

PROPOSED RULEMAKING
Annex A
TITLE 25. ENVIRONMENTAL PROTECTION
PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUBPART C. PROTECTION OF NATURAL RESOURCES
ARTICLE II. WATER RESOURCES
CHAPTER 105. DAM SAFETY AND WATERWAY MANAGEMENT

SUBCHAPTER A. GENERAL PROVISIONS

GENERAL

§ 105.1. Definitions.

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

Abandonment—**The discontinued construction, or operation and maintenance of an existing dam, water obstruction or encroachment in place by the owner or permittee.**

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

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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.

Aquatic resource functions—**Ecosystem services that result from the chemical, physical and biological attributes associated with regulated waters of the Commonwealth, including hydrologic, biogeochemical or habitat.**

Aquatic resource restoration—**The process of reestablishing or rehabilitating regulated waters of this Commonwealth to natural characteristics and aquatic resource functions.**

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.

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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 84th 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.

Conservation district—The term, as defined in section 3(c) of the Conservation District Law (3 P.S. § 851(c)), which has the authority under a delegation agreement executed with the Department to administer and enforce all or a portion of the categories of water obstructions and encroachments, or all or a portion of the erosion, sediment, and stormwater management program covered by the delegation in this Commonwealth.

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

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

Crop production—An activity relating to agricultural products. The term includes:

- (i) Plowing, cultivating, seeding, grazing or harvesting.**
- (ii) Crop rotation.**
- (iii) Federal or state government set aside programs.**

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

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

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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 structures.

[Incremental dam breach analysis] Incremental Dam Breach Analysis (IDBA)—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.

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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**] **watercourse** 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), regarding 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—Periodic activities conducted to preserve the condition of a dam, water obstruction or encroachment as authorized by the Department.

Maintenance dredging—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) Restore the natural or previously permitted reservoir capacity.
- (v) Restore flood protection projects to original design dimensions.

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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.

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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.

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

[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 available from the National Oceanographic and Atmospheric Administration (NOAA).]

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

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

Probable Maximum Flood (PMF)The flood that may be expected from the most severe combination of critical meteorological and hydrologic conditions that are reasonably possible in an area. The PMF is derived from the probable maximum precipitation (PMP).

Probable Maximum Precipitation (PMP)—Theoretically, the greatest depth of precipitation for a given duration that is physically possible over a given storm area at a geographic location during a certain time of the year.

Project—The entire area of the site encompassing a proposed dam, water obstruction or encroachment. The term includes reasonably foreseeable areas planned to contain future dams, water obstructions or encroachments.

Project purpose—A description of the applicant’s proposed project and the necessity for the project to be in or in close proximity to regulated waters of this Commonwealth.

*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.

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

Reservoir - Any 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.

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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**] **designed, constructed and maintained** 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**]**facilities, swales and ditches**. The term does not include **swales or ditches that have not been maintained and have developed into watercourses or wetlands**. **The term also 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.

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

Water dependent—The circumstance which requires a dam, water obstruction or encroachment to have access or proximity to, or siting within, regulated waters of this Commonwealth to fulfill the basic purposes of the project.

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.

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§ 105.2. Purposes.

The purposes of this chapter are to:

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(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, restore and improve** the water quality, natural regime,

aquatic resource functions, geomorphic stability and carrying capacity of [**watercourses**] **regulated waters of this Commonwealth.**

§ 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):

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(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**] **573.4** feet International Great Lakes Datum (IGLD) and low water elevation of 568.6 IGLD. Dams, water obstructions and encroachments constructed between elevation [**572.8**] **573.4** IGLD and elevation [**568.6**] **569.2** 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**] **569.2** 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). **New or revised IGLD datum is incorporated when established by the United States Department of Commerce, National Oceanic and Atmospheric Administration (NOAA).**

(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.

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(d) A delegation agreement 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]authorized** 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.

(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

§ 105.12. 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. **A structure or activity that will occupy submerged lands of the Commonwealth is not eligible for a waiver under this section.** 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 **Pennsylvania** Fish and Boat Commission.

(2) A water obstruction **or encroachment** in a stream or floodway with a drainage area of 100 acres or less **that will not impede flow or aquatic life passage.** This waiver does not apply to a **water obstruction or encroachment proposing to impact [wetlands]a wetland** located in the floodway, **or a stream enclosure.**

(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, **single poles with concrete foundations or pilings,** 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]4** 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 and sediment 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 and Boat Commission under 30 Pa.C.S. § 5123(a)(7) (relating to general boating regulations).

(11) The removal **[of abandoned] or abandonment of a [dams, water obstructions and or encroachments] dam, water obstruction or encroachment. [if the Department determines in writing on the basis of data, information or plans submitted by the applicant.] The Department will review the applicant's demonstration under § 105.15 (relating to environmental assessment) to determine [that] whether** the removal **[of the abandoned] or abandonment of a dam, water obstruction or encroachment [cannot] may** imperil life or property, have **a** significant effect on coastal resources or have an adverse impact on the environment, and **whether** the **applicant's** 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.

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(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 **and environmental assessment under § 105.15** which [has] **have** been approved, in writing, by the Department.

(17) The construction and maintenance of a streambank fencing conservation practice associated with crop production located in or along a body of water or along a watercourse and its floodway.

(18) The construction, operation and maintenance of a water obstruction or encroachment associated with low impact and non-motorized recreational activities that include walking, hiking or biking trails. The single span bridge, culvert or other structure must be 75 feet or less in length and must not result in the inundation of adjacent property not in possession of the owner of the water obstruction or encroachment or impede the passage of aquatic life through regulated waters of this Commonwealth. This waiver does not apply to stream enclosures.

(19) The construction, operation and maintenance of a walking path with an elevated boardwalk in a wetland for educational and interpretive purposes pursuant to a plan which has been approved, in writing, by the Department. The plan shall contain a detailed project description including a description of the proposed structure or activity, specific purpose, goals and objectives, resource identification information, a location map, wetland determination or delineation and data sheets, photographs, and the identification of the preparer and their qualifications.

(20) The temporary emergency placement, operation and maintenance of a water obstruction or encroachment for water withdrawal related to crop production or fire protection. This includes the placement, operation, and maintenance of dry fire hydrants. This waiver does not apply to parking or other areas for ancillary activities.

(21) The construction, operation or removal of temporary environmental testing, monitoring activities, or investigative activities of a temporary nature, not to exceed one (1) year, including boring or placement of sensors to sample or test soil or rock material and other similar activities. This waiver does not apply to parking or other areas for ancillary activities.

(22) The placement, maintenance and removal of temporary mats and pads used for minimizing erosion and sedimentation at a wetland crossing.

(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.] A dam operated and maintained in a stream for water supply purposes, which does not exceed 5 feet in height and does not occupy submerged lands of this Commonwealth.**

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

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§ 105.13. Regulated activities—information and fees.

(a) Application for permits under this chapter **[shall]must** 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. An application for a permit, registration for a general permit, request for permit amendment, major or minor letter of amendment or authorization, major dam design revision, environmental assessments, permit transfer or annual dam registration under this chapter shall be accompanied by a check **or other method of payment acceptable to the Department** for the applicable fees except for submissions by Federal, State, county or municipal agencies or a municipal authority.

(b) Fees collected by the Dam Safety Program and Water Obstruction and Encroachment Program, including delegations to local agencies, will be deposited into a restricted revenue account known as the Clean Water Fund and utilized to offset the operating costs to implement respective programs.

(c) The fees are as follows:

(1) *Dams based on size and hazard potential category as defined in § 105.91 (relating to classification of dams and reservoirs).*

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(vi) *Environmental assessment review fees for nonjurisdictional dams, letters of amendment or letters of authorization.*

<i>Size Category</i>	<i>Fee</i>
A	\$1,400
B	\$1,000
C	\$900

(vii) *Transfer of dam permit as required under § 105.25 (relating to transfer of permits).*

<i>Type of Dam Permit Transfer</i>	<i>Fee</i>
<u>[No Proof of Financial Responsibility Required] Hazard Potential Category 1 and Category 2 dams as classified under § 105.91</u>	\$550
<u>[Proof of Financial Responsibility Required] Hazard Potential Category 3 and Category 4 dams as classified under § 105.91</u>	\$300

(viii) *Annual dam registration fees as required under § 105.131a (relating to annual dam registration).*

	<i>Hazard Potential Category</i>			
	1	2	3	4
<i>Size Category</i>				
A	\$1,500	\$1,500	\$800	\$0
B	\$1,500	\$1,500	\$800	\$0
C	\$1,500	\$1,500	\$800	\$0

(A) Annual registration fees are due by July 1 of each year.

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(2) *Water obstructions and encroachments.*

<i>Fee Title/Type</i>		<i>Fee</i>
<i>Water Obstruction and Encroachment Permit Application Fees</i>		
Joint application	Administrative filing fee (* plus applicable disturbance review fees)	\$1,750

<i>General Permit</i>		<i>Registration Fees</i>
GP-1	Fish habitat enhancement structures	\$50
GP-2	Small docks and boat launching ramps	\$175
GP-3	Bank rehabilitation, bank protection and gravel bar removal	\$250
GP-4	Intake and outfall structures	\$200
GP-5	Utility line stream crossings	\$250
GP-6	Agricultural crossings and ramps	\$50
GP-7	Minor road crossings	\$350
GP-8	Temporary road crossings	\$175
GP-9	Agricultural activities	\$50
GP-10	Abandoned mine reclamation	\$500
GP-11*	Maintenance, testing, repair, rehabilitation or replacement of water obstructions and encroachments	\$750
GP-15*	Private residential construction in wetlands	\$750
* Disturbance review fees added to application, registration or other fees where applicable		
Permanent disturbance	Waterways, floodways/floodplains and wetlands per tenth acre, minimum 0.1 acre	\$800
Temporary disturbance	Waterways, floodways/floodplains and wetlands per tenth acre, minimum 0.1 acre	\$400
<i>Other Fees not Added to Initial Application or Registration Fees</i>		
	Environmental assessment for waived activities (§ 105.12(a)(11) and (16) per § 105.15(d) (<u>relating to environmental assessment</u>))	\$500
	Major amendment to Water Obstruction and Encroachment Permit*	\$500

	Minor amendment to Water Obstruction and Encroachment Permit	\$250
	Transfer of permit with Submerged Lands License Agreement (SLLA)	\$200
	Transfer of permit without SLLA	\$100

(i) Small projects require a joint application for a Water Obstruction and Encroachment Permit and follow the same fee requirements.

(ii) Additional General Permit registration requirements are as follows:

(A) General Permit registration for GP-11 and GP-15 also requires disturbance review fees when applicable.

(B) Conservation districts may charge additional review fees in accordance with section 9(13) of the Conservation District Law (3 P. S. § 857(13)).

(C) Registration fees for coverage under a General Permit issued under Subchapter L (relating to general permits) not otherwise specified in this section will be established in the General Permit. The applicability of the disturbance review fees will also be established in the General Permit.

(iii) Disturbance review fees are calculated by individually adding all of the permanent and temporary impacts to waterways, floodways, floodplains and bodies of water including wetlands to the next highest tenth acre and multiplying the permanent and temporary impacts by the respective fees [**and then these amounts are added to the other applicable fees**].

(A) **[The disturbance review fees are added to the joint application administrative filing fee, applicable General Permit registration fees and major amendments to Water Obstruction and Encroachment Permits.] Submission of the disturbance review fee to the Department may occur during the technical or eligibility review and must occur prior the Department’s decision on a permit application or registration. The disturbance review fee must consist of the largest total area of disturbance to regulated waters of this Commonwealth as determined during the final permit application or registration review.**

(B) If a permit applicant is subject to payment of royalties to the Commonwealth under 58 Pa. Code § 51.92 (relating to royalty rates), the disturbance review fees are not required for the area of disturbance subject to the royalty payment.

(iv) Environmental Assessment for waived activities fee applies to use of the waivers at § 105.12(a)(11) and (16). Environmental Assessment for these waivers is required under § 105.15(d) [**(relating to environmental assessment)**].

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(vi) A major amendment of an existing Water Obstruction and Encroachment Permit, permit authorization or water quality certificate before its expiration is an amendment that is not a minor amendment.

(d) 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 **or multiple counties**, 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 (c) for the applicable structures and activities. Water obstructions and encroachments located within a single county **or multiple counties** shall be treated as a single structure or activity, but the application fee shall be the sum of fees for each water obstruction and encroachment.

(e) An application for or a registration of a permit must be accompanied by **the following** information, maps, plans, specifications, design analyses, test reports and other data specifically required under this chapter **and other applicable subchapters**, and additional information as required **[under] by** the Department to determine compliance with this chapter.

(1) **[For all] A permit application for a water obstruction or encroachment, except a permit application for a small project[s] must include [this information includes, but is not limited to, the following:] the following information provided in a manner acceptable to the Department:**

(i) A site plan. A site plan 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 in § 105.451 (relating to identification and delineation of wetlands—statement of policy). **The demarcation of floodplains and regulated waters of this Commonwealth, including wetlands, must be verified through on-the-ground investigation or must otherwise be field-verified. Copies of FEMA floodplain maps must be included for the project, when the project is located in areas where FEMA maps have been prepared.**

(B) Existing roads, utility lines, lots, other manmade structures and natural features such as contour lines and drainage patterns.

(C) Proposed **temporary and permanent** structures or activities included in the project, which **[shall]must** be identified by labeling.

(D) A **minimum** scale of **[one inch] one-inch** equals 200 feet or larger **that adequately illustrates the scope of work proposed.**

(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] Cross sections of the regulated waters of this Commonwealth to be impacted [before and after the structure or activity is constructed]. The cross sections must show the current or existing conditions and the proposed conditions of the regulated waters of this Commonwealth. The cross sections must be provided at a minimum scale of one-inch equals twenty feet so that the cross sections adequately illustrate the scope of work proposed.**

(ii) A location map. The location map must be of a scale factor of 1:24000 (standard U.S.G.S. Topographic Map). The location map must show all **[natural] topographic** 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] structures and activities.**

(B) **[The] A narrative discussion of the** project purpose.

(C) **[The] A narrative discussion of the** effect the project will have on public health, safety or the environment.

(D) A **[statement] narrative discussion and analysis** 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.] Water dependency must 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 this Commonwealth.**

(iv) Color photographs. Color photographs of the proposed site, **including the location of all proposed or existing dams, water obstructions and encroachments, [shall]must** be submitted. The photos must accurately depict the project area and provide a relative scale of the project to the surrounding area. **[and a] A** map showing the location and orientation of each photograph **must also be included.**

(v) Stormwater management **[analysis] consistency.** If a watershed stormwater management plan has been prepared or adopted, **and is current** under the Storm Water 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 [of the project's impact shall] must be included as part of the application, when provided by the county or municipality. If the stormwater management plan was prepared under § 102.8 (relating to PCSM requirements), the letter must reference the corresponding**

Department Chapter 102 permit or permit application. The Department will use the Post Construction Stormwater Management plan for the analysis under this section.

(vi) Floodplain management [**analysis**] **consistency**. 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 **as part of the application when provided by the county or municipality. When a dam, water obstruction or encroachment is being proposed by a Commonwealth agency, a political subdivision of the Commonwealth or a public utility, the floodplain management plan must be consistent with the Flood Plain Management Act (32 P. S. §§ 679.101–679.601) and Chapter 106 (relating to floodplain management).**

(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. **An alternatives analysis is [A] a detailed analysis of onsite and offsite alternatives to the proposed [action] dam, water obstruction or encroachment, including alternative locations, routings or designs to avoid or minimize adverse environmental impacts. The alternatives analysis must meet the following criteria:**

(A) The level of detail required must be commensurate with the anticipated environmental impact.

(B) A project alternative that may impact a wetland must demonstrate with reliable and convincing evidence that the requirements under §§ 105.18a(a)(3) and (b)(3) (relating to permitting of structures and activities in wetlands) will be met.

(C) A project alternative that may impact regulated waters of this Commonwealth other than a wetland must include a reliable and convincing demonstration consistent with §105.16 (environmental, social and economic balancing).

(D) The analysis must identify present conditions and the effects of reasonably foreseeable future development within the affected wetland, wetland complex, or watercourse upstream and immediately downstream of the proposed dam, water obstruction or encroachment.

(E) A dam, water obstruction or encroachment must be designed, constructed, operated and maintained to assure adequacy and compliance with this chapter, taking into account reasonably foreseeable development within the watershed.

(ix) Mitigation plan. [**Actions to be taken in accordance with the definition of mitigation in this chapter.**] **When the applicant or Department identifies an impact to regulated waters of this Commonwealth, the applicant must provide a statement, plans, maps or other material demonstrating that the impact has been avoided and minimized to the**

maximum practicable extent. Where an impact to regulated waters of this Commonwealth is identified and cannot be avoided or minimized, the applicant shall provide a plan to compensate for the impact under the mitigation requirements of this chapter and consistent with § 105.20a (relating to compensation for impacts to regulated waters of this Commonwealth.).

(x) Impacts analysis. A detailed analysis of the **[potential impacts, to the extent applicable, of the proposed project] impacts and potential secondary impacts of both of the following:**

(A) The construction, modification or operation of the dam, water obstruction or encroachment on the regime and ecology of the regulated waters of this Commonwealth, water quality, stream flow, fish and wildlife, aquatic habitat, Federal and State forests, parks, recreation, public water supplies, instream and downstream water uses, and other significant environmental factors.

(B) The impacts and secondary impacts of the dam, water obstruction or encroachment on nearby natural areas, wildlife sanctuaries, prime farmlands, areas or structures of cultural, historic, or archeological significance, streams which are identified candidates for or are included within the Federal or State wild and scenic river systems, local, Federal or State parks, recreational areas, or historical sites 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.]

(xi) When a project will affect a wetland, the project description, narrative discussion and analysis on water dependency must also include:

(A) A narrative of the delineation process supported by the appropriate information, including data sheets and copies of appropriate soil maps and descriptions from USDA Natural Resource Conservation Service soil surveys.

(B) An analysis of whether the wetland is exceptional value as classified in § 105.17 (relating to wetlands), and a demonstration that satisfies the requirements contained in § 105.18a.

(xii) Antidegradation. A demonstration must be provided that the proposed project is consistent with state Commonwealth antidegradation requirements under 25 Pa. Code Chapters 93, 95, 96 and 102 and the Clean Water Act (33 U.S.C.A. §§ 1251—1376). The applicant must provide a demonstration that includes all regulated waters of this Commonwealth proposed to be impacted by the project.

(xiii) Cumulative impact analysis.

A permit applicant shall provide a projectwide cumulative wetland impact analysis using available resources, which assesses the cumulative impact of the proposed dam, water obstruction or encroachment and other potential or existing dams, water obstructions or encroachments on wetlands. The applicant's analysis must identify piecemeal impacts and the impacts on each wetland resource in the proposed project area and must consider the wetland resource as part of a complete and interrelated wetland area. The applicant must demonstrate that the proposed project, along with other potential or existing dams, water obstructions or encroachments, does not result in impairment of the Commonwealth's wetland resources under § 105.18a(a)(6) or major impairment of the wetlands under § 105.18a(b)(6).

(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.

(3) An application for a project which may have an effect on an exceptional value wetland or on 1 or more acres of wetland must 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.

(4) When the Department, **conservation district** or delegated local agency determines that an application or registration is incomplete or contains insufficient information to determine compliance with this chapter, it will notify the applicant in writing. The applicant shall have **a specified period of time, as stated by the Department in writing, [60 days]** to provide the information necessary to complete the application or registration **and provide the information necessary for the Department, conservation district or delegated local agency to determine compliance with this chapter.** [Thereafter,] **If the applicant does not submit the additional information,** the Department, **conservation district** or delegated local agency will consider the application to be withdrawn by the applicant. **[Requests for] An applicant may request a specific extension [may be sought by the applicant] in writing, setting forth the need for the extension. The Department, conservation district or delegated local agency will confirm or reject the applicant's request for a time extension in writing.** The applicant will be notified in writing when an application or registration is considered withdrawn. When an application or registration is considered withdrawn, the Department, **conservation district** or delegated local

agency will close the application file and will not take **further** action to review the **[file] application**.

(5) If the application has been withdrawn **[in accordance with] under** paragraph (4), the fees associated with filing the application will not be refunded.

(f) A permit application for **a** small **[projects]project** located in **[streams] a stream** or **[floodplains]floodplain** must be accompanied by the following information. This permit application may not be used for **[projects] a project** located in **[wetlands] a wetland**. 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 under this chapter.

* * * * *

(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.] The upstream and downstream cross sectional view must show the current or existing conditions and the proposed conditions of the regulated waters of this Commonwealth. The cross sections must be provided at a minimum scale of one-inch equals twenty feet so that the cross sections adequately illustrate the scope of work proposed.**

(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 must be submitted. The photos 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.

(g) **[Except for small projects, an] An** application for a permit under this chapter **[shall] must** be accompanied by proof of an application for **[an Earth Disturbance Permit] a permit** or an erosion and sedimentation control plan **under Chapter 102 (relating to erosion and sediment control) [for activities in the stream and earthmoving activities].** The **erosion and sedimentation control** plan must conform to requirements **[in] under** Chapter 102 **[(relating to**

erosion and sediment control)] and, unless reviewed by the Department, must include a copy of a letter from the conservation district in the county where the project is located indicating that the conservation district has reviewed the erosion and sediment control plan [of] provided by the Chapter 102 permit applicant and considered it to be satisfactory, if applicable. [Earthmoving] Earth disturbance activities, including small projects, shall be conducted pursuant to an [earth disturbance] erosion and sediment control plan that satisfies Chapter 102. The erosion and sediment control plan must be available at the project site. Best management practices required under the erosion and sediment control plan must be implemented and maintained prior to, during and after construction.

(h) An application [shall] must be signed and submitted by the person who owns or has primary responsibility for the proposed dam or reservoir, water obstruction or encroachment. In the case of a partnership, one or more members of the partnership authorized to sign and submit on behalf of the entire partnership shall sign and submit the application. In the case of a corporation, the president or vice president and the treasurer, assistant treasurer, secretary, or assistant secretary authorized to sign on behalf of the corporation shall sign and submit the application. In the case of a political subdivision, the chief officer of the political subdivision or other responsible official empowered to sign for the political subdivision shall sign and submit the application. 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. An applicant may electronically sign and submit an application to the Department, consistent with the Electronic Transactions Act of 1999 (73 P.S. § § 2260.101 — 2260.501).

[(i) 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.]

[(j)](i) Plans, specifications and reports accompanying an application[s] for any category of dam[s], or for a bridge[s] and other water obstruction[s] or encroachment[s] [which] that would pose a threat to human life or substantial potential risk to property, [shall] must be affixed with the seal of a registered professional engineer and a certification, signed by the registered professional engineer, which [shall] must 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 Protection.”

(j) The following application materials must be affixed with the seal of a registered professional geologist or professional engineer consistent with the requirements under the Commonwealth’s Engineer, Land Surveyor and Geologist Registration Law (63 P.S. § § 148 — 158.2):

(1) Plans, specifications, reports and all other information that accompanies an application for any category of dam or levee, or for any other type of water obstruction or encroachment, that details geologic borehole locations, profiles, logs and interpretations.

(2) A report on coastal geology concerning bluff and beach erosion and subsequent transportation and deposition of sediment.

(k) The Department may waive the specific information requirements of this [section] **chapter** in writing[, in the record of decision,] if [upon review of the permit application,] the Department finds that **the specific [information] requirement** is not necessary to [review the application] **ensure compliance with this chapter. This includes aquatic resource restoration and other activities which protect the natural ecosystem characteristics and functions of the regulated waters of this Commonwealth.**

(l) The Department will review the adequacy of the fees in this [section] **chapter** at least once every 3 years and provide a written report to the [EQB] **Environmental Quality Board**. The report will identify any disparity between the amount of program income generated by the fees and the costs to administer these programs, and it will contain recommendations to adjust fees to eliminate the disparity, including recommendations for regulatory amendments.

§ 105.13a. Complete applications.

(a) An application **or registration** 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 **and verified by the Department, conservation district or other delegated agency. A complete application or registration is one that meets both of the following:**

(1) Satisfies principal completeness requirements.

(2) Contains information that is necessary to demonstrate compliance with the Act, the Clean Streams Law and this chapter, including the identification of all proposed impacts to regulated waters of this Commonwealth.

(b) When the Department, **conservation district or other delegated agency** determines that an application **or registration** is incomplete or [contains insufficient information] **substantially inadequate**, it will notify the applicant in writing. The applicant [shall have] **will be provided a specified period of time, as stated by the Department in writing, [60 days]** from the date of [the] **a [Department’s] Department, conservation district or other delegated agency [letter] notification** to complete the application **or registration [or] and provide the information necessary for the Department, conservation district or other delegated agency to determine**

compliance with this chapter. If the applicant fails to complete the application or registration or fails to provide the necessary information, the Department, **conservation district or other delegated agency will** consider the application **or registration** to be withdrawn. [Requests for] **An applicant may request** a specific extension [shall be in submitted by the applicant] in writing, **setting forth the need for the time extension. The Department, conservation district or other delegated agency will confirm or reject the applicant's request for a specific extension 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 **or registration** and fee will 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.

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

* * * * *

(iii) 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).

(iv) Enrollment and continued good standing in the Commonwealth's Private Dam Financial Assurance Program (PDFAP) established under Section 1603-N of the act of June 22, 2018 (P.L. 281, No. 42), known as the Fiscal Code.

(2) The Department may, upon review, request an increase in the amount of the bond or other legal device noted in paragraph (1)(iii) as necessary to ensure that sufficient funds are available. The Department may not increase this amount more than once every 10 years unless the facility is being modified by permit.

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§ 105.14. Review of applications.

(a) An application will be reviewed **under this chapter** to determine the proposed project's effect on health, safety and the environment, [in accordance with] **using** prevailing practices in

the engineering profession, **and in accordance with current scientific and** environmental principles **and practices**.

(b) In reviewing a permit application under this chapter, the Department will use the following factors to make a determination of impact:

(1) Potential threats to **[life or] life,** 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 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.

(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 **Pennsylvania** Fish and Boat Commission, **other Commonwealth agencies or commissions** and **the** 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 must 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 this Commonwealth.

* * * * *

(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, **96** and 102 [**relating to water quality standards; wastewater treatment requirements; and erosion and sediment control**] and the Clean Water Act (33 U.S.C.A. § § 1251—1376). **In reviewing**

a permit application, the Department will evaluate the potential effect of the proposed dam, water obstruction or encroachment to determine whether existing and designated uses of regulated waters of this Commonwealth are protected and maintained.

(12) Secondary impacts associated ~~[with]~~**with**, but not ~~[the direct result of]~~**directly resulting from**, 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 **located** in, along, across or projecting into ~~[a wetland]~~ **regulated waters of this Commonwealth, including wetlands**, ~~[as defined in § 105.1 (relating to definitions),]~~ the Department will ~~[also consider the impact]~~ **evaluate the effects of the proposed project on regulated waters of this Commonwealth, [on the] including [wetlands values and] aquatic resource** functions, in making a determination of adverse ~~[impact]~~ **environmental 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 an application for a permit or registration which proposes an impact to a wetland, the Department will review the application to determine whether it satisfies §§ 105.13, 105.15, 105.17, 105.18a and 105.20a.

~~[(c)]~~**(d)** 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, Pennsylvania Fish and Boat Commission, **other state agencies and commissions** and **the** 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 must be on a form provided by the Department and 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)**] **§ 105.13(e)** 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 Chapter 93 and §§ [**105.13(d)**] **105.13(e)** 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.

(4) For aquatic resource restoration of regulated waters of this Commonwealth, the Department will base its evaluation on the following information:

(i) A detailed project description that includes specific goals and objectives.

(ii) A project plan which includes:

(A) Resource identification and data

(B) Location map

(C) Wetland determination or delineation

(D) Data sheets

(E) Watercourse reports

(F) Photographs

(G) Identification of the plan preparer

(H) Qualifications of the plan preparer

(iii) A description of regulated waters of this Commonwealth at the project site.

(iv) The resource type, size, designated and existing uses of regulated waters of this Commonwealth, including wetlands at the project site.

(v) Information related to historic and modern land uses. This includes a demonstration of aquatic resource degradation or impairment and identification of historic and modern causes, as applicable.

(vi) An impacts analysis identifying the anticipated aquatic resource restoration improvement and benefit, including water quality; aquatic habitat; floodway and floodplain re-establishment and reconnection to groundwater; and wetlands restoration.

(vii) Plans, cross sections, erosion and sediment control plan, geomorphic measurements and analyses, geologic characteristics and geotechnical data, paleo-aquatic or target ecosystem characterization, identification of existing constraints such as upstream channel instability, potential sediment contributions and need for transition zones and other factors which may constrain restoration capacity.

(viii) Other relevant information.

(b) For structures or activities where water quality certification is required under section 401 of 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)**] **§ 105.12(a)(1)—(10), (12)—(15) and (17)—(21)** (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 **and consistency with § 105.20a (relating to compensation for impacts to regulated waters of this Commonwealth)**, 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.

(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 (relating to wetlands) and 105.18a—105.20a.

* * * * *

§ 105.20a. [Wetland replacement criteria.] Compensation for impacts to regulated waters of this Commonwealth.

[(a) Wetlands replacement 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.]

(a) *Compensatory mitigation for a proposed project.* Where the applicant proposing a dam, water obstruction or encroachment demonstrates, and the Department agrees, that impacts to regulated waters of this Commonwealth cannot be avoided or further minimized by limiting the degree or magnitude of the proposed project or its implementation, or by rectifying the impact by repairing, rehabilitating or restoring the affected regulated waters of this Commonwealth, the applicant must reduce or eliminate the impact through compensatory mitigation by replacing the resource functions that will be impacted or by providing substitute resources or environments.

(b) *No net loss of wetlands.* The Department will track wetland losses and gains that occur as a result of the implementation of this chapter and ensure that, at a minimum, there is a no net loss of wetland resources within the service areas as identified in subsection (c) below.

(c) *Siting criteria for service areas.* An applicant may plan for compensatory mitigation of the impacted regulated waters of this Commonwealth by including a proposal to use a Department approved mitigation bank, in-lieu fee program or permittee responsible mitigation site. Compensatory mitigation for impacts to regulated waters of this Commonwealth will generally not be approved unless the mitigation bank, in-lieu fee program or permittee responsible mitigation site is located within the same Department State Water Plan sub-basin as the impacts to regulated waters of this Commonwealth being compensated for or within the designated watershed boundaries identified by the Department.

(d) *Compensation factors.* The applicant will provide information for, and the Department will evaluate, the following factors when determining the appropriate amount of compensatory mitigation for impacts to regulated waters of this Commonwealth that cannot be eliminated.

(1) The area impacts, including the following:

(i) Direct impacts.

(ii) Indirect impacts.

(iii) Secondary impacts.

(2) The aquatic resource functions affected by the proposed project.

(3) The level of effect of the proposed project on the aquatic resource functions.

(4) The ecological and public value of the regulated water.

(5) The value of proposed compensatory mitigation actions to reestablish and rehabilitate environmental resources.

(e) Methodologies. An applicant shall use the Department's functional assessment protocol and compensatory mitigation technical guidance documents (technical guidance 310-2137-001, 310-2137-002, 310-2137-003, 310-2137-004), as amended, or other equivalent alternative methodology acceptable to the Department for assessing a project's proposed effects upon aquatic resource functions of regulated waters of this Commonwealth.

(f) Structures or activities constructed without a Department permit. For structures or activities constructed without a Department permit or registration issued under this chapter, and for which mitigation cannot be achieved, the compensatory mitigation as determined above must be performed at a minimum ratio of 2:1 (replacement area: affected area). The Department may require the ratio to exceed 2:1 based on a determination of the area(s) affected, the functions destroyed or adversely affected by the project and the willfulness of the violation.

PERMIT ISSUANCE, TRANSFER AND REVOCATION

§ 105.21. Criteria for permit issuance and denial.

* * * * *

(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 **compensatory mitigation**[**replacement in accordance with under** § 105.20a (relating to **compensation for impacts to regulated waters of the Commonwealth** [**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 and Boat 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.

* * * * *

§ 105.25. Transfer of permits.

(a) A permit must be transferred, or notification **must be** provided to the Department, as follows:

* * * * *

(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 **of the dam**, but not **of the** 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 **of the transfer of ownership**.

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

* * * * *

(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) An owner of a dam that does not require a permit shall notify the Department in writing of any change in ownership within 30 days after the transfer of ownership.

[(f)](g) 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. The Department may prepare a new permit to replace worn or obsolete documents.

SUBMERGED LANDS OF THE COMMONWEALTH—LICENSES AND ANNUAL CHARGES

§ 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, \$150 per tenth of an acre.
- (ii) For barge fleeting and **barge** mooring areas, \$30 per tenth of an acre.
- (iii) Minimum annual charge, \$750.

(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 **for small docks and boat ramps** 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	750
500 to 999	1,500
1000 to 1499	3,000
1500 to 1999	4,500
2000 to 2499	6,000
2500 to 2999	7,500
3000 to 3499	9,000
3500 to 3999	10,500
4000 to 4499	12,000
4500 to 4999	13,500
5000 and over	15,000

(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:

* * * * *

(6) A structure or facility constructed and operated exclusively to improve fish habitat, under a cooperative agreement with the **Pennsylvania** Fish and Boat Commission.

(7) A private recreational dock **constructed, operated or maintained under** a general permit **registration issued under section 7 of the act (32 P. S. § 693.7).**

(8) A project or activity constructed and operated primarily for the benefit of the environment, including restoration of regulated waters of this Commonwealth; an agricultural conservation practice; environmental reclamation or remediation; environmental treatment or clean-up; and other similar activities performed under a Department authorized permit or registration under this chapter.

(9) A project or activity of a temporary nature of one year or less, unless the Department authorizes a longer period in writing, for which the site of the project or activity will be fully restored to the condition consistent with one or more Department authorized permits or registrations under this chapter.

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

* * * * *

CONSTRUCTION REQUIREMENTS AND PROCEDURES

§ 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) For water obstruction and encroachments, if the construction is not completed on or before the dates established in the permit, unless extended by the Department in writing, the permit shall become void without further notification 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 5th year following permit issuance or other Department approval, the permittee or owner shall notify the Department 6 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.] For dams, the following apply:**

(1) If work authorized under a dam permit or other Department approval has not commenced on or before the date established in the permit or other Department approval, unless extended by the Department in writing, the permit or other Department approval shall become void without further notification by the Department.

(2) If work authorized under a dam permit or other Department approval has commenced or will commence but will not be completed on or before the date established

in the permit or other Department approval, unless extended by the Department in writing, the permittee or dam owner shall notify the Department 90 days prior to the anticipated commencement of work so that the Department can reassess the project design and reauthorize or extend the approval . During the project design reassessment, the Department may require the permittee or dam owner to revise the project design due to changes in site conditions, changes in dam classification, new technology or revisions to this chapter. (3) At any time if the permittee or dam owner does not intend to perform the work authorized under the dam permit or other Department approval, the Department must be notified in writing. The dam permit or other Department approval will become void upon receipt of the notice by the Department, without further notification by the Department.

§ 105.47. Removal of 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 regulated waters of this Commonwealth to their former condition.

(b) Prior to discontinuing use or abandonment, the permittee or owner of a water obstruction or encroachment covered by this chapter, shall remove all or part of the **[facility] water obstruction or encroachment which poses a threat to public health, safety or environment, or no longer serves a purpose** and **shall** take other actions as necessary **to protect the public health,** safety and the environment **[in accordance with] under** 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

§ 105.53. 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 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), annual reports regarding the condition of the dam, 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 Hazard Potential Category 1 and Category 2 dams as classified in § 105.91 (relating to classification of dams and reservoirs), internal conduit inspections of all piping systems passing through or under the dam must be performed at least once every 10 years. The inspection must include the outlet conduit, intake, gates, valves, and other appurtenant features. A report detailing the conduit inspection must contain color photographs or video and must be submitted to the Department for review within 120 days of the close of the 10-year period. Less frequent reports of conduit conditions may be accepted by the Department if the Department determines that conditions indicate an acceptable serviceable life of the conduit remains to assure the adequate protection of health, safety and property.

[3]**(4)** 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]**(5)** 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]**(6)** 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]**(7)** 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]**(8)** 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 shall apply for a permit, or request an amendment to an existing permit to perform the modifications.

**Subchapter B. DAMS AND RESERVOIRS
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 under §§ 105.13, 105.13a, 105.13b and 105.15, permit applications under this subchapter for the construction or modification of dams and reservoirs must provide the following information:

* * * * *

(2) Site plan and cross sectional views required under [**§ 105.13(d)(1)(i)**] **§ 105.13(e)(1)(i)** (relating to permit applications-information and fees).

(3) Construction plans, specifications and design reports to evaluate the safety, adequacy and suitability of the proposed dam, reservoir and appurtenant works in order to determine compliance with this chapter.

* * * * *

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

(a) In addition to information required under §§ 105.13, 105.13b and 105.15 (relating to permit applications—information and fees; proof of financial responsibility; and environmental assessment), a permit application for the operation and maintenance of existing dams and reservoirs must provide the following information:

(1) Site plan and cross sectional views required under [**§ 105.13(d)(1)(i)**] **§ 105.13(e)(1)(i)**.

(2) “As built” construction plans, specifications and design reports not already on file with the Department, which show the type, size, height and other pertinent dimensions and features of the existing dam and reservoir and appurtenant works.

* * * * *

(8) The EAP for the dam or reservoir, if completed, or work plan to prepare and submit an EAP in accordance with § 105.134 (relating to EAP).

(9) **For dams constructed or modified after July 1, 1979, [Proof] proof** of title or flowage easements for land areas below the top of the dam elevation that is subject to inundation.

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

* * * * *

§ 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:

* * * * *

(2) In addition to the site plan and cross sectional views required under [§ 105.13(d)(1)(i)] **§ 105.13(e)(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.

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

§ 105.96. Outlet works.

(a) Dams must include a device to allow the complete draining of the reservoir 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] with a combined capacity to achieve both of the following:**

(1) **[d]Drain the top 2 feet of reservoir storage below normal pool in 24 hours. [The highest mean monthly flow shall be determined from statistics of an appropriate stream gage, as approved by the Department, transferred to the dam site by the ratio of the drainage areas. 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.]**

(2) **Convey the reservoir inflow, which must be based on the mean annual flow. The mean annual flow must be determined through use of U.S.G.S. regression equations, from an analysis of stream gages, or other Department approved methodologies.**

(b) **The maximum drawdown rate for reservoirs impounded by earthfill dams shall not exceed 1 foot per day without prior approval by the Department unless a partial or complete drawdown is being conducted under §§ 105.63 and 105.135 (relating to emergency procedures and dam hazard emergencies).** 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](c) Each outlet works must include upstream closure, trashrack, [and] a means of dissipating the energy of flow at its outlet **and, where applicable, seepage filtering diaphragms** to assure conveyance of flow without endangering the safety and integrity of the dam or the natural environment of the stream.

(d) The Department may waive or modify one or more of the requirements under subsections (a) through (c) to provide for the integrity of the dam and to protect life and property with an adequate margin of safety.

§ 105.97. Stability of structures.

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(d) Gravity dams must be demonstrated to be stable **under the most recent engineering manuals developed by the United States Army Corps of Engineers relating to stability of dam structures. The demonstration must use appropriate uplift pressures, ice loads and silt loads.** [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 United States Army Corps of Engineers relating to stability of dam structures.]

[h](e) The Department may, in its discretion, consider a revised factor of safety for a class of dams or reservoirs when it can be demonstrated that the factor of safety provides for the integrity of the dams or reservoirs and adequately protects life and property.

§ 105.98. Design flood criteria.

The discharge capacity or storage capacity, or both, must be capable of safely accommodating the recommended design flood for the dam as classified under § 105.91 (relating to classification of dams and reservoirs). **[The design flood must be determined by an incremental dam breach analysis. The minimum required design storm duration is 24 hours.] For dams of Hazard Potential Category 1 or 2, the design flood must be based on the results of an IDBA or in cases where an IDBA is not performed, the design flood must be the PMF.** 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>Classification</i>	<i>Design Flood Range</i>
<u>A-1, A-2, B-1, B-2, C-1, C-2</u>	<u>PMF unless IDBA performed</u>
A-3, B-3	1/2 PMF to PMF
A-4, B-4, C-3	100 year to 1/2 PMF
C-4	50 year to 100 year frequency

PROTECTION AND RESTORATION OF AQUATIC LIFE

§ 105.121. Fishways.

Upon the request of the Pennsylvania Fish and Boat Commission, the permittee shall install and maintain chutes, slopes, fishways, gates or other devices that the Fish and Boat Commission may require 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 Pennsylvania Fish and Boat Commission 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 substantially disrupted aquatic life 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 Pennsylvania Fish and Boat Commission and 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.

OPERATION, MAINTENANCE AND EMERGENCIES

§ 105.134. EAP.

(a) The permittee or owner of an existing or proposed Hazard Potential Category 1, Category 2 or Category 3 dam as classified in § 105.91 (relating to classification of dams and reservoirs) shall develop an EAP to be followed in the event of a dam hazard emergency as defined in § 105.135 (relating to dam hazard emergencies). The EAP [~~shall~~ **must**] be submitted to the Department and [**approved**] **acknowledged** by the Department and the Pennsylvania Emergency Management Agency (PEMA).

(1) Prior to submitting the EAP 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 EAP must be signed by the dam **permittees or** owners, the dam operators, and the county emergency management coordinators for those counties affected by the dam's failure signifying concurrence with the EAP.

(3) In the case of a proposed dam, the EAP **[shall]must** be **[submitted to the Department and]** approved by the Department and PEMA prior to commencement of storage of water, fluid or semifluid.

(4) The EAP must be prepared **[in accordance with]under** the most recent EAP **[guidelines] template** developed by the Department and PEMA **and must be uploaded into the online emergency management planning system.**

(b) Upon **[approval] Department and PEMA acknowledgment** of the EAP, the permittee or owner shall provide a copy of the **[signed approved] acknowledged** EAP to the municipal emergency management agencies and the emergency response agencies listed in the EAP.

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

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

(e) Within 60 days of the date of the Department's **[approval] acknowledgment** letter, the permittee or owner shall provide the Department **with** a written statement certifying that the notices **[has]have** been posted in the locations listed in the EAP. The permittee or owner shall certify in each subsequent annual inspection report, as required **[in]under** § 105.53(a) **(relating to Inspections by permittees or owners and inspection reports)**, that the notices remain posted or were reposted in the locations listed in the EAP.

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

(g) The **[Department may require the]** EAP **must** be updated[, **as necessary,**] **if any of the following occurs:**

(1) **[if there]There** is a new **permittee,** owner, **owner's representative** or operator[,].

(2) [if changes]Changes occur in the downstream inundation area or in the Hazard Potential Category.

Subchapter C. CULVERTS AND BRIDGES

DESIGN CRITERIA FOR CONSTRUCTION OR MODIFICATION

§ 105.161. Hydraulic capacity.

(a) Bridges and culverts shall be designed and constructed in accordance with the following criteria:

- (1) The structure shall pass flood flows without loss of stability.
- (2) The structure may not create or constitute a hazard to life or property, or both.
- (3) The structure may not materially alter the natural regimen **and the geomorphic stability** of the stream.
- (4) The structure may not so increase velocity or direct flow in a manner which results in erosion of stream beds and banks.
- (5) The structure may not significantly increase water surface elevations.
- (6) The structure shall be consistent with local flood plain management programs.

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(e) The structures shall pass the 100-year frequency flood with less than a 1.0-foot increase in the natural unobstructed 100-year water surface elevation, except where the structure would be located in a floodway which is delineated on a FEMA map, in which case no increase in the 100-year water surface elevation will be permitted. Exceptions to this criteria may be approved by the Department if the applicant prepares a risk assessment which demonstrates, and the Department finds, that the structure will not significantly increase the flooding threat to life and property or the environment, and if applicable, is consistent with municipal floodplain management programs adopted under the National Flood Insurance Program and a FEMA Flood Insurance Study. **[This information may be obtained from the Department of Community Affairs, Floodplain Management Division, Forum Building, Harrisburg, Pennsylvania 17120.]**

§ 105.162. Multiple pipes and spans.

Multiple pipes and multiple span bridges and culverts which may tend to collect debris, contribute to the formation of ice jams and increase head losses shall be avoided to the maximum practicable extent. Crossings of less than 15 feet shall be by one span, except where conditions make it impractical to effect the crossing without multiple spans.

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OPERATION AND MAINTENANCE

§ 105.171. Maintenance.

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(c) Removal of silt and debris from the stream channel for the purposes of culvert or bridge maintenance shall be accomplished in accordance with the Department's *Standards for Channel Cleaning at Bridges and Culverts*, as updated and amended. [A copy of this document can be obtained from the Bureau of Dams and Waterway Management, Division of Waterways and Stormwater Management, Post Office Box 8554, Harrisburg, Pennsylvania 17105-8554.]

Subchapter J. DISCHARGES OF DREDGED OR FILL MATERIAL

PERMITS

§ 105.401. Permit applications.

In addition to the requirements of § 105.13 (relating to permit applications—information and fees) and other applicable requirements of this chapter, applications for discharges of dredged or fill material into the regulated waters of this Commonwealth **[shall] must** contain the following information:

(1) The location of **a public water supply well within 1 mile or** a public water supply intake located within 1 mile upstream and 10 miles downstream **of the of the proposed project boundary**.

(2) The location of areas of shell-fish production.

(3) The impact of the activity upon a threatened or endangered species as identified under the Endangered Species Act of 1973 (7 U.S.C.A. § 136; 16 U.S.C.A. § § 460l-9, 460k-1, 668dd, 715i, 715a, 1362, 1371, 1372, 1402 and 1531—1543), and the critical habitat of the species.

(4) The impact of the activity upon those species of aquatic life indigenous to the waterbody.

(5) **[The amount of percentage of the discharge that will consist of toxic material regulated under section 6 of the Toxic Substances Control Act (15 U.S.C.A. § 2605) or hazardous materials as defined by the Resource Conservation and Recovery Act of 1976 (42 U.S.C.A. § § 6901—6986) in other than trace quantities.] A demonstration that the fill material is uncontaminated, nonwater-soluble, nondecomposable, inert solid material used to level an area or bring an area to grade. If the fill material does not meet one or more of these characteristics, then the applicant shall demonstrate that the material is suitable for its intended use and will not cause an adverse impact to human health, safety or the environment. For the purpose of this section, uncontaminated fill material must be unaffected by a release of a regulated substance, as the term regulated substance is used in**

the Land Recycling and Environmental Remediation Standards Act (35 P.S. §§ 6026.101 – 6026.908).

(6) Other information as the Department may require.

CRITERIA FOR APPROVAL

§ 105.411. General criteria.

The Department will not approve an application to discharge dredged or fill material into regulated waters of this Commonwealth, unless the applicant demonstrates to the Department **that applicable criteria under this chapter are met and** a public benefit **[which]** outweighs the **[damage]adverse impact** to the **[public natural resources] public health, safety and environment. [if] when** one or more of the following **[is true]criteria exists:**

- (1) The discharge is to a spawning area during spawning season.
- (2) The discharge would restrict or impede the movement of aquatic species indigenous to the waters or the passage of normal or expected high flows or cause the relocation of the waters unless the primary purpose of the fill is to impound waters.
- (3) The discharge is into regulated waters of this Commonwealth **[, except wetlands,]** which are breeding, feeding or nesting areas for migratory **[water birds] waterfowl.**

Subchapter L. GENERAL PERMITS

§ 105.446. Procedure for issuance.

- (a) At least 60 days prior to issuance of a general permit, the Department will:
 - (1) Publish notice in the *Pennsylvania Bulletin* of intent to issue a general permit, including the text of the proposed general permit and locations for obtaining standardized plans.
 - (2) Provide written notice of the proposed general permit to the United States Army Corps of Engineers; the United States Coast Guard; the United States Fish and Wildlife Service; the United States Environmental Protection Agency; the **Pennsylvania Fish and Boat Commission;** the **Pennsylvania** Game Commission; applicable river basin commissions created by interstate compact; county agencies holding delegations under § 105.4 (relating to delegations to local agencies) and other interested Federal, State or interstate agencies **or commissions.**
- (b) An opportunity shall be provided for interested members of the public, Federal and State agencies to provide written comments on a proposed general permit.
- (c) The Department may, at its discretion, hold a public hearing on a proposed general permit for the purposes of gathering information and comments.

(d) General permits issued by the Department will be published in the *Pennsylvania Bulletin* at least 30 days prior to the effective date of the permits, as required by section 7(d) of the Dam Safety and Encroachments Act (32 P. S. § 693.7(d)).

(e) The Department will periodically review issued general permits for adequacy and make necessary revisions, updates or revocation of a general permit, when necessary or appropriate.

Subchapter M. STATEMENTS OF POLICY

WETLANDS

§ 105.451. Identification and delineation of wetlands—statement of policy.

* * * * *

(c) The Department adopts and incorporates by reference the 1987 *Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1, **January 1987**)* along with the guidance provided by the United States Army Corps of Engineers, Major General Arthur E. Williams’ memorandum dated 6 March 1992, *Clarification and Interpretation of the 1987 Manual* and any subsequent changes as the methodology to be used for identifying and delineating wetlands in this Commonwealth. The 1987 *Corps Wetland Delineation Manual*, **Publication No. ADA 176734 is available from the National Technical Information Service (NTIS), Springfield, VA 21161, or telephone: (703) 487-4650] may be found electronically on-line through the internet.** Copies of the Supplemental Guidance, **including Regional Supplemental Guidance,** issued by the Corps concerning use of the 1987 Manual, **[(that is, the October 7, 1991, Questions and Answers, and the March 6, 1992, Clarification and Interpretation Memorandum) as well as the Administration’s Wetlands Plan of August 24, 1993, may be obtained by contacting the regulatory branch of a local Corps District, or the EPA Wetlands Hotline at (800) 832-7828. For more information, contact Pennsylvania Department of Environmental Protection, Bureau of Dams, Waterways and Wetlands, Post Office Box 8554, Harrisburg, Pennsylvania 17105-8554, telephone (717) 787-6827] may be found electronically on-line through the internet.**

§ 105.452. Status of prior converted cropland—statement of policy.

(a) This section sets forth the policy of the Department as to the status of prior converted cropland in this Commonwealth.

* * * * *

(c) Naturally occurring events may result in either creation or alteration of wetlands. It is necessary to determine whether alterations to an area have resulted in changes that are now “normal circumstances” of the particular area. The Department recognizes **and adopts** “prior converted cropland,” as defined in the *National Food Security Act Manual* (**[180-V-NFSAM, Third Edition, March 1994] Fifth Edition 180-NFSAM-514-D-514.30, December 2018 as amended**), as “normal circumstances” as the **[term]phrase** is used in the definition of wetlands in § 105.1 (relating to definitions), **unless the Department determines that *National Food***

Security Act Manual policy and guidance are inconsistent with Pennsylvania law. These prior converted croplands are not regulated as wetlands under **[the Commonwealth's Wetland Protection Program contained in this chapter,] this chapter when used as crop production.** Prior converted cropland is defined in the *National Food Security Act Manual*, as wetlands that were drained, dredged, filled, leveled or otherwise manipulated, including the removal of woody vegetation **or any activity that results in weakening or reducing the flow or circulation of water,** before December 23, 1985, and have not been abandoned, for the purpose of, or to have the effect **[of]of,** making **[the] crop** production **[of an agricultural commodity]** possible, and an agricultural **[commodity was planted or produced] activity associated with crop production was conducted** at least once prior to December 23, 1985.

[(1) Abandonment is the cessation of cropping, forage production or management on prior converted cropland for 5 consecutive years, so that:

(i) Wetland criteria are met.

(ii) The area has not been enrolled in a conservation set-aside program.

(iii) The area was not enrolled in a State or Federal wetland restoration program other than the Wetland Reserve Program.

(2) Prior converted cropland may also be considered abandoned if the landowner provides written intent to abandon the area and wetland criteria are met.]

(d) This policy change does not affect the exemption for plowing, cultivating, seeding and harvesting for the production of food, fiber and forest products or the waiver for maintenance of field drainage systems found at § 105.12(a)(7) and (8) (relating to waiver of permit requirements).

(e) Prior converted cropland will be considered abandoned when the landowner informs the appropriate Department regional office's wetland program, Pennsylvania Department of Agriculture, or the United States Department of Agriculture, Natural Resource Conservation Service (USDA NRCS) of the intent to abandon the area in writing and wetland criteria are met. Prior converted cropland will be considered abandoned upon receipt of the landowner's correspondence unless the landowner otherwise identifies a specific date to abandon the area.