

**Annex A**

**Title 25 Environmental Protection  
Part I. Department of Environmental Protection  
Subpart C. Protection of Natural Resources  
Article I. Water Resources  
Chapter 105. Dam Safety and Water Management**

**CHAPTER 105. DAM SAFETY AND WATERWAY MANAGEMENT**

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## Subchapter A. GENERAL PROVISIONS

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**GENERAL**

## § 105.1. Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

*Act*—The Dam Safety and Encroachments Act (32 P. S. §§ 693.1–693.27).

*Along*—Touching or contiguous; to be in contact with; to abut upon.

*Appurtenant works*—Structures or materials incident to or annexed to dams or water obstructions which are built or maintained in connection with the dams or water obstructions and are essential to their proper functioning. For dams, the term includes, but is not limited to:

- (i) Structures such as spillways, either in the dam or separate therefrom.
- (ii) Low level outlet works.
- (iii) Conduits such as tunnels, pipelines or penstocks through the dam or its abutments.

*Archaeological site*—A known site of archaeological significance based on the Comprehensive State Plan for Conservation of Archaeological Resources. The Comprehensive State Plan is available from the Historic and Museum Commission[, **Bureau of Historic Preservation, Box 1026, Harrisburg, Pennsylvania 17108**].

*Body of water*—A natural or artificial lake, pond, reservoir, swamp, marsh or wetland.

*Bridge*—A structure and its appurtenant works erected over the regulated waters of this Commonwealth.

*Commercially navigable waters of the Delaware River and its navigable tributaries*—Portions of the Delaware River from the Delaware border in the south to the railroad bridge at Morrisville in the north; the Schuylkill River below Fairmount Dam; Chester Creek below Ninth Street; Crum Creek below the Route 291 (Industrial Highway) Bridge; Darby Creek below 84<sup>th</sup> Street; Neshaminy Creek below the Route 13 Bridge; Pennypack Creek below the Frankford Avenue Bridge; and Ridley Creek below the Baltimore and Ohio Railroad Bridge in Chester.

*Construct*—To erect, build, place or deposit including preliminary preparation of a site for construction.

**Contributory Drainage Area—Area upstream of a proposed or existing dam, water obstruction or encroachment that contributes runoff to a watercourse.**

*Course*—The path taken by a stream, floodway or body of water.

*Cross section*—The area from the top of the bank to the top of the opposite bank of a stream or body of water as cut by a vertical plane passed at a right angle to the course of the stream.

*Culvert*—A structure with appurtenant works which carries a stream under or through an embankment or fill.

*Current*—The rate or velocity of flow of water in a stream, floodway or body of water.

*Dam*—An artificial barrier, together with its appurtenant works, constructed for the purpose of impounding or storing water or **[another] other** fluid or semifluid, or a refuse bank, fill or structure for highway, railroad or other purposes which does or may impound water or **[another] other** fluid or semifluid.

*Design flood*—A specified discharge for which the hydraulic capacity of a structure is designed.

*Discharge of dredged material*—An addition, deposit, disposal or discharge of dredged material into the regulated waters of this Commonwealth including, but not limited to, the addition of dredged material to a specific disposal site located in the regulated waters of this Commonwealth and the runoff or overflow of dredged material from a contained land or water disposal area. The term does not include plowing, cultivating, seeding and harvesting for the production of food, fiber and forest products.

*Discharge of fill material*—

- (i) An addition, deposit, disposal or discharge of fill into the regulated waters of this Commonwealth, including, but not limited to, the following types of construction:
  - (A) Fill that is necessary for the construction of a structure in a regulated water of this Commonwealth.
  - (B) A structure or impoundment requiring rock, sand, soil or other material for its construction.
  - (C) Site-development fills for recreational, industrial, commercial, residential and other uses.
  - (D) Causeways or roadfills.
  - (E) Dams and dikes.

(F) Artificial islands.

(G) Property protection or reclamation devices, such as riprap, groins, seawalls, breakwaters and revetments.

(H) Levees.

(I) Fill for structures such as sewage treatment facilities.

(J) Intake and outfall pipes associated with power plants and subaqueous utility lines.

(K) Artificial reefs.

(ii) The term does not include plowing, cultivating, seeding and harvesting for the production of food, fiber and forest products.

*Dredge*—To remove sand, gravel, mud or other materials from the beds of regulated waters of this Commonwealth.

*Dredged material*—A material that is excavated or dredged from the regulated waters of this Commonwealth.

**EAP-Emergency Action Plan—A formal document that identifies potential emergency conditions at a dam and specifies preplanned actions to be followed to minimize property damage and loss of life.**

**(i) The EAP contains procedures and information to assist the dam owner in issuing early warning and notification messages to responsible downstream emergency management authorities of the emergency situation.**

**(ii) The EAP also contains inundation maps to show the emergency management authorities of the critical areas for action in case of an emergency.**

*Encroachment*—A structure or activity which changes, expands or diminishes the course, current or cross section of a watercourse, floodway or body of water.

*FEMA*—The Federal Emergency Management Agency.

*Fill*—Sand, gravel, earth or other material placed or deposited to form an embankment or raise the elevation of the land surface. The term includes material used to replace an area with aquatic life with dry land or to change the bottom elevation of a regulated water of this Commonwealth.

*Flood*—A general but temporary condition of partial or complete inundation of normally dry land areas from the overflow of streams, rivers or other waters of this Commonwealth.

*Floodplain*—The lands adjoining a river or stream that have been or may be expected to be inundated by flood waters in a 100-year frequency flood.

*Floodway*—The channel of the watercourse and portions of the adjoining floodplains which are reasonably required to carry and discharge the 100-year frequency flood. Unless otherwise specified, the boundary of the floodway is as indicated on maps and flood insurance studies provided by FEMA. In an area where no FEMA maps or studies have defined the boundary of the 100-year frequency floodway, it is assumed, absent evidence to the contrary, that the floodway extends from the stream to 50 feet from the top of the bank of the stream.

**Flowage Easements—An acquired right of use of another person’s land for water temporarily or permanently impounded by a dam or backwater from the installation, operation and maintenance of a water obstruction or encroachment.**

*Freeboard*—The vertical distance between the water surface elevation experienced during the design flood and the crest elevation of a dam levee, floodwall or other embankment.

*Height of dam*—The vertical measurement expressed in feet as measured from the downstream toe of the dam at its lowest point to the elevation of the top of the dam.

*High hazard dam*—A dam so located as to endanger populated areas downstream by its failure.

### **Hydrologic And Hydraulic Analysis**

**(i) A study of the effects of an encroachment or water obstruction on the flow carrying capacity of a watercourse.**

**(ii) A study determining the watershed runoff into a dam and reservoir and the resulting routed outflow from the dam and its spillway structure(s).**

**Incremental Dam Breach Analysis—A process to determine the highest runoff event during which a dam failure would cause a threat to life, health, property or the environment in areas below the dam in excess of the threat level caused by the same runoff event with no dam failure.**

*Inundation area*—The land area subject to flood waters as the result of failure of a dam.

**Letter Of Amendment For Dams**—A letter from the Department amending an existing dam permit for major maintenance, repair or improvement projects which do not involve modification to the top-of-dam elevation or modification of the normal pool reservoir elevation.

**Letter Of Authorization For Dams** - A letter from the Department approving major maintenance, repair or improvement projects which do not involve modification to the top-of-dam elevation or modification of the normal pool reservoir elevation of a dam which has not been previously permitted by the Department and meets the waiver of permit requirements under § 105.12(b)(1) or (2) (relating to Waiver of Permit Requirements).

*Levee*—An earth embankment or ridge constructed along a water course or body of water to confine water within prescribed limits; the term is also known as a dike.

*Limited Power and Water Supply Act*—The act of June 14, 1923 (P. L. 700, No. 293) (32 P. S. §§ 621–625); and the act of June 14, 1923 (P. L. 704, No. 294) (32 P. S. §§ 591–600), **relating to Limited Power Permits and Limited Water Supply Permits from the Water Supply Commission of Pennsylvania and the conditions thereof, to the flooding and use by holders of Limited Power Permits of lands owned by the Commonwealth, to the unlawful use for water or steam power developments of dams and changes in streams hereafter constructed or made otherwise than under Limited Power Permits, and to proceedings for the enforcement of this act.**

*Maintenance dredging*— [Dredging conducted as part of construction of a dam, water obstruction or encroachment, and periodic] **Periodic** dredging conducted to accomplish one or more of the following purposes:

- (i) Maintain adequate depths for navigation.
- (ii) Assure proper passage of ice and flood flows.
- (iii) Preserve the safety, stability and proper operation of the dam, water obstruction or encroachment.

**(iv) Restoring the natural or previously permitted reservoir capacity**

**(v) Restoring flood protection projects to original design dimensions.**

**Major Dam Design Revision**—A revision to a previously approved or permitted dam design which requires either the Department’s review or modeling of a revised hydrologic and hydraulic analysis of the dam and reservoir’s capacity to pass or store, or both, the required spillway design flood; the Department’s review or modeling of an analysis to determine the ability of the dam’s spillway or decant to dewater after runoff events; or the Department’s review or modeling of a stability analysis of the revised dam design.

**Maximum Credible Earthquake**—A seismic event with a 2% probability of exceedance in 50 years.

*Mitigation*—

- (i) An action undertaken to accomplish one or more of the following:
  - (A) Avoid and minimize impacts by limiting the degree or magnitude of the action and its implementation.
  - (B) Rectify the impact by repairing, rehabilitating or restoring the impacted environment.
  - (C) Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action.
- (ii) If the impact cannot be eliminated by following clauses (A)–(C), compensate for the impact by replacing the environment impacted by the project or by providing substitute resources or environments.

*Normal pool elevation*—

- (i) For bodies of water which have no structural measures to regulate height of water, the height of water at ordinary stages of low water unaffected by drought.
- (ii) For structurally regulated bodies of water, the elevation of the spillway, outlet control or dam crest which maintains the body of water at a specified height.
- (iii) This term does not apply to wetlands.

*100-year frequency flood*—The flood magnitude expected to be equaled or exceeded on the average of once in 100 years; it may also be expressed as the flood having a 1.0% chance of being equaled or exceeded in a given year.

*Operation*—Elements of the use, control and functioning of a dam, water obstruction or encroachment during the lifetime of the dam, water obstruction or encroachment, including its removal, which may affect primarily the storage, release or flow of water; the structural safety of a dam, water obstruction or encroachment; or navigation, with due consideration of

the other purposes of the act.

*Ordinary low water mark*—The water surface elevation at ordinary stages of low water, unaffected by drought and unchanged by artificial means.

*Owner*—A person who owns, controls, operates, maintains or manages a dam or reservoir, water obstruction or encroachment.

*Parcel*—A portion of land formally set forth and described in a conveyance.

*Person*—

**(i) A natural person, partnership, association, corporation, public utility, municipality, municipal authority, political subdivision of the Commonwealth, receiver or trustee, *firm, estate* and a department, board, commission or authority of the Commonwealth[.] *or other legal entity which is recognized by law as the subject of rights and duties.***

**(ii) Whenever used in a section prescribing and imposing a penalty or sanction, the term includes the members of an association and the officers of a corporation, municipality or municipal authority.**

*Political subdivision*—A county, city, borough, incorporated town, township, school district, authority or other governmental unit or a combination thereof acting jointly.

**Practicable alternative—An alternative is practicable if it is available and capable of being carried out after taking into consideration construction cost, existing technology and logistics. An area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed to fulfill the basic purpose of the project will be considered as a practicable alternative.**

*PMF—Probable maximum flood*—The flood that may be expected from the most severe combination of critical meteorologic and hydrologic conditions that are reasonably possible in an area. The PMF is derived from the probable maximum precipitation (PMP) as determined on the basis of **the most recent data [obtained] available** from the National Oceanographic and Atmospheric Administration (NOAA).

*Public service corporation or public utility*—A corporation, association or other corporate body having the powers and privileges of corporations not possessed by individuals or partnerships which entity renders a public utility service. The term does not include a municipality or municipal authority.

*Public service line*—The term includes, but is not limited to, electric transmission lines, gas pipelines, telephone lines, water lines, railroad trackage and other facilities owned or operated by public service corporations.

*Public utility service*—The rendering of one or more of the following services for the public:

- (i) Gas, electricity or steam production, generation, transmission or distribution.
- (ii) Water diversion, pumping, impoundment or distribution.
- (iii) Railroad transportation of passengers or property.
- (iv) Operation of a canal, turnpike, tunnel, bridge, wharf or similar structure.
- (v) Transportation of natural or artificial gas, crude oil, gasoline or petroleum products, materials for refrigeration or other fluid substances by pipeline or conduit.
- (vi) Telephone or telegraph communications.
- (vii) Sewage collection, treatment or disposal.

*Regulated waters of this Commonwealth*—Watercourses, streams or bodies of water and their floodways wholly or partly within or forming part of the boundary of this Commonwealth.

*Replacement*—The construction of a new wetland or restoration of a previously destroyed wetland, or both.

*Reservoir*—A natural or artificial basin, which contains or will contain the water or other fluid or semifluid impounded by a dam.

**Reservoir filling plan – A plan that sets a schedule for the initial filling of the reservoir behind a new dam or the refilling of a reservoir after the rehabilitation of an existing dam.**

*Safety*—Security from the risk or threat of significant loss or injury to life, health, property and the environment.

*Small projects*—Water obstructions or encroachments located in a stream or floodplain which will have an insignificant impact on safety and protection of life, health, property and the environment.

*Spillway*—A device which safely conveys the design flood of a dam without endangering **[its] the dam’s** safety or integrity.

*Storage capacity*—The volume as expressed in acre-feet of the impounded water to the maximum storage level, that is, the top of the dam.

*Stormwater management facilities*—Manmade measures designed and constructed to convey stormwater runoff away from structures or improved land uses, or to control, detain or manage stormwater runoff to avoid or reduce downstream damages. The term includes, but is not limited to, transportation and related facility drainage systems and manmade stormwater detention basins. The term does not include replacement wetlands or major dams and reservoirs constructed for water supply, recreation, river basin flood control or other regional or basin-wide purposes.

*Stream*—A watercourse.

*Stream crossings*—A pipeline, aerial cable or similar structure which is placed in, along, under, across or over the regulated waters of this Commonwealth.

*Stream enclosure*—A bridge, culvert or other structure in excess of 100 feet in length upstream to downstream which encloses a regulated water of this Commonwealth.

*Submerged lands of this Commonwealth*—Waters and permanently or periodically inundated lands owned by the Commonwealth, including lands in the beds of navigable lakes and rivers and beds of streams declared public highways which are owned and held in trust by the Commonwealth.

*U.S.G.S.*—United States Geological Survey.

*Watercourse*—A channel or conveyance of surface water having defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

*Water obstruction*—

- (i) A dike, bridge, culvert, wall, wingwall, fill, pier, wharf, embankment, abutment or other structure located in, along or across or projecting into a watercourse, floodway or body of water.
- (ii) In the case of ponds, lakes and reservoirs, a water obstruction is considered to be in or along the body of water if, at normal pool elevation, the water obstruction is either in the water or adjacent to and abutting the water’s edge.

*Water Obstructions Act*—The act of June 25, 1913 (P. L. 555, No. 355) (32 P. S. §§ 681–691), repealed by section 27 of the act of October 23, 1979 (P. L. 204, No. 70) (32 P. S. § 693.27).

*Wetland functions*—Include, but are not limited to, the following:

- (i) Serving natural biological functions, including food chain production; general habitat; and nesting, spawning, rearing and resting sites for aquatic or land species.
- (ii) Providing areas for study of the environment or as sanctuaries or refuges.
- (iii) Maintaining natural drainage characteristics, sedimentation patterns, salinity distribution, flushing characteristics, natural water filtration processes, current patterns or other environmental characteristics.
- (iv) Shielding other areas from wave action, erosion or storm damage.
- (v) Serving as a storage area for storm and flood waters.
- (vi) Providing a groundwater discharge area that maintains minimum baseflows.
- (vii) Serving as a prime natural recharge area where surface water and groundwater are directly interconnected.
- (viii) Preventing pollution.
- (ix) Providing recreation.

*Wetlands*—Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs and similar areas.

*Wild trout streams*—A stream **[classified] identified** as supporting naturally reproducing trout populations by the Fish and Boat Commission **under 58 Pa Code §57.11 (relating to listing of wild trout streams)**. For a list of wild trout streams, **contact** the Fish and Boat Commission **[can be contacted at: Fish Commission, Bureau of Fisheries, Division of Fisheries Management, 450 Robinson Lane, Bellefonte, Pennsylvania 16823-9616], [www.fish.state.pa.us](http://www.fish.state.pa.us)**.

## **§ 105.2. Purposes.**

The purposes of this chapter are to:

- (1) Provide for the comprehensive regulation and supervision of dams, reservoirs, water obstructions and encroachments in the Commonwealth in order to protect the health, safety, welfare and property of the people.
- (2) Assure proper planning, design, construction, maintenance, monitoring and supervision of dams and reservoirs, including preventive measures necessary to provide an adequate margin of safety.
- (3) Assure proper planning, design, construction, maintenance and monitoring of water obstructions and encroachments, in order to prevent unreasonable interference with water flow and to protect navigation.
- (4) Protect the natural resources, environmental rights and values secured by PA. CONST. Art. I, § 27 and conserve and protect the water quality, natural regime and carrying capacity of watercourses.

## **§ 105.3. Scope.**

(a) The following structures or activities are regulated under the act and section 302 of the Flood Plain Management Act (32 P. S. § 679.302):

(1) Dams on a natural or artificial watercourse, other than those licensed under the Federal Power Act (16 U.S.C.A. §§ 791a–825s), where one or more of the following occur:

- (i) The contributory drainage area exceeds 100 acres.
- (ii) The greatest depth of water measured by upstream toe of the dam at maximum storage elevation exceeds 15 feet.
- (iii) The impounding capacity at maximum storage elevation exceeds 50 acre-feet.

(2) Dams used for the storage of water not located on a watercourse and which have no contributory drainage where the greatest depth of water measured at upstream toe of the dam at maximum storage elevation exceeds 15 feet and the impounding capacity at maximum storage elevation exceeds 50 acre-feet.

(3) Dams used for the storage of fluids or semifluids other than water, the escape of which may result in air, water or land pollution or in danger to persons or property.

(4) Water obstructions and encroachments other than dams located in, along or across, or projecting into a watercourse, floodway or body of water, whether temporary or permanent.

(5) Flood control projects constructed, owned or maintained by a governmental unit.

(b) For the purposes of this chapter, the Department's jurisdiction in and along Lake Erie will be defined by the high water elevation of 572.8 feet International Great Lakes Datum (IGLD) and low water elevation of 568.6 IGLD. Dams, water obstructions and encroachments constructed between elevation 572.8 IGLD and elevation 568.6 IGLD require a permit under section 6 of the act (32 P. S. § 693.6). Dams, water obstructions and encroachments constructed lakeward of elevation 568.6 IGLD require both a permit under section 6 of the act and a Submerged Lands License Agreement under section 15 of the act (32 P. S. § 693.15).

(c) The environmental assessment conducted under this chapter is applicable to dams, water obstructions and encroachments for which a permit or approval is required under this chapter.

## **§ 105.4. Delegations to local agencies.**

(a) Under section 17 of the act (32 P. S. § 693.17) and subject to this section, the Department may by written agreement delegate to a county conservation district or other county agency one or more of its regulatory functions including enforcement and the power to permit, inspect and monitor specified categories of water obstructions and encroachments.

(b) **[No]** A delegation may be made of the authority to issue permits for a water obstruction or encroachment constructed, owned or maintained by the Commonwealth, a political subdivision or a public utility. Delegations may be made of the powers to inspect and monitor the activities, if the Department retains final authority to approve or disapprove permits, and concurrent authority to inspect, monitor and enforce the act.

(c) To the extent delegated by the agreement, the delegations may include the authority to enforce the act and this chapter and to exercise other powers and duties otherwise vested in the Department to implement the act with respect to the categories of water obstructions and encroachments covered by the delegation.

(d) A delegation agreement **[shall] will**:

- (1) Specify the powers and duties to be performed by the delegated agency.
- (2) Specify the categories of water obstructions and encroachment activities to be covered by the delegated agency.
- (3) Provide for the commitment by the delegated agency of sufficient trained staff and resources to perform the powers and duties to be delegated.
- (4) Require the delegated agency to maintain records of activities performed under the delegation.
- (5) Provide for monitoring and supervision by the Department of performance by the delegated agency of the functions delegated under the agreement.

(e) A permit for a water obstruction or encroachment issued by a delegated agency is subject to review by the Department, unless the right of review is waived by the Department. A permit issued by a delegated agency shall become effective 30 days following the receipt of notice by the Department of issuance, unless the permit is disapproved by the Department or an appeal is filed with the Department under section 17 of the act [(32 P. S. § 693.17)].

(f) When the Department delegates one or more of its regulatory functions to a local agency, the Department will retain the concurrent power to inspect and monitor categories of water obstructions and encroachments and to enforce the act and this chapter.

## PERMIT APPLICATIONS

### § 105.11. Permit requirements.

(a) A person may not construct, operate, maintain, modify, enlarge or abandon a dam, water obstruction or encroachment without first obtaining a written permit from the Department.

(b) An existing dam, water obstruction or encroachment constructed under a license or permit issued in compliance with the act of June 8, 1907 (P. L. 496, No. 322) (53 P. S. § 16834 note and 55 P. S. §§ 332.1 and 332.2) or the Water Obstructions Act, shall be deemed to comply with the construction and operating permit requirements of this section. These projects shall, after September 27, 1980, comply with the operating, maintenance, monitoring and other requirements of this chapter.

(c) The owner of an existing dam, water obstruction or encroachment who does not hold a permit issued under the act of June 8, 1907 (P. L. 496, No. 322) or the Water Obstructions Act shall apply for and receive a permit to operate and maintain the facility under the act on or before January 1, 1981. For purposes of this subsection, a limited power permit issued under the Limited Power and Water Supply Act will be deemed to have been issued under the Water Obstructions Act. These projects shall comply with the operating, maintenance, monitoring and other requirements established under the act.

(d) A permit issued by the Department after July 1, 1979 for the construction and operation of a water obstruction or encroachment **[shall] will** incorporate authorization for normal repairs and maintenance of permitted structures conducted within the original specifications for the water obstruction or encroachment. A repair or maintenance involving modification of the water obstruction or encroachment from its original specifications and a repair or reconstruction involving a substantial portion of the structure shall require the prior written permit of the Department under subsection (a).

(e) A **[dam,]** water obstruction or encroachment or modification thereof, constructed or authorized pursuant to the terms of a permit issued under this chapter prior to October 12, 1991 **[shall] will** be deemed to comply with the construction permit requirements of this subchapter. These projects **[shall] must**, after October 12, 1991, comply with the operating, maintenance, monitoring and other requirements of this chapter.

**(f) A dam or modification thereof, constructed or authorized pursuant to the terms of a permit issued under this chapter prior to \_\_\_\_\_, will be deemed to comply with the construction permit requirements of this subchapter. These projects will, after \_\_\_\_\_, comply with the operating, maintenance, monitoring and other requirements of this chapter.** (Editor's note: The blanks refer to the effective date of adoption of this proposed rulemaking.)

### § 105.12. Waiver of permit requirements.

(a) Under section 7 of the act (32 P. S. § 693.7), the requirements for a permit are waived for the following structures or

activities, regardless of when commenced. If the Department upon complaint or investigation finds that a structure or activity which is eligible for a waiver, has a significant effect upon safety or the protection of life, health, property or the environment, the Department may require the owner of the structure to apply for and obtain a permit under this chapter.

- (1) A dam not exceeding 3 feet in height in a stream not exceeding 50 feet in width, except wild trout streams designated by the Fish Commission.
- (2) A water obstruction in a stream or floodway with a drainage area of 100 acres or less. This waiver does not apply to wetlands located in the floodway.
- (3) An aerial crossing of a nonnavigable stream or wetland by electric, telephone or communications lines which are not located in a Federal wilderness area or watercourse or body of water designated as a wild or scenic river under the Wild and Scenic Rivers Act of 1968 (16 U.S.C.A. §§ 1271–1287) or the Pennsylvania Scenic Rivers Act (32 P. S. §§ 820.21–820.29). This waiver applies to one or more wires attached aboveground to single poles. This does not apply to the maintenance and construction of towers, roads or other water obstructions or encroachments.
- (4) A dam subject to the requirements of the Mine Safety and Health Administration, 30 CFR 77.216-1 and 77.216-2 (relating to water, sediment or slurry impoundments and impounding structures; identification; and water, sediment, or slurry impoundments or impounding structures; minimum plan requirements; changes or modifications; certification), if the Department determines on the basis of preliminary data submitted by the applicant that the dam is of Size Classification C and Hazard Potential Classification 3 as defined in § 105.91 (relating to classification of dams and reservoirs) and is not located in a watercourse or body of water designated as a wild and scenic river under the Wild and Scenic Rivers Act of 1968 or the Pennsylvania Scenic Rivers Act.
- (5) A water obstruction or encroachment located in, along, across or projecting into a wetland or impoundment, constructed and maintained for the purpose of treating acid mine drainage, sewage or other waste, if the wetland or impoundment is a treatment facility constructed under a valid permit issued by the Department under the Surface Mining Conservation and Reclamation Act (52 P. S. §§ 1396.1–1396.31), The Clean Streams Law (35 P. S. §§ 691.1–691.1001), the Noncoal Surface Mining Conservation and Reclamation Act (52 P. S. §§ 3301–3326), the Solid Waste Management Act (35 P. S. §§ 6018.101–6018.1003), the Oil and Gas Act (58 P. S. §§ 601.101–601.605) and the Pennsylvania Sewage Facilities Act (35 P. S. §§ 750.1–750.20).
- (6) A water obstruction or encroachment located in, along, across or projecting into a stormwater management facility or an erosion and sedimentation pollution control facility which meets the requirements in Chapter 102 (relating to erosion control), if the facility was constructed and continues to be maintained for the designated purpose.
- (7) Maintenance of field drainage systems that were constructed and continue to be used for crop production. Crop production includes:
  - (i) Plowing, cultivating, seeding, grazing or harvesting.
  - (ii) Crop rotation.
  - (iii) Government set aside programs.
- (8) Plowing, cultivating, seeding or harvesting for crop production.
- (9) Construction and maintenance of ford crossings of streams for individual private personal use which require only grading of banks for approach roads and the placement of not more than 12 inches of gravel for roadway stability. Fords may not be used for commercial purposes and shall cross the regulated waters of this Commonwealth in the most direct manner. This waiver does not apply in exceptional value streams as listed under Chapter 93 (relating to water quality standards) or in wild trout streams.
- (10) A navigational aid or marker, buoy, float, ramp or other device or structure for which a permit has been issued by the Fish Commission under 30 Pa.C.S. § 5123(a)(7) (relating to general boating regulations).
- (11) The removal of abandoned dams, water obstructions and encroachments if the Department determines in writing on the basis of data, information or plans submitted by the applicant that the removal of the abandoned dam water obstruction or encroachment cannot imperil life or property, have significant effect on coastal resources or have an adverse impact on the environment, and the plans provide for restoration and stabilization of the project area.
- (12) The construction, operation or removal of staff gages, water recording devices, water quality testing devices, including, but not limited to, sensors, intake tubes, weirs and small buildings which contain required instruments and similar scientific structures.

(13) A bridge or culvert purchased from an operating railroad company subsequent to the abandonment of the railroad line, track, spur or branch pursuant to the approval of the Interstate Commerce Commission. Major maintenance or reconstruction, or stream dredging may not be undertaken until the new owner obtains a permit under this chapter.

(14) The maintenance of an artificial pond or reservoir to its original storage capacity where:

- (i) The contributory drainage area is less than or equal to 100 acres.
- (ii) The greatest depth of water at maximum storage elevation is less than or equal to 15 feet.
- (iii) The impounding capacity at maximum storage elevation is less than or equal to 50 acre feet.

(15) The construction and maintenance of an encroachment or water obstruction on an abandoned mining site, where the Department has issued a notice of intent to forfeit the bond for a mining activity permitted after July 1982.

(16) Restoration activities undertaken and conducted pursuant to a restoration plan which has been approved, in writing, by the Department.

(b) The requirements for a permit for existing structures or activities, as provided in section 6(c) of the act (32 P. S. § 693.6(c)), are waived for the following structures or activities, if construction was completed prior to July 1, 1979. If the Department upon complaint or investigation finds that a structure or activity which is eligible for a waiver, has a significant effect upon safety or the protection of life, health, property or the environment, the Department may require the owner of the structure or activity to apply for and obtain a permit under this chapter.

(1) A dam not exceeding 5 feet in height in a nonnavigable stream operated and maintained for water supply purposes.

(2) A dam which the Department determines, on the basis of preliminary data submitted by the applicant, is of Size Classification C and Hazard Potential Classification [3] 4, as defined in § 105.91 and does not have a significant effect on coastal resources or an adverse impact on the environment.

(3) A fill not located on navigable lakes and navigable rivers.

(4) A streambank retaining device.

(5) A stream crossing other than a crossing located on submerged lands of this Commonwealth and a crossing by pipelines for conveyance of petroleum products and gas.

(6) An outfall, headwall or water intake structure.

(7) A culvert, bridge or stream enclosure on a watercourse where the drainage area above the culvert, bridge or stream enclosure is 5 square miles or less.

(c) Structures and activities shall meet the construction, operation, maintenance, monitoring and other requirements of this chapter. No other permits which may be required under a law other than the act are waived by this section.

### **§ 105.13. Permit applications—information and fees.**

(a) Application for permits under this chapter shall be submitted to the Department, in writing, upon forms provided by the Department. Applicants are encouraged to request a meeting with the Department prior to submission of their applications.

(b) An application for a permit under this chapter, except applications submitted by Federal, State, county or municipal agencies or a municipal authority for a dam, water obstruction or encroachment shall be accompanied by a check payable to “Commonwealth of Pennsylvania” in accordance with the following schedule:

(1) *Dams.*

*Class A \$3000*

*Class B \$2500*

*Class C \$1500*

*(Based on Size Classification as defined in § 105.91)*

(2) *Water obstructions and encroachments.*

*Stream enclosures \$350*

*Channel changes \$300*

*Commercial dredging \$300*

<i>Peat extraction</i>	\$750
<i>Fills, levees, floodwalls</i>	\$350
<i>Bridges and other water obstructions and encroachments</i>	\$200
<i>Small projects</i>	\$100

(c) A single application may be submitted or a single permit may be issued for multiple structures and activities which are part of a single project or facility or part of related projects and facilities, located in a single county, constructed, operated or maintained by the same persons. When a single application covers multiple structures or activities other than a single structure and related maintenance dredging, the application fee shall be the sum of fees in subsection (b) for the applicable structures and activities. Stream crossings located within a single county for the installation of a public service line shall be treated as a single structure or activity but the application fee shall be the sum of fees for each stream crossing.

(d) An application for a permit shall be accompanied by information, maps, plans, specifications, design analyses, test reports and other data specifically required by this chapter and additional information as required by the Department to determine compliance with this chapter.

(1) For all permit applications, except small projects, this information **[shall include] includes**, but is not limited to, the following:

(i) *A site plan.* A site plan **[shall] must** include:

- (A) A complete demarcation of the floodplains and regulated waters of this Commonwealth on the site. The wetlands shall be identified and delineated in accordance with the Department’s Wetland Delineation Policy as published at § 105.451 (relating to identification and delineation of wetlands—statement of policy).
- (B) Existing roads, utility lines, lots, other manmade structures and natural features such as contour lines and drainage patterns.
- (C) Proposed structures or activities included in the project, which shall be identified by labeling.
- (D) A scale of one inch equals 200 feet or larger.
- (E) A north arrow.
- (F) The name of the persons who prepared the plan, and the date and name of the applicants.
- (G) A cross sectional view of the regulated waters to be impacted before and after the structure or activity is constructed.

(ii) *A location map.* The location map **[shall] must** be of a scale factor of 1:24000 (standard U.S.G.S. Topographic Map). The location map **[shall] must** show all natural features including the names and boundaries of regulated waters of this Commonwealth, natural areas, wildlife sanctuaries, natural landmarks, political boundaries, locations of public water supplies and other geographical or physical features including cultural, archeological and historical landmarks within 1 mile of the site. U.S.G.S. maps may be reviewed at County Conservation District Offices or obtained by writing to: United States Geological Survey Map Distribution, Box 25286 Federal Center, Denver, CO 80225.

(iii) *Project description.* A narrative of the project shall be provided which includes, but is not limited to:

- (A) A description of the proposed structure or activity.
- (B) The project purpose.
- (C) The effect the project will have on public health, safety or the environment.
- (D) A statement on water dependency. A project is water dependent when the project requires access or proximity to or siting within water to fulfill the basic purposes of the project.

(iv) *Color photographs.* Color photographs of the proposed site **[shall] must** be submitted. The photos shall accurately depict the project area and provide a relative scale of the project to the surrounding area and a map showing the location and orientation of each photograph.

(v) *Stormwater management analysis.* If a watershed stormwater management plan has been prepared or adopted under the Stormwater Management Act (32 P. S. §§ 680.1–680.17), an analysis of the project’s impact on the Stormwater Management Plan and a letter from the county or municipality commenting on the analysis shall be included.

(vi) *Floodplain management analysis.* If the proposed dam, water obstruction or encroachment is located within a floodway delineated on a FEMA map, include an analysis of the project's impact on the floodway delineation and water surface profiles and a letter from the municipality commenting on the analysis.

(vii) *Risk assessment.* If the stormwater or the floodplain management analysis conducted in subparagraphs (v) and (vi) indicates increases in peak rates of runoff or flood elevations, include a description of property and land uses which may be affected and an analysis of the degree of increased risk to life, property and the environment.

(viii) *Alternatives analysis.* A detailed analysis of alternatives to the proposed action, including alternative locations, routings or designs to avoid or minimize adverse environmental impacts.

(ix) *Mitigation plan.* Actions to be taken in accordance with the definition of mitigation in this chapter.

(x) *Impacts analysis.* A detailed analysis of the potential impacts, to the extent applicable, of the proposed project on water quality, stream flow, fish and wildlife, aquatic habitat, Federal and State forests, parks, recreation, instream and downstream water uses, prime farmlands, areas or structures of historic significance, streams which are identified candidates for or are included within the Federal or State wild and scenic river systems and other relevant significant environmental factors. If a project will affect wetlands the project description shall also include:

(A) A narrative of the delineation process supported by the appropriate data sheets and copies of appropriate soil maps and descriptions from soil conservation service soil surveys. Soil conservation service soil surveys may be obtained from the county conservation district offices.

(B) An analysis of whether the wetland is exceptional value as classified in § 105.17 (relating to wetlands).

(C) A statement on water dependency. A project is water dependent when the project requires access or proximity to or siting within water to fulfill the basic purposes of the project.

(2) An application for a project which will affect less than 1 acre of wetland where the wetland is not exceptional value wetland shall also include a description of functions and values of the existing wetlands to be impacted by the project, as defined in § 105.1 (relating to definitions).

(3) An application for a project which may have an affect on an exceptional value wetland or on 1 or more acres of wetland shall also include an assessment of the wetland functions and values using a methodology accepted by the Department and a survey, conducted by a licensed professional land surveyor, of the wetland boundary as delineated and of the property lines of the parcel where the project is located.

(e) A permit application for small projects located in streams or floodplains shall be accompanied by the following information. This permit application may not be used for projects located in wetlands. If upon review the Department determines that more information is required to determine whether a small project will have an insignificant impact on safety and protection of life, health, property or the environment, the Department may require the applicant to submit additional information and processing fees required by this chapter.

(1) A *site plan.* A site plan **[shall] must** include:

(i) The floodplains and regulated waters of this Commonwealth on the site, including wetlands, existing roads, utility lines, lots, other manmade structures, natural features such as slopes and drainage patterns, proposed structures or activities included in the project.

(ii) The names of the persons who prepared the plan.

(iii) The date and the name of applicants.

(iv) A north arrow.

(2) A *cross sectional view.* A cross sectional view of the affected regulated waters of this Commonwealth before and after the structure or activity is constructed.

(3) A *location map.* A map showing the geographic location of the project. U.S.G.S. topographic maps, FEMA maps or municipal maps are acceptable. FEMA and municipal maps may be obtained from local government offices. U.S.G.S. maps may be reviewed at county conservation district offices or obtained by writing to: United States Geological Survey Map Distribution, Box 25286 Federal Center, Denver, CO 80225.

(4) *Project description.* A narrative of the project shall be provided which includes, but is not limited to:

(i) A description of the proposed structure or activity.

(ii) The project purpose.

(iii) The effect the project will have on public health, safety or the environment.

(iv) The project's need to be in or in close proximity to water.

(5) *Color photographs.* Color photographs of the proposed site shall be submitted. The photos **[shall] must** accurately depict the project area and provide a relative scale of the project to the surrounding area and a map showing the location and orientation of each photograph.

(f) Except for small projects, an application for a permit under this chapter shall be accompanied by proof of an application for an Earth Disturbance Permit or an erosion and sedimentation control plan for activities in the stream and earthmoving activities. The plan **[shall] must** conform to the requirements contained in Chapter 102 (relating to erosion control) and **[shall] must** include a copy of a letter from the conservation district in the county where the project is located indicating that the district has reviewed the erosion and sediment control plan of the applicant and considered it to be satisfactory, if applicable. Earthmoving activities, including small projects, shall be conducted pursuant to an earth disturbance plan.

(g) An application shall be submitted by the person who owns or has primary responsibility for the proposed dam or reservoir, water obstruction or encroachment. If an application is submitted by a person with primary responsibility for the structure or activity, the owner of a dam or reservoir, water obstruction or encroachment will not thereby be relieved of legal duties or responsibilities for the structure or activity as imposed by the act or this chapter.

(h) An application shall be signed by the owners of the dam or reservoir, water obstruction or encroachment, or the persons exercising primary responsibility for the dam or reservoir, water obstruction or encroachment. In the case of a partnership, one or more members of the partnership authorized to sign on behalf of the entire partnership shall sign the application. In the case of a corporation, it shall be signed by the president, vice president or other responsible official empowered to sign for the corporation. In the case of a political subdivision, it shall be signed by the chief officers of the political subdivision or other responsible official empowered to sign for the political subdivision, with the seal affixed and attested by the clerk.

(i) Plans, specifications and reports accompanying applications for any category of dams, or for bridges and other water obstructions or encroachments which would pose a threat to human life or substantial potential risk to property shall be affixed with the seal of a registered professional engineer and a certification, signed by the registered professional engineer, which shall read as follows:

“I (name) do hereby certify pursuant to the penalties of 18 Pa.C.S.A. Sec. 4904 to the best of my knowledge, information and belief, that the information contained in the accompanying plans, specifications and reports has been prepared in accordance with accepted engineering practice, is true and correct, and is in conformance with Chapter 105 of the rules and regulations of the Department of Environmental Resources.”

(j) The Department may waive the specific information requirements of this section in writing, in the record of decision, if upon review of the permit application, the Department finds that specific information is not necessary to review the application.

### **105.13a Complete applications.**

**(a) An application for a permit is complete when the necessary information is provided and requirements under the act and this chapter have been satisfied by the applicant.**

**(b) When the Department determines that an application is incomplete or contains insufficient information, it will notify the applicant in writing. The applicant shall have 60 days from the date of the Department's letter to complete the application or the Department will consider the application to be withdrawn. Requests for a specific extension shall be submitted by the applicant in writing. The applicant will be notified in writing when an application is considered withdrawn. If the applicant chooses to reapply for a permit, a new complete application and fee shall be required.**

### **105.13b Proof of financial responsibility.**

**For continued operation and maintenance of all existing hazard potential category 1 or category 2 dams, as classified in § 105.91 (relating to classification of dams and reservoirs), and water obstructions or encroachments, which present a substantial potential risk to life or property; and as a requirement for approval of a permit under this chapter for a hazard potential category 1 or category 2 dam, and water obstruction or encroachment, which**

**presents a substantial potential risk to life or property, the Department will require proof of financial responsibility or security assuring the proper construction, repair, operation and maintenance, inspection and monitoring and removal, if necessary, of the facility.**

**(a) As proof of responsibility or security, the Department may require one or more of the following:**

**(1) A certificate of public convenience from the Public Utility Commission if the owner of the proposed facility is subject to regulation under 66 Pa.C.S. (relating to the Public Utility Code).**

**(2) Ownership or management of the facility by an agency of the Federal, State, county or municipal government or of an interstate compact.**

**(3) A bond or other legal device of a form acceptable to the Department, payable to the Commonwealth, which guarantees proper construction, repair, operation and maintenance, inspection and monitoring, and removal, if necessary, of the facility. The amount of bond or legal device must be sufficient to cover the costs of entry, repair, correction, operation, maintenance, inspection, monitoring or removal of the facility by the Commonwealth in the event of failure of the owner to comply with orders of the Department, terms and conditions of the permit, this chapter and the act and section 302 of the Flood Plain Management Act (32 P. S. § 679.302).**

**(b) The Department may, upon review, request an increase in the amount of the bond or other legal device noted in subsection (a)(3) as necessary to ensure that sufficient funds are available. The Department may not increase this amount more than once every ten years unless the facility is being modified by permit.**

**(c) Applicability of these regulations shall apply to already existing permits issued for a hazard potential category 1 or category 2 dam. The owner of an already existing permitted hazard potential category 1 or category 2 dam must satisfy the requirements of this section within five years of the effective date of these regulations.**

#### **§ 105.14. Review of applications.**

(a) An application will be reviewed to determine the proposed project's effect on health, safety and the environment, in accordance with prevailing practices in the engineering profession and in accordance with current environmental principles.

(b) In reviewing a permit application under this chapter **[for construction or substantial modification of a dam or reservoir, water obstruction or encroachment,]** the Department will use the following factors to make a determination of impact:

(1) Potential threats to life **[or]**, property **or the environment** created by the dam, water obstruction or encroachment.

(2) Potential threats to safe navigation created by the dam, water obstruction or encroachment.

(3) The effect of the dam, water obstruction or encroachment on the property or riparian rights of owners **[above, below] upstream, downstream** or adjacent to the project.

(4) The effect of the dam, water obstruction or encroachment on regimen and ecology of the watercourse or other body of water, water quality, stream flow, fish and wildlife, aquatic habitat, instream and downstream uses and other significant environmental factors. **In reviewing permit applications existing and designated uses will be maintained and protected.**

(5) The impacts of the dam, water obstruction or encroachment on nearby natural areas, wildlife sanctuaries, public water supplies, other geographical or physical features including cultural, archaeological and historical landmarks, National wildlife refuges, National natural landmarks, National, State or local parks or recreation areas or National, State or local historical sites.

(6) Compliance by the dam, water obstruction or encroachment with applicable laws administered by the Department, the Fish **and Boat** Commission and river basin commissions created by interstate compact.

(7) The extent to which a project is water dependent and thereby requires access or proximity to or siting within water to fulfill the basic purposes of the project. The dependency shall be based on the demonstrated unavailability of any alternative location, route or design and the use of location, route or design to avoid or minimize the adverse impact of the dam, water obstruction or encroachment upon the environment and protect the public natural resources of the Commonwealth.

(8) Present conditions and the effects of reasonably foreseeable future development within the affected watershed

**[above] upstream** and **[below] downstream of** the dam, water obstruction or encroachment:

- (i) A dam, water obstruction or encroachment shall be designed, constructed and operated to assure adequacy and compliance with this chapter, taking into account reasonably foreseeable development within the watershed.
- (ii) In assessing the impact of future development upon a dam, water obstruction or encroachment, the Department may require the applicant to submit data regarding estimated development potentials and municipal, county and regional planning related to the affected watershed.

(9) Consistency with State and local floodplain and stormwater management programs, the State Water Plan and the Coastal Zone Management Plan.

(10) Consistency with the designations of wild, scenic and recreational streams under the Wild and Scenic Rivers Act of 1968 (16 U.S.C.A. §§ 1271–1287) or the Pennsylvania Scenic Rivers Act (32 P. S. §§ 820.21–820.29), including identified 1-A candidates.

(11) Consistency with State antidegradation requirements contained in Chapters 93, 95 and 102 (relating to water quality standards; wastewater treatment requirements; and erosion control) and the Clean Water Act (33 U.S.C.A. §§ 1251–1376).

(12) Secondary impacts associated with but not the direct result of the construction or substantial modification of the dam or reservoir, water obstruction or encroachment in the area of the project and in areas adjacent thereto and future impacts associated with dams, water obstructions or encroachments, the construction of which would result in the need for additional dams, water obstructions or encroachments to fulfill the project purpose.

(13) For dams, water obstructions or encroachments in, along, across or projecting into a wetland, as defined in § 105.1 (relating to definitions), the Department will also consider the impact on the wetlands values and functions in making a determination of adverse impact.

(14) The cumulative impact of this project and other potential or existing projects. In evaluating the cumulative impact, the Department will consider whether numerous piecemeal changes may result in a major impairment of the wetland resources. The Department will evaluate a particular wetland site for which an application is made with the recognition that it is part of a complete and interrelated wetland area.

(c) In reviewing a permit application under § 105.11(c) (relating to permit requirements) and section 6(c) of the act (32 P. S. § 693.6(c)) for the operation and maintenance of an existing dam, water obstruction or encroachment, the Department will use the following factors:

- (1) Potential threats to life, property or safe navigation created by the continuing operation or maintenance of the project.
- (2) Adverse impact on stream flow, water quality or the environment which might be reduced or mitigated by reasonable changes in the operation of the project.
- (3) Compliance of the operation and maintenance of the project with applicable laws administered by the Department, the Fish Commission and river basin commissions created by interstate compact.

(d) The Department may review a permit application for the operation and maintenance of existing projects without regard to the design criteria and construction requirements in Subchapters B–J. If the Department finds that an existing dam, water obstruction or encroachment is unsafe or adversely affects property or the environment, it may consider application of criteria and requirements reasonably necessary to correct the conditions.

#### **§ 105.15. Environmental assessment.**

(a) A person may not construct, operate, maintain, modify, enlarge or abandon the following categories of structures or activities until an environmental assessment has been approved in writing by the Department. The environmental assessment **[shall] must** be on a form provided by the Department and **[shall]** include the following information:

- (1) For dams, water obstructions or encroachments permitted under this chapter, the Department will base its evaluation on the information required by § 105.13 (relating to permit applications–information and fees) and the factors included in § 105.14(b) (relating to review of applications) and this section.
- (2) For dams, water obstructions or encroachments located in, along or projecting into a wetland for which a permit is not otherwise required under this chapter, the Department will base its evaluation on the information required by §

105.13(d) and the factors included in § 105.14(b) and this section.

(3) For dams located in, along or projecting into an exceptional value water as defined in Chapter 93 (relating to water quality standards) for which a permit is not otherwise required under this chapter, the Department will base its evaluation on the information required by the factors included in [**§ 95.1 Chapter 93**] (relating to [**general requirements water quality standards**]) and §§ 105.13(d) and 105.14(b) and the following information submitted by the applicant:

- (i) The surface area of the impoundment.
- (ii) The height of the dam.
- (iii) The mean depth and maximum depth of the stream at the location of the dam.
- (iv) A description of the release structure.
- (v) The rate of a conservation release.
- (vi) The design of bypass structures.
- (vii) The use of the dam.
- (viii) The material used for construction of the dam.

(b) For structures or activities where water quality certification is required under section 401 of [**The the**] Clean Water Act (33 U.S.C.A. § 1341), an applicant requesting water quality certification under section 401 shall prepare and submit to the Department for review, an environmental assessment containing the information required by subsection (a) for every dam, water obstruction or encroachment located in, along, across or projecting into the regulated water of this Commonwealth.

(c) Based on the results of the environmental assessment required under subsection (a), the Department may require the applicant to undertake further studies and submit additional information, analyses and reports as found necessary by the Department.

(d) The environmental assessment has been conducted by the Department for all general permits, categories of structures and activities listed in § 105.12(a)(1)–(10) and (12)–(15) (relating to waiver of permit requirements). The environmental assessment has also been conducted for the structures or activities listed in § 105.12(b) or for which water quality certification has been granted for a Nationwide permit regulating the structure or activity and the environmental assessment requirements have been deemed satisfied.

#### **§ 105.16. Environmental, social and economic balancing.**

(a) If the Department determines that there may be an impact on natural, scenic, historic or aesthetic values of the environment, the Department will consult with the applicant to examine ways to reduce the adverse environmental impact. If, after consideration of mitigation measures, the Department finds that the adverse environmental impact will occur, the Department will evaluate the public benefits of the project to determine whether the public benefits outweigh the environmental harm.

(b) An application for a permit for a structure or activity which the Department determines will have an adverse impact on the environment or public natural resources will not be approved by the Department unless the applicant demonstrates and the Department finds that the public benefits of the proposed project outweigh the harm to the environment and public natural resources. Public benefits include, but are not limited to:

- (1) Correction and prevention of pollution.
- (2) Protection of public health and safety.
- (3) Reduction of flood damages.
- (4) Development of energy resources.
- (5) Creation or preservation of significant employment.
- (6) Provision of public utility services.
- (7) Other essential social and economic development which benefits a substantial portion of the public.

(c) An application for a permit will not be approved by the Department in the following areas unless the applicant demonstrates and the Department finds that the project will not have an adverse impact upon the public natural resources:

(1) A project located in or within 100 feet of a watercourse or body of water that has been designated as a National or State wild or scenic river in accordance with the Wild and Scenic Rivers Act of 1968 (16 U.S.C.A. §§ 1271–1287) or the Pennsylvania Scenic Rivers Act (32 P. S. §§ 820.21–820.29).

(2) A project located in or within 100 feet of a Federal wilderness area designated in accordance with the Wilderness Act (16 U.S.C.A. §§ 1131–1136) or the Federal Eastern Wilderness Act of 1975 (16 U.S.C.A. § 1132).

(3) A project located within an area which serves as a habitat of a threatened or endangered species protected by the Endangered Species Act of 1973 (7 U.S.C.A. § 136; 16 U.S.C.A. §§ 4601-9, 460k-1, 668dd, 715i, 715a, 1362, 1371, 1372, 1402 and 1531–1543) or for a species which has been designated as a threatened or endangered species under the Wild Resource Conservation Act (32 P. S. §§ 5301–5314), 30 Pa.C.S. (relating to the Fish and Boat Code) or 34 Pa.C.S. (relating to the Game and Wildlife Code).

(4) A project located in waters designated as exceptional value in Chapter 93 (relating to water quality standards).

(d) In reviewing permit applications, it will be the policy of the Department to encourage activities that protect the natural condition of the watercourses or other body of water.

(e) This section does not apply to dams, water obstructions or encroachments located in, along, across or projecting into wetlands. These structures or activities will be evaluated under §§ 105.17 and 105.18a–105.20.

### **§ 105.17. Wetlands.**

Wetlands are a valuable public natural resource. This chapter will be construed broadly to protect this valuable resource.

(1) *Exceptional value wetlands.* This category of wetlands deserves special protection. Exceptional value wetlands are wetlands that exhibit one or more of the following characteristics:

(i) Wetlands which serve as habitat for fauna or flora listed as “threatened” or “endangered” under the Endangered Species Act of 1973 (7 U.S.C.A. § 136; 16 U.S.C.A. §§ 4601-9, 460k-1, 668dd, 715i, 715a, 1362, 1371, 1372, 1402 and 1531–1543), the Wild Resource Conservation Act (32 P. S. §§ 5301–5314), 30 Pa.C.S. (relating to the Fish and Boat Code) or 34 Pa.C.S. (relating to the Game and Wildlife Code).

(ii) Wetlands that are hydrologically connected to or located within ½-mile of wetlands identified under subparagraph (i) and that maintain the habitat of the threatened or endangered species within the wetland identified under subparagraph (i).

(iii) Wetlands that are located in or along the floodplain of the reach of a wild trout stream or waters listed as exceptional value under Chapter 93 (relating to water quality standards) and the floodplain of streams tributary thereto, or wetlands within the corridor of a watercourse or body of water that has been designated as a National wild or scenic river in accordance with the Wild and Scenic Rivers Act of 1968 (16 U.S.C.A. §§ 1271–1287) or designated as wild or scenic under the Pennsylvania Scenic Rivers Act (32 P. S. §§ 820.21–820.29).

(iv) Wetlands located along an existing public or private drinking water supply, including both surface water and groundwater sources, that maintain the quality or quantity of the drinking water supply.

(v) Wetlands located in areas designated by the Department as “natural” or “wild” areas within State forest or park lands, wetlands located in areas designated as Federal wilderness areas under the Wilderness Act (16 U.S.C.A. §§ 1131–1136) or the Federal Eastern Wilderness Act of 1975 (16 U.S.C.A. § 1132) or wetlands located in areas designated as National natural landmarks by the Secretary of the Interior under the Historic Sites Act of 1935 (16 U.S.C.A. §§ 461–467).

(2) *Other wetlands.* This category includes wetlands not categorized as exceptional value wetlands.

(3) *Permits.* The Department will maintain a list of permit decisions involving wetlands. This list will be a matter of public record and will be available for inspection at the Department’s offices.

### **§ 105.18. [Reserved].**

### **§ 105.18a. Permitting of structures and activities in wetlands.**

(a) *Exceptional value wetlands.* Except as provided for in subsection (c), the Department will not grant a permit under this chapter for a dam, water obstruction or encroachment located in, along, across or projecting into an exceptional value wetland, or otherwise affecting an exceptional value wetland, unless the applicant affirmatively demonstrates in

writing and the Department issues a written finding that the following requirements are met:

- (1) The dam, water obstruction or encroachment will not have an adverse impact on the wetland, as determined in accordance with §§ 105.14(b) and 105.15 (relating to review of applications; and environmental assessment).
- (2) The project is water-dependent. A project is water-dependent when the project requires access or proximity to or siting within the wetland to fulfill the basic purposes of the project.
- (3) There is no practicable alternative to the proposed project that would not involve a wetland or that would have less effect on the wetland, and not have other significant adverse effects on the environment. An alternative is practicable if it is available and capable of being carried out after taking into consideration construction cost, existing technology and logistics. An area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed to fulfill the basic purpose of the project shall be considered as a practicable alternative.
- (4) The project will not cause or contribute to a violation of an applicable State water quality standard.
- (5) The project will not cause or contribute to pollution of groundwater or surface water resources or diminution of resources sufficient to interfere with their uses.
- (6) The cumulative effect of this project and other projects will not result in the impairment of the Commonwealth's exceptional value wetland resources.
- (7) The applicant shall replace affected wetlands in accordance with § 105.20a (relating to wetland replacement criteria).

(b) *Other wetlands.* Except as provided for in subsection (c), the Department will not grant a permit under this chapter for a dam, water obstruction or encroachment in, along, across or projecting into the wetland which is not an exceptional value wetland, or otherwise affecting the wetland, unless the applicant affirmatively demonstrates in writing and the Department issues a written finding that the following requirements are met:

(1) The project will not have a significant adverse impact on the wetland, as determined in accordance with §§ 105.14(b) and 105.15. The determination of whether an adverse impact is significant includes an evaluation of the following factors:

- (i) The areal extent of the wetland impacts.
- (ii) The wetland's values and functions.
- (iii) Whether the affected wetlands values and functions are unique to the area or region.
- (iv) Comments from other State and Federal environmental agencies concerning the scope and effect of the impact.

(2) Adverse environmental impacts on the wetland will be avoided or reduced to the maximum extent possible.

(3) There is no practicable alternative to the proposed project that would not involve a wetland or that would have less adverse impact on the wetland, and that would not have other significant adverse impacts on the environment. An alternative is practicable if it is available and capable of being carried out after taking into consideration construction cost, existing technology and logistics. An area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed to fulfill the basic purpose of the proposed project shall be considered as a practical alternative.

(i) It shall be a rebuttable presumption that there is a practicable alternative, not involving a wetland, to a nonwater-dependent project, and that the alternative would have less adverse impact on the wetland.

(ii) To rebut the presumption, an applicant for a permit under this chapter shall demonstrate with reliable and convincing evidence and documentation and the Department will issue a written finding that the following statements are true:

(A) The basic project purpose cannot be accomplished utilizing one or more other sites that would avoid, or result in less, adverse impact on the wetland.

(B) A reduction in the size, scope, configuration or density of the project as proposed and alternative designs to that of the project as proposed that would avoid, or result in fewer or less severe, adverse impacts on a wetland will not accomplish the basic purpose of the project.

(4) The project will not cause or contribute to a violation of an applicable State water quality standard.

(5) The project will not cause or contribute to pollution of groundwater or surface water resources or diminution of the resources sufficient to interfere with their uses.

(6) The cumulative effect of this project and other projects will not result in a major impairment of this Commonwealth's wetland resources.

(7) The applicant will replace the affected wetlands to compensate for unavoidable impacts, in accordance with § 105.20a.

(c) The Department will not grant a permit under this chapter for a dam, water obstruction or encroachment which has a significant adverse impact on a wetland unless the applicant affirmatively demonstrates and the Department finds in writing that a project is necessary to abate a substantial threat to the public health or safety and that the requirements of subsection (b)(2)–(7) are met.

#### **§ 105.19. [Complete applications.] [Reserved]**

**[(a) An application for a permit is not complete until the necessary information and requirements under the act and this chapter, including proof of financial responsibility, have been satisfied by the applicant.]**

**When the Department determines that an application is incomplete or contains insufficient information to determine compliance with this chapter, it will notify the applicant in writing. The applicant shall then have 60 days to complete the application or the Department will consider the application to be withdrawn by the applicant. Requests for a specific extension may be sought by the applicant in writing. The applicant will be notified in writing when an application is considered withdrawn. When an application is considered withdrawn, the Department will close the application file and take no further action to review the file, unless the applicant requests the file to be reopened after submitting the previously identified information to complete the application and a new fee. Fees will not be refunded after an application is withdrawn.]**

#### **§ 105.20. [Proof of financial responsibility.] [Reserved]**

**[(a) Prior to the approval of a permit under this chapter for construction or modification of a dam, water obstruction or encroachment which may present a substantial potential risk to life or property, the Department will require proof of financial responsibility or security for continued operation and maintenance during the lifetime of the facility. Dams, water obstructions or encroachments which may be subject to the proof of financial responsibility include, but are not limited to, Category 1 dams, Hazard Potential Classification, as defined in § 105.91 (relating to classification of dams and reservoirs) stream enclosures, bridges, levees, fills and floodwalls.]**

**(b) As proof of responsibility or security, the Department may require one or more of the following:**

- (1) A certificate of public convenience from the Pennsylvania Public Utility Commission if the owner of the proposed facility is subject to regulation under 66 Pa.C.S. (relating to the Public Utility Code).**
- (2) Ownership or management of the facility by an agency of the Federal, State, county or municipal government or of an interstate compact.**
- (3) A bond or other legal device of a form acceptable to the Department, payable to the Commonwealth, which guarantees proper construction, repair, operation and maintenance, inspection and monitoring, and removal if necessary of the facility. The amount of bond or legal device shall be sufficient to cover the costs of entry, repair, correction, operation, maintenance, inspection, monitoring or removal of the facility by the Commonwealth in the event of failure of the owner to comply with orders of the Department, terms and conditions of the permit, this chapter and the act and section 302 of the Flood Plain Management Act (32 P. S. § 679.302).]**

#### **§ 105.20a. Wetland replacement criteria.**

**(a) Wetlands replacement [shall] must meet the following general criteria:**

**(1) *Area ratio.* The wetland shall be replaced at a minimum area ratio of replacement acres to affected acres of 1:1. The Department may require the area ratio to exceed 1:1 based on a determination of the area affected and the functions and values which will be destroyed or adversely affected by the project. For structures or activities constructed without a permit, and for which mitigation, as defined in § 105.1 (relating to definitions), cannot be achieved, the wetland shall be replaced at a minimum area ratio of 2:1 (replacement acres: affected acres). The Department may require the area ratio to exceed 2:1 based on a determination of the area affected and the functions and values which were destroyed or adversely affected by the project.**

(2) *Function and value replacement.* Functions and values that are physically and biologically the same as those that are lost shall be replaced at a minimum ratio of 1:1. The Department may require the functions and values ratio to exceed 1:1 based on the area affected and on the functions and values which will be destroyed as adversely affected by the project and the replacement ratio. For structures or activities constructed without a permit, and for which mitigation, as defined in § 105.1, cannot be achieved, the wetland shall be replaced at a minimum area ratio of 2:1. The Department may require the area ratio to exceed 2:1 based on a determination of the area affected and the functions and values which were destroyed or adversely affected by the project.

(3) *Siting criteria.* Replacement shall be located adjacent to the impacted wetland unless an alternative replacement site is approved by the Department. Alternative replacement sites will generally not be approved unless the replacement site is located within the same watershed as the wetland being replaced or within the designated boundaries of the coastal zone management area where the loss occurs.

(b) In addition to the general criteria in subsection (a), the Department will use its guidelines entitled “*Design Criteria for Wetlands Replacement*” in making decisions under this section. These guidelines provide for design, flexibility and utilization of best available technology in environmental engineering. These guidelines are available from the Division of Rivers and Wetlands Conservation, Post Office Box 8761, Harrisburg, Pennsylvania 17105-8761.

## PERMIT ISSUANCE, TRANSFER AND REVOCATION

### § 105.21. Criteria for permit issuance and denial.

(a) In addition to the other requirements of this chapter, a permit application will not be approved unless the applicant demonstrates that the following conditions are met:

(1) The application is complete and accurate.

(2) The proposed project or action complies with the standards and criteria of this title and with other laws administered by the Department, the Fish **and Boat** Commission, and river basin commissions created by interstate compact.

(3) The proposed project or action will adequately protect public health, safety and the environment.

(4) The proposed project or action is consistent with the environmental rights and values secured by Pa. Const. Art. I, § 27 and with the duties of the Commonwealth as trustee to conserve and maintain public natural resources of this Commonwealth.

(5) The applicant has not been found to be in continuing violation of this title or other laws administered by the Department, the [Pennsylvania] Fish and Boat Commission, or a river basin commission **created by interstate compact**, including, but not limited to, a violation of an adjudication and order, agreement, consent order or decree, whether or not the applicant’s violation resulted in an order or civil penalty assessment.

(6) The applicant has submitted adequate proof of financial responsibility, if required under § [105.20] **105.13b** (relating to proof of financial responsibility).

(b) A permit issued under this chapter shall be subject to the general and special conditions regarding construction, operation, maintenance, inspection and monitoring of a project or action that the Department may deem necessary to assure compliance with the requirements and purposes of this chapter, the act, the Flood Plain Management Act (32 P. S. §§ 679.101–679.601) and other laws administered by the Department, the Fish **and Boat** Commission, and river basin commissions created by interstate compact.

(c) The Department may not issue a permit to operate and maintain a dam, water obstruction or encroachment constructed without a permit unless one of the following is met:

(1) The Department determines that the structure or activity complies with the standards and criteria of this title, including replacement in accordance with § 105.20a (relating to wetland replacement criteria), and with other laws administered by the Department, the Fish **and Boat** Commission, and river basin commissions created by interstate compact.

(2) The Department determines that the structure or activity does not comply with the standards and criteria of this title and with other laws administered by the Department, the Fish Commission and river basin commissions created by interstate compact, that the effect on wetlands will be mitigated, and at least one of the following is met:

(i) Restoration would cause destruction of a dwelling occupied by a person who had no role in the planning or construction of the project.

(ii) Restoration may result in more long term damage than would be caused by allowing the project to remain in place.

(iii) Restoration would be unsuccessful due to material changes in the condition of the site and its surrounding area.

(iv) There are extraordinary circumstances, which preclude restoration.

(d) The reason for denial of a permit application and appeal procedures shall be communicated in writing to the applicant.

(e) In an appeal from a Department action concerning a permit application to operate and maintain a dam, water obstruction or encroachment, the applicant has the burden of proving that there is no reasonable basis for the Department's action.

#### **§ 105.21a. Public notice.**

Except for dams, water obstructions and encroachments authorized under §§ 105.12, 105.64 and Subchapter L (relating to waiver of permit requirements; emergency permit; and general permits), or as small projects, the Department will publish a notice in the *Pennsylvania Bulletin* upon receipt of an application and again upon the issuance or denial of a permit by the Department.

#### **§ 105.22. [Reserved].**

#### **§ 105.23. Compliance with other applicable statutes.**

Receipt of a permit under the provisions of this chapter **[shall] does** not relieve the permittee of the obligation of complying with Federal, interstate compact and State laws, regulations and standards applicable to the construction, operation or maintenance of the dam or water obstruction.

#### **§ 105.24. Coordination of permits.**

(a) The Department will establish a system to coordinate the application for and issuance of permits under this chapter with permit processes conducted under other statutes and regulations administered by the Department and with permit processes administered by other Federal and State agencies.

(b) When possible, the Department will develop joint permit application forms to facilitate the submission of information on related activities of a project regulated under statutes and regulations administered by the Department and other Federal and State agencies, to reduce duplicate and repetitious application requirements. The joint application forms shall be used in lieu of individual applications for the required permits, except for small projects.

#### **§ 105.25. Transfer of permits.**

(a) A permit **[may] must** be transferred **[to a new owner if there is a change of ownership of the dam, water obstruction or encroachment.]or notification provided to the Department as follows:**

**(1) If the owner and permittee are the same person and there is a change in ownership, the permit must be transferred to the new owner of the dam, water obstruction or encroachment.**

**(2) If the owner and permittee are not the same person and there is a change of permittee, but not ownership of the dam, water obstruction or encroachment, the permit must be transferred to the new permittee.**

**(3) If the owner and permittee are not the same person and there is a change in ownership, but not permittee of the dam, water obstruction or encroachment, the change in ownership must be reported by the permittee to the Department in writing within 30 days.**

(b) A permit **[may] will only** be transferred **[only]** upon application to and approval by the Department. An application for transfer shall be submitted **[up]**on forms provided by the Department.

(c) A permit may not be transferred if a violation of this chapter exists at the time of application for transfer unless the transfer will expedite correction of the violation.

- (d) The new **[owner] permittee** shall expressly agree to abide by the permit conditions and shall, if applicable:
- (1) Provide the Department with proof of financial responsibility **[and] or** security in accordance with § 105.**[20]13b** (relating to proof of financial responsibility).
  - (2) Obtain a license, easement, right-of-way or other interest in the submerged lands of this Commonwealth in accordance with §§ 105.31–105.35 (relating to submerged lands of the Commonwealth—licenses and annual charges).
- (e) The original permittee will not be relieved of an obligation to comply with this chapter, the terms and conditions of the permit or an order issued by the Department until the transfer has been approved.
- (f) Upon receipt of the approved application for transfer, the applicant shall affix the approved application for transfer to the original permit. The approved application for transfer shall become part of, and remain affixed to, the original permit**[, until the Department issues a new permit]. The Department may prepare a new permit to replace worn or obsolete documents.**

**§ 105.26. Revocation and suspension of permits.**

- (a) Failure to comply with a provision of this chapter, an order of the Department, or a term or condition of a permit issued under this chapter, **or the submission of false or misleading information on a permit application,** will be cause for the Department to revoke or suspend a permit.
- (b) The Department will issue to the permittee a written notice of the suspension or revocation of a permit. The notice shall be subject to the procedure for appeal and hearing before the Environmental Hearing Board as provided by section 24 of the act (32 P. S. § 693.24); **Section 503.(b) of the Flood Plain Management Act (32 p.s. §679.503(b));** section 1921-A of The Administrative Code of 1929 (71 P. S. § 510-21), and 2 Pa.C.S. §§ 501–508 and 701–704 (relating to the Administrative Agency Law).

**§ 105.27. [Reserved].**

**§ 105.28. [Reserved].**

**§ 105.29. [Reserved].**

**§ 105.29a. Burden of proof.**

In a civil or administrative action taken by the Department under this chapter, the person against whom the action has been taken has the burden of proof to demonstrate that the project complies with the act and this chapter.

**§ 105.30. [Reserved].**

**SUBMERGED LANDS OF THE COMMONWEALTH—LICENSES  
AND ANNUAL CHARGES**

**§ 105.31. Property rights.**

- (a) Except as provided in §§ 105.32 and 105.33 (relating to projects—proper purpose; and licenses for public service corporations), **[no] a** permit issued under this chapter may **not** give real or personal property rights nor grant exclusive privileges; nor may it be construed to grant or confer a right, title, easement or interest in, to or over lands belonging to this Commonwealth.
- (b) **[No] A** permit for a dam, water obstruction or encroachment to occupy submerged lands of the Commonwealth will **not** be issued by the Department until the applicant has first obtained one of the following:
- (1) An easement, right-of-way, license or lease from the Department under section 15 of the act (32 P. S. § 693.15) and § 105.32.
  - (2) A license under section 514 of The Administrative Code of 1929 (71 P. S. § 194) and § 105.33.

(3) A license, easement, right-of-way or other interest in the submerged lands of this Commonwealth granted under specific statutory authority from the General Assembly.

(c) For purposes of this section, to occupy submerged lands of this Commonwealth includes:

(1) The placement of a physical structure on, under or over submerged lands of this Commonwealth.

(2) The use or control of the space overlying submerged lands of this Commonwealth, associated with use of a structure with the regularity and in a manner that substantially restrict or prevent navigation, fishing, recreation or other public trust uses by the general public on or over the lands.

### **§ 105.32. Projects—proper purpose.**

(a) If the applicant does not have an estate or interest in the submerged lands of this Commonwealth under other specific authority from the General Assembly at the time of application for a permit under the act, the Department may, with the approval of the Governor, grant an easement, right-of-way, license or lease to occupy submerged lands of this Commonwealth in a navigable lake or river or stream declared a public highway for a dam, water obstruction or encroachment regulated under this chapter which is constructed for the purpose of:

(1) Improving navigation or public transportation.

(2) Recreation, fishing or other public trust purposes.

(3) Protecting public safety or the environment.

(4) Providing water supply, energy production or waste treatment.

(5) Providing a public utility service by a government agency or subdivision, public utility or electric cooperative.

(6) Other activities which require access to water.

(b) The total area of land which any such project may occupy under one or more easements, rights-of-way, licenses or leases granted by the Department under this section may not exceed 25 acres.

### **§ 105.33. Licenses for public service corporations.**

In accordance with section 514 of The Administrative Code of 1929 (71 P. S. § 194), a permit issued to a public service corporation to place a public service line upon, in or over submerged land of this Commonwealth will incorporate a license for the privilege of crossing Commonwealth lands.

### **§ 105.34. Navigation and public trust.**

[No] An easement, right-of-way, lease or license will not be granted by the Department if it may adversely affect navigation or significantly impair the right in lands of the public held in trust by this Commonwealth.

### **§ 105.35. Charges for use and occupation of submerged lands of this Commonwealth.**

(a) Except as provided in subsections (b) and (c), the following charges apply to the granting of an easement, right-of-way, license or lease to occupy submerged lands of this Commonwealth issued under section 15 of the act (32 P. S. § 693.15) and § 105.32 (relating to projects—proper purpose):

(1) For commercial utility and other dams, water obstructions and encroachments except as listed in subsection (c), annual license charges:

(i) For areas occupied by facilities, \$50 per tenth of an acre.

(ii) For barge fleeting and mooring areas, \$10 per tenth of an acre.

(iii) Minimum annual charge, \$250.

(2) For private recreation docks, owned and used solely by the owners of adjacent riparian property, unless the project is otherwise authorized by a general permit issued under section 7 of the act (32 P. S. § 693.7), an annual charge of \$250.

(b) Licenses for public service lines crossing or occupying submerged lands of this Commonwealth, issued under section 15 of the act or section 514 of The Administrative Code of 1929 (71 P. S. § 194) are subject to the following schedule of

annual charges:

<i>Length of Crossings (in feet)</i>	<i>Charges (in dollars)</i>
Less than 500	\$250
500 to 999	500
1000 to 1499	1000
1500 to 1999	1500
2000 to 2499	2000
2500 to 2999	2500
3000 to 3499	3000
3500 to 3999	3500
4000 to 4499	4000
4500 to 4999	4500
5000 and over	5000

(c) Charges may not be imposed under section 15 of the act or section 514 of The Administrative Code of 1929 for the following categories of activities and structures:

- (1) An activity or structure constructed, owned or operated by a department, commission or agency of the Commonwealth or the Federal government.
- (2) A project or activity constructed, or operated primarily for the benefit of a State building or a State institution.
- (3) A flood control project constructed, owned or operated by an agency of the Commonwealth, the Federal government or a municipality.
- (4) A project or activity constructed, owned or operated by a political subdivision of **[the] this** Commonwealth which provides potable water supply, sewage disposal or other similar services necessary for public health and welfare, or in connection with a service for which no fees or charges other than general taxes are imposed.
- (5) A facility to provide access to the general public to water for recreational boating, fishing, hunting, swimming or other recreation where the access is provided without charge or on a nonprofit basis.
- (6) A structure or facility constructed and operated exclusively to improve fish habitat, under a cooperative agreement with the Fish Commission.
- (7) A private recreational dock constructed under a general permit.

(d) The annual charges imposed in subsections (a) and (b) may be revised by the EQB after approval by the Governor and reasonable notice to the holder of a license issued under this section.

(e) This section does not apply to a crossing contiguous to or in a State park or State forest lands. Easements for the crossings shall be administered in accordance with section 514 of The Administrative Code of 1929 and the park and forest land management practices of the Department **of Conservation and Natural Resources**.

(f) The removal of sand, gravel and other valuable minerals from submerged lands of this Commonwealth are subject to the royalty and agreement provisions established under section 1908-A of The Administrative Code of 1929 (71 P. S. § 510-8).

**§ 105.36. [Reserved].**

**§ 105.37. [Reserved].**

**§ 105.38. [Reserved].**

**§ 105.39. [Reserved].**

§ 105.40. [Reserved].

CONSTRUCTION REQUIREMENTS AND PROCEDURES

§ 105.41. Notices and reports.

(a) Except for work authorized under the provisions of §§ 105.12(a), 105.64 and subchapter L (relating to waiver of permit requirements; emergency permits; and general permits), t[T]he permittee shall meet the following: [notify the Department, in writing, of the proposed time for commencement of work at least 15 days prior to the commencement of construction.]

(1) For permits or approvals issued for water obstructions or encroachments, requirements to provide notice of commencement of work and status reports, if any, shall be identified in conditions of the permit or by order of the Department.

(2) For permits or approvals issued for dams, a pre-construction meeting between the permittee, the Department, the contractor and the engineer responsible for construction supervision, must be conducted at least 15 days but not more than 30 days prior to the commencement of construction unless a different time is established by the Department. Thereafter, a detailed report on the status of construction must be submitted monthly to the Department of Environmental Protection, Division of Dam Safety, until construction has been completed.

(b) The Department may require submission of [the] additional reports, as it deems necessary, on the status of construction.

§ 105.42. [Acknowledgment of] Terms and conditions of Department permits and approvals.

(a) Upon receipt of a permit, the permittee shall sign the permit thereby expressly certifying the permittee's acceptance of, and agreement to comply with, the terms and conditions of the permit. The permittee shall return a signed copy of the permit to the Department. The permit will not be effective until the signed copy of the permit is received by the Department.]

(b) (a) The permittee or owner shall fully inform the engineer or contractor responsible for the supervision and conduct of work of the terms, conditions, restrictions and covenants covered by a permit, letter of amendment, letter of authorization, or other Department approval issued under this chapter [of the terms, conditions, restrictions and covenants of the permit].

(c) (b) Prior to the commencement of construction, the permittee [shall] or owner must file [with the Department in writing, on a form provided by the Department, a statement] an acknowledgment form provided by the Department, signed by the permittee or owner and [an individual responsible for the supervision or conduct of the construction work] other project personnel, as specified on the form, acknowledging [and accepting the general and special conditions contained] the terms, conditions, restrictions and covenants in the permit and, if required by the Department, for a letter of amendment or letter of authorization. Unless the acknowledgment [and acceptance have] form has been completed and filed, the permit or other Department approval is void.

(d) (c) A copy of the permit or other Department approval and the acknowledgment form [shall] must be available at the work site for inspection upon request by an officer or agent of the Department or another Federal, State, county or municipal agency.

§ 105.43. Time limits.

(a) The Department will set time limits for the commencement and completion of work under a permit and may set time limits for the commencement and completion of work under a letter of amendment or letter of authorization issued under this chapter that it deems reasonable and appropriate to carry out the purposes of this chapter.

(b) [If] For water obstruction and encroachments, if the [work] construction is not completed on or before the dates [set by the Department] established in the permit, unless extended by the Department in writing, the permit shall become void without further notification [being required] by the Department.

(c) For dams, unless otherwise stated, if work authorized by the dam permit or other Department approval has not commenced on or before December 31 of the 5<sup>th</sup> year following permit issuance or other Department approval, the permittee or owner shall notify the Department six months prior to the anticipated commencement of work so that the project design can be reassessed and reauthorized in writing. During the design reassessment the

**permittee or owner may be required to make revisions due to changes in site conditions, dam classification, new technology or revisions to this Chapter. At any time if the permittee or owner does not intend to perform the work, the Department shall be notified in writing and the dam permit or Department approval will become void without further notification by the Department.**

**§ 105.44. Implementation of work according to specifications.**

(a) Work undertaken under a permit **or other Department approval** issued under this chapter [shall] **must** be conducted in accordance with the maps, plans, profiles and specifications as approved by the Department.

(b) [No changes] **Changes** in the maps, plans, profiles and specifications for work covered by a permit **or other Department approval** which would affect the waterway area or structural stability of the project may **not** be made except with the written approval of the Department. Upon written approval by the Department, the changes shall become part of the permit.

(c) The Department will have the right during the progress of work to require changes or modifications in the maps, plans, profiles and specifications for work covered under a permit **or other Department approval** it may determine are necessary and proper to protect public health, public safety and the environment.

**§ 105.45. Inspections by the Department.**

Work, structures and land covered under a permit **or other Department approval** issued under this chapter shall at all times be subject to inspection by representatives of the Department **and its authorized agents**, and the permittee **or owner** shall allow representatives of the Department **and its authorized agents** to enter a property, premises or place associated with the [permit] **permitted or approved project** for the purposes of the inspection.

**§ 105.46. Implementation of erosion and sedimentation control plans.**

(a) During the construction of a dam, water obstruction or encroachment, the permittee **or owner** shall follow the erosion and [sedimentation] **sediment** control plan prepared in accordance with Chapter 102 (relating to erosion control) and submitted [with and approved] as part of this application.

(b) Construction [shall] **must** be done in a manner [so as] to minimize erosion of banks and bed of the stream and disturbance of the regimen of the stream.

**§ 105.46a. Collection and disposal of waste materials.**

Waste materials, scrap or excess construction materials shall be collected, stored and disposed of in accordance with the Solid Waste Management Act (35 P. S. §§ 6018.101–6018.1003), the Municipal Waste Planning, Recycling and Waste Reduction Act (53 P. S. §§ 4000.101–4000.1904), The Clean Streams Law (35 P. S. §§ 691.1–691.1001) and related rules and regulations.

**§ 105.47. Removal of [structures] dams and removal or abandonment of water obstructions and encroachments.**

(a) If construction work has not been completed within the time specified in the permit **or other Department approval** and the time limit specified in the permit has not been extended in writing by the Department or if a permit has been revoked for any reason, the permittee **or owner** shall, at his own expense and in a manner that the Department may prescribe, remove all or any portion of the work as the Department requires and restore the [water course and floodplain] **regulated waters of this commonwealth** to their former condition.

(b) Prior to discontinuing use or abandonment, the **permittee or** owner of a [structure] **water obstruction or encroachment** covered by this chapter, [regardless of whether or not it was constructed under a permit from this Department or its predecessors,] shall remove all or part of the facility and take other actions as [are] necessary to protect safety and the environment in accordance with a permit **or other approval** issued by the Department.

**(c) The owner of a dam covered by this chapter, shall remove all or part of the facility and take other actions as necessary to protect safety and the environment in accordance with a permit or other approval issued by the Department.**

## OPERATION, MAINTENANCE AND INSPECTION

### § 105.51. Operation and maintenance.

The permittee or owner of a dam, water obstruction or encroachment shall operate and maintain the facility and appurtenant structures in a safe condition in accordance with permit terms and conditions, **[and]** the provisions of this chapter, **and operation and maintenance manual as required by the Department** so that the facility cannot imperil life, health, safety or property located above or below the facility.

### § 105.52. **[Inspection.] [Reserved].**

**[Regardless of the date of construction of a dam, water obstruction or encroachment or whether or not it was permitted by the Department or its predecessors, it shall be the duty of the permittee or owner of a dam, water obstruction or encroachment to evaluate the safety of the facility and appurtenant structures and to modify the facility in accordance with the permit requirements of § 105.11 (relating to permit requirements) to ensure protection of life and property in accordance with changed conditions and current safety criteria.]**

### § 105.53. Inspections by **permittees or owners** and inspection reports.

**(a)** The permittee or owner of a dam, water obstruction or encroachment shall inspect the facility and appurtenant works according to the following schedule:

(1) Dams, reservoirs and their appurtenant works **[shall] must** be inspected at least once every 3 months.

(2) For **hazard potential** Category 1 dams and Category 2 dams as classified in § 105.91 (relating to classification of dams and reservoirs)**[, which are defined as high hazard dams in § 105.1 (relating to definitions),]** annual reports regarding the condition of the dam, **[certified by a registered professional engineer,] affixed with the seal of a registered professional engineer and certification, which reads “This is to certify that the above dam has been inspected and the following are the results of the inspection.”,** **[shall] must** be submitted to the Department on or before December 31 of each year. More frequent reports of dam conditions may be required by the Department if in its discretion conditions indicate the reports are necessary to assure adequate protection of health, safety and property.

(3) For local flood protection projects, annual reports regarding the condition of the flood protection facility **[shall] must** be submitted to the Department on or before December 31 of each year.

(4) The **permittee or** owner of a water obstruction or encroachment shall conduct periodic inspections to ensure the safe operation, monitoring and maintenance of the facility in accordance with this title, terms and conditions of the permit and approved operating or monitoring plans.

(5) The **permittee or** owner shall retain records of the inspections, including records of actions taken to correct conditions found in the inspections. Copies of the records shall be provided to the Department on request.

(6) The Department may, through terms and conditions of the permit or by request at any time, require the **permittee or** owner to submit certified reports regarding the condition of the facility to the Department.

(7) **[In] for water obstructions and encroachments, in** lieu of inspections conducted by the **permittee or** owner and certified reports submitted by the **permittee or** owner, the Department may accept reports of equivalent inspections conducted and prepared by governmental agencies. In addition, the Department may accept equivalent inspection reports certified by the **permittee or** owner and submitted to other governmental agencies.

**(b) Regardless of the date of construction of a dam, water obstruction or encroachment or whether or not it was permitted by the Department or its predecessors, it shall be the duty of the permittee or owner of a dam, water obstruction or encroachment to evaluate the safety of the facility and appurtenant structures and to modify the facility in accordance with the permit requirements of § 105.11 (relating to permit requirements) to ensure the protection of life and property with respect to changed conditions and current safety criteria. If structural or operation modifications are required as a result of the inspection findings, the permittee or owner must make application for permit, or request an amendment to an existing permit to perform the modifications.**

### § 105.54. Monitoring systems.

The permittee or owner of a dam, water obstruction or encroachment shall set up and implement monitoring systems that are required by the Department in the terms and conditions of the permit.

## **INVESTIGATION AND CORRECTION OF UNSAFE CONDITIONS—EMERGENCY PROCEDURES**

### **§ 105.61. Procedures for investigations.**

The Department may, if it finds there is reasonable cause to suspect the existence of conditions adversely affecting the safety of a dam, water obstruction or encroachment, **or the environment,** order the owner to conduct investigations, studies, tests and analyses that may be required to properly evaluate the safety of the structure. The investigations, studies, tests and analyses shall be accomplished under the supervision of a registered professional engineer, experienced in the design, construction, operation and maintenance of the facilities and approved by the Department, and shall be accomplished in accordance with methods the Department may prescribe. Failure to **conduct the ordered investigations, studies, tests and analyses and** provide the investigation results **of the activities** to the Department on request will constitute adequate grounds for revocation or suspension of a permit.

### **§ 105.62. Correction of unsafe conditions.**

(a) If the Department determines that a dam, water obstruction or encroachment is unsafe or adversely affects property or the environment or has not been properly constructed, operated, monitored or maintained in compliance with legal requirements, it may require the owner of the facility to repair, alter, maintain or remove the facility or take other actions necessary to carry out the purposes of this chapter within the time prescribed by the Department.

(c) The Department or its authorized agents may enter and conduct investigations, tests and analyses and take corrective action required to carry out the purposes of this chapter if one or more of the following conditions exist:

- (1) The owner cannot be ascertained or found.
- (2) The owner refuses or fails to comply with an order issued by the Department under section 14 of the act (32 P. S. § 693.14) or this section.
- (3) The condition of the facility is so dangerous as to require immediate remedial action.

(c) The Department may recover from the owner, in the name of the Commonwealth, the expenses incurred in taking the action described in subsection (b) in the same manner as debts are recoverable by law.

### **§ 105.63. Emergency procedures.**

(a) The permittee or owner of a dam, water obstruction or encroachment shall immediately notify the Department and responsible authorities in adjacent and downstream communities, including emergency management authorities, of a condition which may threaten the safety of the facility and take necessary actions to protect life and property, including action required under an emergency plan or Department order issued under the act.

(b) The permittee or owner of a dam or reservoir shall immediately notify the Department and responsible emergency management authorities in adjacent and downstream communities of conditions which may indicate a potential dam hazard emergency **in accordance with § 105.135 (relating to dam hazard emergencies)** including [, **but not limited to,**] one or more of the following conditions:

- [(1) Sliding of upstream or downstream slopes or abutments contiguous to the dam.**
- (2) Sudden subsidence of the crest of the dam.**
- (3) Longitudinal or transverse cracking of the crest of the dam.**
- (4) Unusual release of water from the downstream face or toe of the dam.**
- (5) Other unusual conditions at the downstream slope of the dam.**
- (6) Significant landslides in the reservoir area.]**

**(1) The lake or pond level is at or near the top of the dam and water is flowing, or about to flow, over the top of the dam.**

**(2) The overflow pipe or spillway is damaged, or clogged with debris or ice, which is resulting in a rapid rise in the lake or pond level.**

**(3) The primary or emergency spillway is experiencing heavy flows which are causing severe erosion to the spillway or the dam embankment.**

**(4) Any structural movement or failure of the concrete (masonry) spillway or the spillway abutment walls.**

**(5) Any sloughing or sliding of the dam embankment's upstream or downstream slope. Also, earth slides in the spillway channel, either upstream or downstream of the dam's crest, which could impede the flow in the spillway.**

**(6) Subsidence, sinkholes or cracks found in any part of the dam embankment or abutting slopes.**

**(7) Any new discharge of water is observed through the dam embankment or abutting slopes, adjacent to any conduit outlets, or under the dam, which appears as a boil along the downstream toe. Should such a discharge occur and the water is cloudy or muddy in color, then a very serious problem exists.**

**(8) Any other conditions, which the owner's engineer knows are a concern for the dam's safety.**

(c) In case of emergency, telephone calls should be directed to the **Public Safety Answering Point (PSAP) – 911, the Pennsylvania Emergency Management Agency at (717) [783-8150] 651-2001 [or] and** the Department's emergency number at (717) 787-4343 **or (800) 541-2050.**

#### **§ 105.64. Emergency [permit] permits.**

The Department may issue emergency permits if it finds that immediate remedial action is necessary to alleviate an imminent threat to life, property or the environment.

(1) The emergency permit will be provided in writing, on a form developed for this purpose.

(2) The emergency permit will contain conditions as the Department determines appropriate.

(3) The Department may institute proceedings, legal or administrative, that it deems appropriate for violations of the emergency permit or conditions of the emergency permit.

(4) **[If the municipality in which the emergency occurs has waived notice, the emergency permit is effective immediately. If notice has not been waived by the municipality, the emergency permit is effective 30 days after notice is sent to the municipality in which the emergency occurred.]** The emergency permit will expire in **[30] 60** days **after the effective date of the permit** unless extended in writing by the Department.

**(5) The permittee shall notify the affected municipality of the issuance of an emergency permit as soon as possible and provide a follow-up notice in writing to the affected municipality within 48 hours from the issuance of the emergency permit.**

**[(Editor's Note: The act of August 14, 1991 (P. L. \_\_, No. 35) supersedes the first two sentences of § 105.64(4).)]**

## Subchapter B. DAMS AND RESERVOIRS

### GENERAL PROVISIONS

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#### GENERAL PROVISIONS

##### § 105.71. Scope.

Except as provided in §§ 105.3 and 105.12 (relating to scope; and waiver of permit requirements), this subchapter governs the construction, [alteration, enlargement, repair, maintenance,] operation, **maintenance, and modification [and removal]** of a dam or reservoir regulated under the act.

##### § 105.72. [Reserved].

##### § 105.73. [Reserved].

##### § 105.74. [Reserved].

##### § 105.75. [Reserved].

§ 105.76. [Reserved].

§ 105.77. [Reserved].

§ 105.78. [Reserved].

§ 105.79. [Reserved]

#### **PERMITS, LETTERS OF AMENDMENTS AND LETTERS OF AUTHORIZATIONS**

**§ 105.81. Permit applications for construction and modification of dams and reservoirs.**

(a) In addition to the information required by §§ 105.13, **105.13a, 105.13b AND 105.15** [(relating to permit applications—information and fees)], permit applications under this subchapter for the construction or modification of dams and reservoirs shall ~~[give]~~ **provide** the following information:

- (1) **[The name and address of the applicant.] Reports and data detailing the conduct and results of investigations and tests necessary to determine the safety, adequacy and suitability of design, including:**
    - (i) **Data concerning subsoil and rock foundation conditions**
    - (ii) **Data concerning exploratory pits, drilling, coring and tests to determine seepage rates**
    - (iii) **Data concerning the strength tests necessary to measure the physical properties and behavior of foundations and embankment materials at the dam or reservoir site**
    - (iv) **Data concerning the geology of the dam site or reservoir area, indicating possible hazards such as faults, weak seams and joints**
    - (v) **Data concerning availability and quality of construction materials;**
    - (vi) **A “Dam Stability Report” as required by § 105.97 (relating to stability of structures)**
    - (vii) **Other information as may be necessary to determine the safety, adequacy and suitability of the design, including the design calculations for the dam, which shall be made available to the Department on request.**
  - (2) **[The location, type, size, height and purpose of the proposed dam and reservoir and appurtenant works.] Site plan and cross sectional views required under § 105.13(d)(1)(i) (relating to permit applications—information and fees),**
  - (3) **Construction plans, specifications and design reports in sufficient detail to evaluate the safety, adequacy and suitability of the proposed dam, reservoir and appurtenant works**
  - (4) **A schedule indicating proposed commencement and completion dates for construction.**
- [(3)] (5) For projects involving storage of fluids or semifluids other than water, information concerning the chemical content, viscosity and other pertinent physical characteristics of the fluid or semifluid impounded.
- [(4)] The storage capacity and reservoir surface areas for normal pool and maximum high water.
- (5) Plans (6) **An instrumentation plan including justification and design** for [purposed] **the installation of permanent monitoring instruments to measure the performance** of [performance by instrument installations in] the dam[, including the purposes of the instrumentation]. If no instrumentation is considered necessary, [reasons for this judgment may] **justification must be [stated] provided.**
- [(6)] (7) [As accurately as may be readily obtained, the area] **A hydrologic and hydraulic analysis, submitted as a separate report, which includes:**
  - (i) **The size, shape and characteristics** of the drainage basin[, **pertinent rainfall and stream flow**].
  - (ii) **Current precipitation data and precipitation distribution information as required by the Department.**
  - (iii) **Streamflow** records[, and flood].
  - (iv) **Flood** flow records and estimates.

**(v) An incremental dam breach analysis, storage capacity and reservoir surface area for normal pool and maximum storage elevations.**

**(vi) Other hydrologic and hydraulic determinations necessary for the design and operation of the dam.**

[(7)] **(8) [The proposed time for commencement and anticipated completion of construction] For existing dams, copies of the structure's most recent inspection reports.**

[(8)] **(9) [The method and schedule of operation of the dam including an] An emergency [warning system and operation] action plan if required under § 105.134 (relating to emergency action plan).**

**(9) Plans for control of erosion and water pollution during the anticipated construction operations including plans for adequate measures to limit the erosion of the soil from exposed slopes after completion of construction. The plans shall indicate that adequate control measures will be taken during construction to protect the quality of stream flow below the project site. The application shall include a copy of a letter from the conservation district in the county where the project is located indicating that the district reviewed the erosion and sediment control plan of the applicant and considers it to be satisfactory. ]**

(10) Proof of title or adequate flowage easements for land area below the top of the dam elevation that is subject to inundation.

**(11) An operation and maintenance manual for the dam as required by § 105.131 (relating to operation, maintenance and monitoring).**

[(11)] **(12)** Other information the Department may require.

**(b) The application shall be accompanied by a design report, construction plans and specifications, in sufficient detail to evaluate the safety, adequacy and suitability of the proposed work.**

**(c) The applicant shall conduct and submit the results of the investigations and tests as the Department, in its judgment, believes are necessary to determine the safety, adequacy and suitability of design, including but not limited to:**

**(1) Data concerning subsoil and rock foundation conditions and the materials entering into the construction of the dam or reservoir.**

**(2) Data concerning exploratory pits, drilling, coring and tests to determine seepage rates.**

**(3) Data concerning the strength tests necessary to measure the physical properties and behavior of foundation and embankment materials at the dam or reservoir site.**

**(4) Data concerning the geology of the dam or reservoir area, indicating possible hazards such as faults, weak seams and joints.**

**(5) Data concerning availability and quality of construction materials.**

**(6) Other information as may be necessary, including the design calculations for the dam, which shall be made available to the Department on request.**

**(d) Plans and specifications and the results of tests or investigations shall be prepared under the supervision of and certified by a registered professional engineer experienced in dam design and construction and assisted by qualified engineers, geologists and other specialists, when necessary. ]**

**[(e)] (b) The Department may waive specific information requirements of this section in writing, if the Department finds that specific information is not necessary to review the application.**

## **§ 105.82. Permit applications for operation and maintenance of existing dams and reservoirs.**

(a) In addition to information required by §§ 105.13 [and 105.14], **105.13b and 105.15** (relating to permit applications—information and fees; [and review of applications] **proof of financial responsibility; and environmental assessment**), a permit application for the operation and maintenance of existing dams and reservoirs shall [give] **provide** the following information:

**(1) [The name and address of the applicant.] Site plan and cross sectional views required under § 105.13 (d)(1)(i)**

**(2) [The location] “As built” construction plans, specifications and design reports not already on file with the**

**Department, which show the type, size, height and [purpose] other pertinent dimensions and features** of the existing dam and reservoir and appurtenant works.

(3) For projects involving storage of fluids or semifluids other than water, information concerning the chemical and physical characteristics of the fluid or semifluid impounded.

(4) **[The storage capacity and reservoir surface areas for normal pool and maximum high water.**

(5) A description of facilities and plans for monitoring the performance of the dam.

**[(6) Information on the area] (5) A hydrologic and hydraulic analysis, submitted as a separate report, which includes:**

**(i) The size, shape and characteristics** of the drainage basin[,],

**(ii) Current precipitation data and precipitation distribution information as required by the Department.**

**(iii) [rainfall and stream flow] Streamflow** records[, and],

**(iv) [flood] Flood** flow records and estimates[, when available],

**(v) An incremental dam breach analysis, storage capacity and reservoir surface area for normal pool and maximum storage elevations.**

**(vi) Any other relative hydrologic and hydraulic information that may be available.**

[(7)] **(6)** Information [**readily**] available regarding the foundation, **embankment stability**, specifications and construction of the dam.

**[(8) The method and schedule of operation of the dam, if deemed necessary by the Department.] (7) A manual which includes plans for the operation and maintenance of the dam in accordance with the requirements of § 105.131 (relating to operation, maintenance and monitoring).**

[(9)] **(8)** The emergency [**warning**] **action** plan for the dam or reservoir, if completed, or work plan to prepare and submit an emergency [**warning**] **action** plan in accordance with §§ **105.131 and** 105.134 (relating to [**operation and monitoring plans; and**] emergency action plan).

[(10)] **(9)** Proof of title or flowage easements for land areas below the top of the dam elevation that is subject to inundation.

[(11)] **(10)** Reports of the most recent inspections of the dam conducted by the owner or by the State or Federal government agencies.

[(12)] **(11)** Other information as the Department may require.

(b) The Department may waive or modify one or more of the application content requirements set forth in subsection (a) if the information required is not available and is not essential to determining the safety of the dam or reservoir or compliance by the dam or reservoir with the requirements of this chapter.

§ 105.83. [Reserved].

§ 105.84. [Reserved].

§ 105.85. [Reserved].

§ 105.86. [Reserved].

§ 105.87. [Reserved].

**§ 105.88. Dam Permit Issuance.**

**(A) Upon the Department's review and approval of the dam permit application for the construction or modification of a dam in accordance with § 105.81 (relating to permit applications for construction and**

modification of dams and reservoirs), the Department will issue a dam construction permit.

(b) For newly constructed or modified dams permitted under subsection (a), the Department will issue a dam operation and maintenance permit after the following conditions have been met:

(1) Meeting the requirements of §§ 105.107-105.109 (relating to final inspection; completion certification and project costs; and as-built plans) by the owner or permittee.

(2) Acceptance of construction or modification by the Department.

(c) Upon the Department's review and approval of the dam permit application for operation and maintenance of existing dams in accordance with § 105.82 (relating to permit applications for operation and maintenance of existing dams and reservoirs), the Department will issue a dam operation and maintenance permit.

§ 105.89. Letters of Amendment and Letters of Authorization for Modification of Dams and Reservoirs.

(a) Projects which do not modify top of dam elevation, normal pool elevation, or normal operation of the pool level may be authorized by letter of amendment when the dam has an existing permit or by letter of authorization when the dam meets § 105.12(b) (relating to waiver of permit requirements). The permittee or owner shall provide the following information:

(1) Reports and data detailing the conduct and results of investigations and tests necessary to determine the safety, adequacy and suitability of design, including:

(i) Data concerning subsoil and rock foundation conditions

(ii) Data concerning exploratory pits, drilling, coring and tests to determine seepage rates

(iii) Data concerning the strength tests necessary to measure the physical properties and behavior of foundations and embankment materials at the dam or reservoir site

(iv) Data concerning the geology of the dam site or reservoir area, indicating possible hazards such as faults, weak seams and joints

(v) Data concerning availability and quality of construction materials;

(vi) A "dam stability report" as required by § 105.97 (relating to stability of structures)

(vii) other information as may be necessary to determine the safety, adequacy and suitability of the design, including the design calculations for the dam, which shall be made available to the Department on request.

(2) In addition to the site plan and cross sectional views required under § 105.13(d)(1)(i) (relating to permit applications-information and fees), construction plans, specifications and design reports in sufficient detail to evaluate the safety, adequacy and suitability of the proposed dam, reservoir and appurtenant works, and a schedule indicating proposed commencement and completion dates for construction.

(3) For projects involving storage of fluids or semifluids other than water, information concerning the chemical content, viscosity and other pertinent physical characteristics of the fluid or semifluid impounded.

(4) Plans for proposed permanent monitoring of performance by instrument installations in the dam, including the purposes of the instrumentation. If no instrumentation is considered necessary, reasons for this engineering judgment shall be stated.

(5) A hydrologic and hydraulic analysis, submitted as a separate report, which include the following:

(i) The size, shape and characteristics of the drainage basin

(ii) Current precipitation data and precipitation distribution information as required by the Department.

((iii) Streamflow records.

(iv) Flood flow records and estimates.

(v) An incremental dam breach analysis, storage capacity and reservoir surface area for normal pool and maximum storage elevations.

(vi) Other hydrologic and hydraulic determinations necessary for the design and operation of the dam.

(6) For existing dams, copies of the structure's most recent inspection reports.

(7) An emergency action plan if required under § 105.134 (relating to emergency action plan).

**(8) A manual documenting the operation and maintenance procedures for the dam.**

**(9) For projects impacting wetlands or exceptional value waters, or if the project requires 401 water quality certification, environmental assessment approval will be required under § 105.15 (relating to environmental assessment).**

**(b) The Department may waive the specific information requirements of this section in writing, if upon review of the request for letter of amendment or letter of authorization, the Department finds that specific information is not necessary to approve the project.**

**CLASSIFICATION AND DESIGN CRITERIA FOR APPROVAL OF CONSTRUCTION, OPERATION, MODIFICATION AND MAINTENANCE**

**§ 105.91. Classification of dams and reservoirs.**

(a) A dam or reservoir shall be classified in accordance with size **Category** and the hazard potential **Category** which might occur in the event of an operational or structural failure. In approving a [hazard potential] classification, the Department will consider, without limitation:

- (1) The height of the dam and storage capacity of the reservoir.
- (2) The physical characteristics and extent of actual and projected development of the dam site and downstream areas.
- (3) The relationship of the site to existing or projected industrial, commercial and residential areas and other land uses downstream which may be affected by a dam failure.

(b) **Size category will be determined by either storage or height of structure, whichever results in the higher category. Hazard potential category will be determined by either loss of life or economic loss, whichever results in the higher category.** The following shall be the [classifications] **categories** and descriptions as used in this subchapter:

**SIZE [CLASSIFICATION\*] CATEGORY**

<i>[Class]</i> <b><u>Category</u></b>	<i>Impoundment Storage</i> <i>(Acre Feet)</i>	<i>Dam Height (Feet)</i>
A	Equal to or greater than 50,000	Equal to or greater than 100
B	Less than 50,000 but greater than 1000	Less than 100 but greater than 40
C	Equal to or less than 1000	Equal to or less than 40

**[\*Note: Size classification may be determined by either storage or height of structure, whichever gives the higher category.]**

**HAZARD POTENTIAL [CLASSIFICATION] CATEGORY**  
*[Extent of Development]*

<i>Category</i>	<i>Population at Risk</i>	<i>Economic Loss</i>
1	<b><u>Substantial (Numerous homes or small businesses or a large business or school.)</u></b>	Excessive <b><u>such as</u></b> [(]extensive residential, commercial, <b><u>or</u></b> agricultural <b><u>damage, or [and]</u></b> substantial public inconvenience[)]].
2	<b><u>Few (A small number of homes or small businesses.)</u></b>	<b><u>Appreciable such as limited residential, commercial, or agricultural damage, or moderate public inconvenience.</u></b>

[2] 3 [Few (no rural communities or urban developments and no more than a small number of habitable structures)] None expected (no permanent structures for human habitation or employment) [Appreciable] **Significant** [(]damage to private or public property and short duration public inconvenience[)] such as damage to storage facilities or loss of critical stream crossings

[3] 4 None expected (no permanent structure for human habitation or employment) Minimal [(undeveloped or occasional structures with no significant effect on public inconvenience)] damage to private or public property and no significant public inconvenience

#### § 105.92. Foundations.

(a) The foundation of a dam or reservoir [shall] **must** be stable under all probable conditions.

(b) In analyzing the stability of the foundation of a proposed or existing dam or reservoir, the applicant shall consider all of the following factors:

(1) The seismic forces and liquefaction potential at the site.

(2) The [shearing] shear strength of the foundation.

(3) Settlement [and], subsidence, and carbonate karst solution features, such as sinkholes and solution channels.

(4) [Leakage, permeability and solubility] Seepage potential through the soil and rock components of the foundation.

(5) The dispersive characteristics of the soil foundation and borrow areas.

#### § 105.93. Design stress.

In the construction of dams and reservoirs, allowable stresses [shall] **must** conform to the current standards accepted by the engineering profession.

#### § 105.94. Spillways.

(a) Every dam [shall] **must** be provided with a spillway system which is capable of safely conveying the design flood, as provided in §105.98 (relating to design flood criteria), of the dam without endangering the safety or integrity of the dam. The Department may require submission of models utilizing current acceptable methodologies to demonstrate this capability without excessive erosion and failure of the spillway system.

(b) Each spillway [shall] **must** include a satisfactory means of dissipating the energy flow at its outlet to assure conveyance of flow without endangering the safety and integrity of the dam or the natural environment of the stream.

(c) Each spillway floor slab must be provided with adequate drainage, anchors, or drainage and anchors to be stable against uplift.

#### § 105.95. Freeboard.

Sufficient freeboard may be required to prevent overtopping of the dam and to allow for wave and ice action.

#### § 105.96. Outlet works.

(a) Dams [shall] **must** include a device to [permit] allow the complete draining of the reservoir [within a reasonable period of time as determined by the Department] unless the Department determines that an outlet works is not feasible for a specific dam. At minimum, the device must be sized to pass a minimum of 70% of the highest mean monthly inflow at the site plus the capacity to drain the top 2 feet of reservoir storage below normal pool in 24 hours. The Department may require an increased size to provide for the integrity of the dam and to protect life and property

**with an adequate margin of safety.**

(b) In determining the reasonable time period for drainage of the reservoir, the **dam owner, the dam owner's engineer, and the** Department may consider, without limitation, the following factors:

- (1) The damage potential posed by possible failure of the dam.
- (2) The risk and nature of potential failure and the time likely to be available to avert the failure after notice of conditions threatening the safety or stability of the dam.
- (3) The purpose of the dam and reservoir.
- (4) The capacity and stability of available drainage courses to convey the waters released from the reservoir in the event of emergency drainage.
- (5) The influence of rapid drawdown on the stability of the dam, its appurtenant works and the upstream natural slopes of the reservoir.

**(c) Under normal conditions, the maximum rate of drawdown for reservoirs impounded by earthfill dams should not exceed 1 foot per day without prior approval by the Department. Under emergency conditions, the maximum rate of partial or complete drawdown of reservoirs must be approved by the Department, when feasible.**

**(d) Each outlet works [shall] must include upstream closure, trashrack, and** a means of dissipating the energy of flow at its outlet to assure conveyance of flow without endangering the safety and integrity of the dam or the natural environment of the stream.

**§ 105.97. Stability of [structure] structures.**

(a) Dams [shall] **must** be structurally sound and [shall] be constructed of sound and durable materials. The [completed] structure [shall] **must** be stable [**under all probable conditions of operation**] **during and at the completion of construction.**

(b) [**In reviewing the stability of a structure, the Department may consider, without limitation, the following:**] **As part of the permit application for the construction or modification of a dam, the design engineer must submit to the Department, under professional seal and certification, a report entitled "Dam Stability Report" which clearly demonstrates to the Department that the requirements of Subsection (a) have been satisfied. At a minimum, this report must address the following considerations:**

- (1) The physical properties of the materials available for construction.
- (2) [**The**] **A stability analysis based on the properties of the structure's materials and on the** seismic **forces** and **seepage conditions** affecting the structure.
- (3) The methods of construction.
- (4) The conditions of operation of the dam and reservoir.

**(c) Earthfill dams must be demonstrated to be stable for the following conditions:**

- (1) Normal pool with steady-state seepage conditions with a factor of safety of 1.5.**
- (2) Maximum pool with steady-state seepage conditions with a factor of safety of 1.4.**
- (3) Sudden drawdown from normal pool conditions with a factor of safety of 1.2.**
- (4) Normal pool with steady-state seepage conditions under seismic forces produced by the maximum credible earthquake with a factor of safety of 1.1.**
- (5) Completion of construction with no pool with a factor of safety of 1.3.**

**(d) Gravity dams must be demonstrated to be stable for the following conditions:**

- (1) Normal pool with appropriate uplift pressures, ice loads and silt loads with a factor of safety of 2.0.**
- (2) Maximum pool with appropriate uplift pressures and silt loads with a factor of safety of 1.7.**
- (3) Normal pool with appropriate uplift pressures and silt loads under seismic forces produced by the maximum credible earthquake with a factor of safety of 1.3.**

**(e) For gravity dams, the overturning stability is acceptable when the resultant of all forces acting on the dam is located as follows:**

(1) Within the middle third of the structure for normal pool conditions.

(2) Within the middle half of the structure for maximum pool conditions.

(3) Within the structure for earthquake conditions.

(f) For gravity dams the foundation bearing pressures must be less than or equal to the allowable for no pool, normal pool and maximum pool conditions and less than 133% of the allowable for earthquake conditions.

(g) The factors of safety for earthfill dams or gravity dams must be the higher of:

(1) The factors of safety in subsections (c) and (d).

(2) The factors of safety in the most recent Engineering Manuals developed by the U.S. Army Corps of Engineers relating to stability of dam structures.

#### § 105.98. Design flood criteria.

[(a)] The discharge capacity or storage capacity, or both, [shall] **must** be capable of safely accommodating the recommended design flood for the [size and hazard potential classification of the dam as determined] **dam as classified** by § 105.91 (relating to classification of dams and reservoirs). The [design flood is intended to represent the largest flood that need be considered in the evaluation of a given project. When a range of ]design flood [is indicated, the magnitude that most closely relates to the size and hazard potential shall be selected. Design flood criteria shall be as indicated in the following table:] **must be determined by an incremental dam breach analysis. The minimum required design storm duration is 24 hours. When considered appropriate by the Department, engineering judgment may be used to determine the design flood within the design flood range indicated below for dams of hazard potential category 3 or 4. The classification or damage, or both, resulting from dam failure will determine the design flood within the design flood range.**

<i>[Size and Hazard Potential]</i>	
<i>Classification</i>	<i>Design Flood <u>Range</u></i>
[A-1, A-2, B-1]	[PMF]
A-3, [B-2, C-1] <b>B-3</b>	1/2 PMF to PMF
[B-3, C-2] <b>A-4, B-4,</b>	100 year to 1/2 PMF
<b>C-3</b>	
[C-3] <b>C-4</b>	50 year to 100 year frequency

[(b) The Department may, in its discretion, require consideration of a minimum design flood for a class of dams or reservoirs in excess of that set forth in subsection (a) when it can be demonstrated that the design flood requirement is necessary and appropriate to provide for the integrity of the dam or reservoir and to protect life and property with an adequate margin of safety.

[(c) The Department may, in its discretion, consider a reduced design flood for a class of dams or reservoirs when it can be demonstrated that the design flood provides for the integrity of the dam or reservoir and protects life and property with an adequate margin of safety. ]

#### § 105.99. Dams in subdivision developments.

Whenever a dam or reservoir is proposed to be constructed in or as a part of an existing or proposed subdivision development, the Department will include in the permit the conditions as are necessary to prevent construction of structures on lands which may be subject to flooding caused by the maximum pool of the dam and to require the permittee to adequately inform potential buyers or lessees of the restrictions.

### CONSTRUCTION REQUIREMENTS AND PROCEDURES

#### § 105.101. [Notices and reports.] **[Reserved].**

[At least 15 days prior to commencement of construction, the permittee shall notify the Department, in writing, of the proposed time for commencement of work. Thereafter, a detailed report on the status of construction shall be

submitted monthly to the Department of Environmental Resources; Division of Dam Safety; Post Office Box 2357, Harrisburg, Pennsylvania 17120, until construction work has been completed.]

**§ 105.102. Personnel and supervision.**

(a) The permittee **or owner** shall file with the Department, at least 15 days prior to the commencement of construction, a statement setting forth the name **[of the contractors conducting the work authorized by the permit and the names and employers of personnel responsible for the supervision of construction.] and employer, including contact information, of the following:**

**(1) The professional engineer responsible for oversight and supervision of construction.**

**(2) Representatives of the professional engineer.**

**(3) Contractors conducting the work authorized by the permit, letter of amendment or letter of authorization as required by the Department.**

(b) Work **[shall] must** be conducted under the oversight and supervision of a **[competent] professional** engineer approved by the Department**[, and the].** **The professional** engineer or **[a competent] Department approved** representative shall be on the work site during significant construction activities until the completion of the dam.

**§ 105.103. Weather and ground conditions.**

(a) No earth or other embankment material **[which is] may be covered, placed, compacted, or graded when** in a frozen condition **[may be covered or placed in embankments].**

(b) Masonry and concrete may not be placed in freezing weather except under conditions approved by the Department.

**§ 105.104. Removal and disposal of vegetation.**

(a) Work shall be conducted in **[such] a manner [as]** to minimize the destruction of or damage to trees and other vegetation on and adjacent to the construction site.

(b) Vegetation cleared and removed from the site shall be disposed of in accordance with **[all]** applicable laws and regulations.

**§ 105.105. [Reserved].**

**§ 105.106. Activities and facilities on the construction site.**

Activities and facilities on the construction site **[shall] must** be conducted and operated in **[such] a manner [as]** to avoid pollution of the air and waters of this Commonwealth and in accordance with applicable laws and the provisions of this title.

**§ 105.107. [Completion certificate and final plans]. Final inspection,**

**[(a) Within 30 days after the completion of work authorized by permit issued under this subchapter, the permittee shall file with the Department a certified statement signed by the supervising engineer and by the permittee that work has been performed in accordance with the terms and conditions of the permit; with the approved maps, plans, profiles and specifications; and with applicable laws and the provisions of this title.**

**(b) Within 90 days after the completion of work, the permittee shall file with the Department a set of final "as built" plans for the project, showing changes from the original plans and specifications.]**

**Within 10 days after the completion of work on a dam authorized by the Department, the permittee or owner shall schedule a final project inspection with the Department. The final inspection must include the permittee or owner, the permittee or owner's supervising engineer, and the Department's field representative. Upon conclusion of this final inspection, the Department's field representative will present the permittee or owner with a list of any deficient items, if necessary. A follow-up final inspection may be required by the Department. At the discretion of the Department, the final inspection may be waived for projects authorized by letter of amendment or letter of**

authorization.

**§ 105.108. Completion certification and project costs**

Within 30 days after the final inspection or within 30 days of completion of the work if the final inspection is waived by the Department, the permittee or owner shall file with the Department a completion certification provided by the Department stating that work has been performed in accordance with the terms and conditions of the permit or other Department authorization; the approved maps, plans, profiles and specifications; and applicable laws and the provisions of this title. The completion certification must contain the following:

- (1) Original signature of the permittee or owner.
- (2) Seal and original signature of the supervising engineer.
- (3) Design cost.
- (4) Construction cost.
- (5) Construction inspection cost.
- (6) The estimated percentage of the total cost for each major feature of the project.

**§ 105.109. As-built plans**

Within 90 days after the final inspection or completion of the work, if the final inspection is waived by the Department, the permittee or owner shall file with the Department "as built" plans for the project, indicating revisions from the original plans and specifications.

[WATER] STORAGE AND DISCHARGE

**§ 105.111. Commencement of [water] storage of water, fluid or semifluid.**

(a) The permittee shall notify the Department, in writing, at least [1 week] 7 days in advance of the date proposed for the commencement of [water] storage of water, fluid or semifluid in the reservoir [or pond] created by the dam for which the permit is issued.

(b) The Department may [, at its discretion,] require that a reservoir filling plan be developed and approved by the Department prior to commencement of storage of water, fluid or semifluid. This plan will provide the acceptable rate of rise of the reservoir and, if necessary, elevations and durations for constant reservoir levels within the filling period. This plan may also require lowering of the reservoir level if the prescribed rate of rise is not controlled or attained. The plan may also require monitoring of instrumentation of the dam.

(c) The Department may require that a representative of the Department be at the site before or during the filling of the [pond or] reservoir.

(d) The initial storage in the reservoir of new dams and refilling of reservoirs of rehabilitated dams may not commence prior to the submission of the information required in §105.108 (relating to completion certification and project costs) and the acceptance of the certification, in writing, from the Department.

**§ 105.112. Stream flow during construction, filling and repair.**

During the period of construction, [alteration] modification, enlargement or repair and during the period that the [pond or] reservoir is being filled, the permittee shall allow a sufficient flow of water, as determined by the Department, into the stream below the dam to support fish and other aquatic life and to preserve the water quality in the stream.

**§ 105.113. Releases.**

(a) The Department will impose general and special conditions regarding release rates in a permit for a dam or reservoir that it deems necessary to maintain stream flows for the purposes of protection of public health, water quality control, conservation of fisheries and aquatic habitat, improvement of recreation and protection of instream and downstream water uses. The appropriate release rates for the dams and reservoirs [shall] will be established in accordance with subsections (b) and (c).

(b) For dams or reservoirs constructed after August 28, 1978:

(1) The minimum release rate unless modified in accordance with paragraph (2) shall be the average consecutive 7 day flow having a recurrence interval of once in 10 years (Q 7-10) plus an additional release rate determined by the following formula:

*Release rate*

$$(csm) = Q7-10 + PDF(.25 csm - Q7-10 csm)$$

where PDF = the percentage factor based on the storage capacity of the reservoir measured as percent of average annual runoff retained in the reservoir. This factor is explained in Planning Principles, State Water Plan SWP-1 (March, 1975).

.25 csm = .25 cubic feet per second of flow per square mile of watershed.

Q7-10csm = The seven-day, ten-year flow, in cubic feet per second per square mile of watershed.

The minimum release rate determined by this formula shall not exceed 0.25 cubic feet per square mile of watershed.

(2) The Department may modify the minimum release rate, or provide variable schedules or releases considering the following factors:

(i) The purposes stated in subsection (a).

(ii) Particular stream requirements, including the particular needs of instream and downstream water uses and riparian rights.

(iii) The particular uses and purposes of the dam or reservoir.

(iv) The particular engineering, hydrologic and economic factors affecting the ability of the dam or reservoir to provide the releases.

(c) For dams and reservoirs constructed prior to August 28, 1978, the Department will determine a reasonable schedule for release rates, considering all of the following:

(1) The purposes stated in subsection (a) and the particular needs of instream and downstream water uses on the affected stream.

(2) The capacity of existing release works at the dam and feasibility of potential modification of the release works.

(3) The yield of the reservoir, and its capability to meet release requirements and satisfy the purposes and uses of the reservoir.

(d) Every dam **[shall] must** at all times be operated in **[such] a** manner **[as]** to allow the required flow of water into the stream below the dam as established under this section, and as otherwise necessary to support fish and other aquatic life and to assure compliance with the water quality **[criteria set forth] standards** in Chapter 93 (relating to water quality standards) and to provide for other instream uses for the affected stream.

§ 105.114. [Reserved].

## PROTECTION AND RESTORATION OF AQUATIC LIFE

§ 105.121. Fishways.

Upon the request of the Fish **and Boat** Commission, the permittee **[shall] must** install and maintain chutes, slopes, fishways, gates or other devices that the Fish **and Boat** Commission may require **[under sections 185–187 of The Fish Law of 1959 (30 P. S. §§ 185–187) (Repealed)] under 30 Pa C.S. §§ 3501 – 3505.**

§ 105.122. Drawdown of impounded waters.

Impounded waters which are inhabited by fish may not be drawn down except with the written approval of the Fish **and Boat** Commission **[issued under section 191 of The Fish Law of 1959 (30 P. S. § 191) (Repealed)]. under 30 Pa C.S. § 3506 (relating to drawing off or interference with dams or devices).**

§ 105.123. Restoration of aquatic life.

If the Department finds that construction of a dam or reservoir has [so] substantially disrupted aquatic life [as] to preclude natural restoration of the stream ecology within a reasonable period of time, the permittee shall be required to submit and implement a plan to restore the aquatic life of the stream to its prior condition, to the maximum extent possible. The plan shall be subject to review and modification by the Department in consultation with the Fish **and Boat** Commission and [shall] **must** include but not be limited to **the following**:

- (1) Placement of bed gravel.
- (2) Stabilization of banks and bed.
- (3) Installation of stream improvement devices.
- (4) Revegetation of stream and banks.
- (5) Stocking of fish and other aquatic life.

§ 105.124. [Reserved].

§ 105.125. [Reserved].

### OPERATION, MAINTENANCE AND EMERGENCIES

§ 105.131. **Operation, maintenance and monitoring [plans].**

(a) In addition to the requirements of §§ 105.51–105.54 (relating to operation, maintenance and inspection), the permittee or owner of a dam [or reservoir] shall follow the [method and schedule of operation of] **operation and maintenance manual for the dam [or reservoir], [including] and the emergency action plan if required by § 105.134 (relating to emergency action plan), as approved by the Department and [shall] must implement a monitoring plan [approved by the Department for permanent monitoring of performance by instrument installation in the dam] as required by § 105.81(a)(4) (relating to permit applications for construction and modification of dams and reservoirs).**

(b) A permittee or owner of a dam or reservoir may not modify or cease implementation of all or part of the approved plans and methods of operation or monitoring without the prior approval of the Department **by permit, letter of amendment, or letter of authorization. The permit will be issued in accordance with §105.82 (relating to permit applications for operation and maintenance of existing dams and reservoirs). The letter of amendment or letter of authorization will be issued only after review and approval of necessary engineering calculations, construction plans and construction specifications. If the project impacts wetlands or exceptional value waters, or if the project requires 401 water quality certification, an environmental assessment must also be submitted to the Department for review and approval under § 105.15 (relating to environmental assessment). Modifications of a dam are subject to the construction requirements and procedures under Subchapter A and Subchapter B (relating to general provisions; and dams and reservoirs), unless specifically waived by the Department.**

(c) The permittee or owner of a dam or reservoir shall operate and maintain the dam in accordance with the authorized plans and specifications. [Normal repairs and] **Routine** maintenance of the dam and the reservoir's design storage capacity will not require further authorization **under this Chapter** except as provided in § 105.122 (relating to drawdown of impounded waters).

§ 105.132. [Inspection.] [Reserved].

[The permittee or owner of a dam or reservoir shall follow the inspection schedule set forth in § 105.53 (relating to inspections by owners and inspection reports).]

§ 105.133. **Directed repairs.**

The permittee **or owner** shall immediately take steps that the Department may prescribe as necessary to preserve the structural stability and integrity of the dam and protect health, safety[ and], property, **and the environment.**

§ 105.134. **Emergency action plan.**

(a) The **permittee or** owner of [a] **an existing or proposed hazard potential Category 1, Category 2 or Category 3 dam [or reservoir that may cause loss of life or serious damage to property if a failure of the dam occurs,] as classified in § 105.91 (relating to classification of dams and reservoirs)** shall develop an emergency action plan to be followed in the event of a dam hazard emergency **as defined in § 105.135 (relating to dam hazard emergencies)**. The emergency action plan [shall] **must** be submitted to **the Department** and approved by the Department and [local emergency management officials] **the Pennsylvania Emergency Management Agency (PEMA)**.

**(1) Prior to submitting the emergency action plan for review or approval, the permittee or owner shall schedule a meeting with the county emergency management coordinators for those counties affected by the dam's failure.**

**(2) Each submission of the emergency action plan must be signed by the dam owners, the dam operators, and the county emergency management coordinators for those counties affected by the dam's failure signifying concurrence with the emergency action plan.**

**(3) In the case of a proposed dam, the emergency action plan must be submitted to the Department and approved by the Department and PEMA prior to commencement of [water] storage [in the reservoir or pond created by the dam during any stage of construction of the dam] of water, fluid or semifluid.**

**(4) The emergency action plan [shall] must [, at a minimum, contain the following elements:] be prepared in accordance with the most recent emergency action plan guidelines developed by the Department and PEMA.**

**[(1) An identification of the area below the dam which may be threatened with loss of life or serious damage to property if a failure of the dam occurs.**

**(2) A listing of key municipal and emergency management officials and their telephone numbers. The list shall be readily available at the dam site near a telephone or other means of communication, if available.**

**(3) An identification of handicapped or other persons who may have difficulty evacuating the area which may be threatened if a failure of the dam occurs. Procedures for identifying and evacuating these people in a dam hazard emergency shall be developed in cooperation with local and emergency management officials.]**

(b) [For an existing dam or reservoir that may cause loss of life or serious damage to property if failure of the dam occurs, an emergency action plan shall be submitted to and approved by the Department and local emergency management officials.] **Upon approval of the emergency action plan, the permittee or owner shall provide a copy of the signed approved emergency action plan to the municipal emergency management agencies and the emergency response agencies listed in the emergency action plan.**

**(c) Within 60 days of the date of the Department's approval letter, the permittee or owner shall provide the Department a written statement certifying that a signed approved copy of the emergency action plan has been provided to each municipal emergency management agency and to each emergency response agency listed in the emergency action plan.**

**(d) In addition to the requirements in subsections (a) [and], (b) and (c), the permittee or owner of a [high] hazard potential Category 1 or Category 2 dam shall post notices in public [places] locations in areas that may be affected by the failure of the dam[; for example, areas where public water or sewage service may be interrupted]. The notice [shall] must indicate that copies of the emergency action plan are available for review at the appropriate county and municipal emergency management offices. Also, the notice [shall] must be posted by the permittee or owner in [the following] public places within each political subdivision situated within the inundation area downstream of the dam[:]. The notice must be posted in the city, borough, and township buildings in the affected municipalities, with the management's permission. Additionally, the notice shall be posted in locations within the inundation area, such as, post offices, libraries, grocery stores, or gas stations, with the management's permission.**

**(e) Within 60 days of the date of the Department's approval letter, the permittee or owner shall provide the Department a written statement certifying that the notice has been posted in the locations listed in the emergency action plan. The permittee or owner shall certify in each subsequent annual inspection report, as required in § 105.53(a), that the notices remain posted or were reposted in the locations listed in the emergency action plan.**

**[(1) The city, borough or township building.**

**(2) The police department offices.**

**(3) The fire company halls.**

**(4) The tax collector's office.]**

**(f) The emergency action plan shall be reviewed and updated every 5 years or the frequency interval indicated in the most recent EAP guidelines developed by the Department and PEMA.**

**(g) The Department may require the emergency action plan be updated, as necessary, if there is a new owner or operator, if changes occur in the downstream inundation area or in the hazard potential category.**

#### **§ 105.135. Dam hazard emergencies.**

(a) For the purposes of this section, a dam hazard emergency means a condition which the Department, permittee or owner of the dam reasonably finds constitutes an imminent threat to life or property above or below a dam, whether arising from the condition of the dam and appurtenant works or extraordinary natural conditions, affecting the safety and stability of the dam, including [, **but not limited to,**] flood, earthquake [, **fire**] and ice jam.

(b) The emergency procedures and the emergency [**warning system and operation**] **action** plan required by §§ 105.63 and 105.134 (relating to emergency procedures; and emergency action plan) shall be followed by the permittee and owner of a dam or reservoir in the event of an actual or potential dam hazard emergency.

(c) If a dam hazard emergency exists, [**the Department and**] the permittee or owner of the dam shall immediately notify appropriate emergency management officials of the existence of the hazard and request the authorities to initiate appropriate action to assure protection of life and property; and the permittee or owner shall immediately take [**the steps as are**] **actions as authorized by the Department** necessary to prevent dam failure or loss of life or property [, **including, but not limited to, the following:**].

[**(1) Draw down of the reservoir.**

**(2) Reinforcement of the dam structure.**

**(3) Breach or removal of the dam.**

**(4) Removal of debris.**

**(5) Repair or installation of structures necessary to assure the stability and safety of the dam. ]**

(d) The Department, upon determining that a dam hazard emergency exists, will notify the owner immediately to take [**steps**] **actions** the Department determines are necessary to prevent dam failure or loss of life or property.

#### **§ 105.136. Unsafe dams.**

(a) For purposes of this section, an unsafe dam means a dam which meets one or more of the following criteria:

(1) A dam with deficiencies of such a nature that if not corrected could result in the failure of the dam with subsequent loss of lives or substantial property damage. This determination is based on good engineering judgment or the application of the guidelines established for the National Dam Inspection Program.

(2) A dam classified as unsafe under the National Dam Inspection Program.

(3) A dam declared as unsafe by the Department.

(b) The owner of an unsafe dam shall do the following:

(1) Immediately notify the Department upon receipt of any information indicating the dam is unsafe.

(2) Drain the [**dam**] **reservoir** as [**approved or**] required **and approved** by the Department **and in accordance with § 105.122 (relating to drawdown of impounded waters).**

(3) Within time limits established by the Department, submit a plan for removal of the dam, a plan for repair of the dam or an application for a permit authorizing modification of the dam under subsection (c).

(4) Following approval of the plan or permit by the Department, undertake and complete actions to remove or repair the dam or implement the modifications to the dam within the time limits set by the Department.

(c) The Department may issue a permit for modification of an unsafe dam, under section 9 of the act (32 P. S. § 693.9), which authorizes the owner of an unsafe dam to modify the dam within the time prescribed in the permit to meet the requirements of the act and this chapter. The permit shall be conditioned upon:

(1) Compliance by the owner of the dam with a prescribed schedule for correction or modification of the unsafe condition within the shortest time period technically feasible and economically achievable.

(2) Implementation by the owner of the dam of measures deemed necessary by the Department to reduce risks to

health, **[and]** safety **and the environment** pending correction or modification of the unsafe condition, including but not limited to special provisions relating to operation, emergency planning, monitoring and warning systems, and development of an alternative source of water supply if the dam serves as a water supply dam.

(d) In determining whether to require removal of an unsafe dam or to permit the owner to modify the dam, the Department will consider whether there is a substantial adverse impact to the public health **[and]**, safety **and the environment** which will result from the draining and removal of the dam**[,and whether that]**. **If the Department determines that this** adverse impact outweighs the danger to public health **[and]**, safety**[,which outweighing will result in allowing] and the environment resulting from leaving the dam in place, the Department may decide to allow the unsafe dam to remain until it has been modified.**

(e) At the discretion of the Department, a public hearing may be held in the affected area prior to the issuance of a permit authorizing modification of an unsafe dam over a period of more than 6 months, to inform affected communities of the risks which may result from allowing the unsafe dam to remain standing or to impound water during the time necessary to complete the modifications.

(f) If the Department finds that conditions upon which the permit **[authorizing modification], letter of amendment, or letter of authorization** was issued have substantially changed or that the owner does not meet the schedule for modification contained in the permit, **letter of amendment, or letter of authorization**, the Department will review the status of the dam. An extension of the time period for completion of a modification may be issued by the Department if the owner has proceeded in good faith with the previous schedule of modification and the requirements of subsections (c) and (d) are met.

(g) Nothing in this section may be construed to limit the power of the Department to take immediate action, prior to public hearing, to do one or more of the following:

- (1) Revoke or suspend a permit, **letter of amendment, or letter of authorization** where deemed necessary by the Department to protect public health **[and]**, safety **and the environment**.
- (2) Order correction or abatement of a dam hazard emergency under § 105.135 (relating to dam hazard emergencies)
- (3) Take another action authorized by law.

**Subchapter K. DISBURSEMENTS OF MONIES FROM THE DAMS AND  
ENCROACHMENTS FUND**

**§ 105.431. General provisions.**

(a) Fines collected under the penal provisions of the act and civil penalties collected under the act shall be paid into the treasury of the Commonwealth in a special fund known as the Dams and Encroachments Fund.

(b) Moneys paid into the Dams and Encroachments Fund may be disbursed at the discretion of the Department for use in the elimination of hazards to life, property and the environment resulting from unsafe dams, water obstructions and encroachments. **[The moneys shall be available for use by the Bureau of Dams and Waterway Management in addition to funds otherwise available to it.]**

(c) For purposes of this chapter, the full and normal range of **program** activities **[of the bureau] necessary to administer this chapter** will be considered to contribute to the elimination of hazards from unsafe dams, water obstructions and encroachments **[under subsection (b)]**. Disbursement of moneys from the Dams and Encroachments Fund moneys may therefore be made for, but will not be limited to, the following purposes:

- (1) Conducting investigations, tests and analyses as required to carry out the purposes of the act, including costs of entry; testing and sampling; and examining books, papers and records.
- (2) Undertaking corrective action, repair work or removal to eliminate an actual or potentially dangerous or hazardous condition of a dam, water obstruction or encroachment as provided under section 14(c) of the act (32 P. S. § 693.14(c)).
- (3) Purchasing contractual services and consultation from firms and individuals with relevant expertise in the field of safety of dams, water obstructions and encroachments.
- (4) Purchasing materials, equipment, services and travel necessary for personnel training and provision of information and educational materials on the safety of dams, water obstructions and encroachments to schools, colleges, institutions and citizens.
- (5) Covering extraordinary costs of litigation arising out of the enforcement of dam safety and encroachments laws of the Commonwealth, such as the printing of briefs and records, taking of depositions and expert witness fees.

**§ 105.432. [Authorization for disbursement.] Reserved.**

**[The Director of the Bureau of Dams and Waterway Management will authorize the use of monies disbursed from the Dams and Encroachments Fund consistent with the established policies and procedures of the Department. For disbursements from the fund not falling within the explicit categories established in § 105.431 (relating to general provisions), the Director of the Bureau of Dams and Waterway Management will submit a request to the Secretary of the Department requesting an authorization to disburse the funds for the project in question.]**