

26.17.04.00

Title 26 DEPARTMENT OF THE ENVIRONMENT

Subtitle 17 WATER MANAGEMENT

Chapter 04 Construction on Nontidal Waters and Floodplains

Authority: Environment Article, §§1-404, 5-501—514, Annotated Code of Maryland

26.17.04.01

.01 Scope.

These regulations are designed to govern construction, reconstruction, repair, or alteration of a dam, reservoir, or waterway obstruction or any change of the course, current, or cross section of a stream or body of water within the State including any changes to the 100-year frequency floodplain of free-flowing waters. Free-flowing waters do not include State or private wetlands or areas subject to tidal flooding. For purposes of these regulations, the landward boundaries of any tidal waters shall be deemed coterminous with the wetlands boundary maps adopted pursuant to Environment Article, §16-301, Annotated Code of Maryland.

26.17.04.02

.02 Definitions.

A. The following definitions describe the meanings of terms used in the regulations governing construction on nontidal waters and floodplains adopted by the Water Management Administration of the Department of the Environment (Regulations .01----.13), unless the context in which they are used clearly requires a different meaning or a different meaning is prescribed at the point of use. Terms not defined below shall have the meanings given to them in the relevant statutes or, if not defined in statutes, the meanings attributed by common use. The terms "Administration", "Department", "person", and "waters of the State" are defined in the Environment Article, Title 5, Subtitle 1, Annotated Code of Maryland. The definitions for these terms are provided as a convenience, but persons affected by the Department's regulations should be aware that these definitions are subject to amendment by the General Assembly.

B. In this chapter, the following terms have the meanings indicated:

(1) "Administration" means the Water Management Administration.

(2) "Administrative order" means a written notification issued by the Administration pursuant to State law and regulations, requiring, within a time specified, correction of a violation of or compliance with provisions of pertinent law, regulations, permit, or approval.

(3) "Anadromous fish spawning areas" means that portion of the waters of the State identified by the Department as spawning and nursery areas for anadromous fish species.

(4) "Dam" means any obstruction, wall, or embankment, together with its abutments and appurtenant works, if any, in, along, or across any stream, heretofore or hereafter constructed for the purpose of storing or diverting water or for creating a pool upstream of the dam, as determined by the Administration.

(5) "Danger reach" means that area downstream of a dam within which sudden release of waters resulting from failure of the dam during the inflow design flood would cause an artificial flood exceeding the flood that might be expected from the same storm if the dam had not existed.

(6) "Department" means the Department of the Environment.

(7) "Dominant discharge" means the flow rate capacity, in cubic feet per second, of the stream channel considering steady, uniform flow.

(8) "Emergency condition" means a sudden unforeseen occurrence or condition requiring exigency or a circumstance which the Administration determines constitutes a present or imminent danger to the public health or safety or to the environment.

(9) "Floodplain" means that area along or adjacent to a stream or a body of water within the waters of the State that is capable of storing or conveying floodwaters.

(10) "Flood-proofing" means any combination of structural or nonstructural additions, changes, or adjustments to structures together with attendant utility and sanitary facilities that are designed so that below the elevation of the 100-year frequency flood event the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

(11) "Freeboard" means the vertical distance to the crest of a dam above the water surface at time of maximum design flow over the spillway.

(12) "General waterway construction permit" means the authorization established by Regulation .10 of this chapter for certain categories of construction activities to take place without an individual waterway construction permit.

(13) "Inflow design flood" means the size of flood coming into the reservoir that is used as a basis for designing various parts of the dam.

(14) "1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control" means the official handbook for sediment control principles, methods, and practices approved by the Administration, which is incorporated by reference under COMAR 26.17.01.11.

(15) "Natural trout waters" means waters having the potential to support or are capable of supporting natural trout populations, including propagation, and their associated food organisms. These waters are designated Use III as indicated in COMAR 26.08.02.08.

(16) "Normal depth" means the maximum vertical distance from the stream bed invert at the upstream toe of the dam to the normal water surface.

(17) "Overflow spillway" means any operating, emergency, or other spillway which discharges with a free water surface over or around the dam as opposed to an orifice, gate, or conduit which discharges through or beneath the dam or nearby ground.

(18) "Owner" means any person or persons and their duly authorized agents, owning, operating, maintaining, or proposing to construct any dam, reservoir, or other obstruction, or to change the course, current, or cross section of any body of water in the State.

(19) "Permit" means authorization by the Administration, pursuant to pertinent law and regulations, describing the required performance for specific activities and operations.

(20) "Permittee" means the person to whom a permit is issued by the Administration.

(21) "Person" means the federal government, the State, any county, municipal corporation, or other political subdivision of the State, or any of their units, or an individual, receiver, trustee, guardian, executor, administrator, fiduciary, or representative of any kind, or any partnership, firm, association, public or private corporation, or any other entity.

(22) "Probable maximum flood" means the most severe flood considered possible in a specific region. This may be:

(a) The probable maximum flood as determined by a source acceptable to the Administration; or

(b) Calculated using a rational consideration of the chances of simultaneous occurrence of the maximum of the several elements or conditions which contribute to the flood.

(23) "Recreational trout waters" means cold or warm waters having the potential to hold or support or capable of holding or supporting adult trout for put-and-take fishing, usually seasonal. These waters are designated Use IV as indicated in COMAR 26.08.02.08.

(24) Repair.

(a) "Repair" includes any modification or alteration to a dam, reservoir, waterway obstruction, stream channel, or floodplain when the:

(i) Hydraulic performance or safety of a dam or waterway obstruction is altered or affected;

(ii) Hydraulic performance of a bridge or culvert, stream channel, or floodplain is altered or affected; or

(iii) Use of construction equipment within a flowing stream would be required.

(b) "Repair" does not include ordinary maintenance which does not cause pollution, as defined in COMAR 26.17.01.01B(14), to the waters of the State.

(25) "Reservoir" means any basin, either natural or artificial, used for the collecting or storing of water.

(26) "Standard project flood" means the most severe flood considered reasonably characteristic of the specific region.

This is calculated for a specific dam site using one or more of the recognized methods acceptable to the Administration. Usually, this flood will have a magnitude between 40 percent to 60 percent of the probable maximum flood.

(27) "State" means the State of Maryland.

(28) "Substantial improvement" means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure. The term does not include any project for improvement of a structure to comply with existing State or local health, sanitary, or safety code specifications which are necessary to insure safe living conditions or any alteration of a structure listed in the National Register of Historic Places or a State Inventory of Historic Places.

(29) "Tractive force" means the shear stress, expressed in pounds per square foot, acting upon the wetted boundary of the stream channel and is expressed as: $\psi \text{ omicron} = \Delta RS$ when $\psi \text{ omicron}$ is the tractive force, Δ the unit weight of water in pounds per cubic foot, R the hydraulic radius, and S the longitudinal slope of the stream bed in feet per feet.

(30) "Waters of the State" includes both surface and underground waters within the boundaries of the State subject to its jurisdiction, including that portion of the Atlantic Ocean within the boundaries of the State, the Chesapeake Bay and its tributaries, and all ponds, lakes, rivers, streams, public ditches, tax ditches, and public drainage systems within the State, other than those designed and used to collect, convey, or dispose of sanitary sewage. The floodplain of free-flowing waters determined by the Department on the basis of the 100-year flood frequency is included as waters of the State.

26.17.04.03

.03 Requirements for a Permit.

A. Except as set forth in D and E of this regulation, a person who proposes to construct, reconstruct, repair, or alter a dam, reservoir, or waterway obstruction, or change in any manner the course, current, or cross section of a stream or body of water within the State except tidal waters, including any changes to the 100-year frequency floodplain of free-flowing streams shall obtain a permit from the Administration before commencing any work.

B. If the construction, reconstruction, repair, or alteration of the proposed works is for the purpose of obtaining a new or increased supply of water for any use for which an appropriation permit is required by law or regulation, the applicant shall also apply to the Administration for this permit. The Administration shall establish the order in which the applications may be considered or may require the applications to be submitted and considered concurrently.

C. The latest flood insurance studies prepared by the Federal Emergency Management Agency shall serve to delineate, at a minimum, the extent of the 100-year floodplain of free-flowing waters. The applicant shall furnish the Administration with hydrologic and hydraulic computations to establish the elevation of the 100-year frequency flood event.

D. Exemptions. The following activities are exempted from the requirements for a permit from the Administration under this chapter:

(1) Filling, dredging, or construction of any work in the tidal portions of the waters of the State; filling, dredging, or construction, in these areas, may require a wetlands license or permit under the provisions of Environment Article, Title 16, Annotated Code of Maryland;

(2) Agricultural drainage systems, for the purpose of lowering the level of water in the soil, with a total drainage area of 2,500 acres or less except that a drainage system financed or managed by a public drainage association is exempt only if a plan for construction, operation, and maintenance has been approved by the Secretary of Agriculture under the Agriculture Article, §8-603, Annotated Code of Maryland;

(3) The removal or demolition of residential structures;

(4) A small pond which meets the requirements of Regulation .05G of this chapter.

26.17.04.04

.04 Permit Applications — General Requirements.

A. An application to the Administration shall include all studies, surveys, calculations, tests, and data necessary for determining the adequacy of the project design. The degree of investigation needed for a specific project is a matter of the Administration's judgment based upon the magnitude and impact of the project and the complexity of the site. The applicant shall demonstrate to the Administration that sufficient investigations have been made and that adequate allowances have been applied to the design. The Administration may waive a requirement not pertinent to the decision. In addition, the Administration may require the submission of additional information or data it finds appropriate.

B. An application to the Administration shall include evidence of the benefits to be derived from the project. This evidence shall be stated in monetary terms or, when more appropriate, other quantitative or qualitative terms.

C. A proposed project shall be consistent and compatible with overall basin, flood management, or watershed development plans, if any, prepared, adopted, or approved by the State or a local jurisdiction.

D. An environmental study of the significant effects of the project may be required of the applicant by the Administration. The Administration may require that the study include an inventory of the existing vegetation, fish, wildlife, scenic, recreational, and historic values located within the project area. The study shall also include a description of mitigation measures proposed to minimize the potential adverse effects of the project.

E. An application to the Administration shall include provisions assuring the maintenance and operation of the proposed project throughout the project's existence.

F. Unless waived by the Administration, hydrologic calculations shall be based on the ultimate development of the watershed, assuming existing zoning.

G. Information required by these regulations shall be submitted to the Administration, in a manner and form acceptable to the Administration, before the Administration will take final action on the application.

H. The Administration shall furnish application forms for permits upon request. The owner of the proposed project or his duly authorized representative shall complete and sign the application form.

I. When required in writing by the Administration, the applicant shall engage a qualified professional engineer, practicing in accordance with the laws of Maryland, to certify that the design meets all of the requirements of the Administration.

J. The Administration may refuse to process an application until the applicant has certified in writing to the Administration that all local land use requirements, including zoning, special exceptions, variances or conditional uses, necessary for the location and operation of the proposed works have been satisfied. It is the applicant's responsibility to obtain State, federal, or local approvals not addressed in the regulations contained in this chapter. Obtaining a permit under this chapter does not relieve the permittee from obtaining other approvals as may be required.

K. Hydrologic and hydraulic computations shall use methods in the public domain which are verifiable.

L. Unless waived by the Administration, project plans shall include survey and topographic information that is referenced to a bench mark based on the National Geodetic Vertical Datum of 1929 which is incorporated by reference under 41 FR 20202 (1976).

M. Final action on any application will be deferred pending receipt of an approved sediment and erosion control plan from the local soil conservation district, when the local approval is required under COMAR 26.17.01.

N. An applicant shall agree to allow a reasonable inspection of the proposed project site by representatives of the Administration.

26.17.04.06

06 Bridges and Culverts.

A. In addition to the general requirements as described in Regulation .04 of this chapter, the following information shall be submitted with all applications for bridges and culverts unless specifically waived by the Administration:

- (1) Alternate proposals studied.
- (2) Geologic investigations and conclusions based upon geologic maps, surface investigations, seismic or other geophysical studies, or borings.
- (3) Type and source (on-site or off-site) of borrow and fill materials to be used in construction.
- (4) Estimated cost of the project and the length of time required for construction.
- (5) Construction plans and specifications.
- (6) Construction Schedule. The construction schedule shall include the following:
 - (a) The sequence of construction phases, such as channel and structure excavation, structure and embankment construction;
 - (b) Equipment stream crossings and storage areas;
 - (c) Means for diverting stream flow during construction;
 - (d) Means for controlling the dewatering discharges;
 - (e) Means for controlling runoff during the various construction phases.
- (7) Map and measurement of the drainage area upstream of the proposed project.
- (8) General plan of the proposed project, showing location; land ownership; contours of presently existing ground and proposed structures, buildings, roads and drainage structures; and the proposed additionally inundated area associated with the 100-year flood event.
- (9) Design report, which shall at a minimum, include the following:
 - (a) Discharge-frequency curve, which shall include the discharge, in cubic feet per second, associated with the 2-year, 10-year, and 100-year frequency flood events;
 - (b) Stage-discharge curve, which shall include the water surface elevation, in feet above mean sea level, associated with the 2-year, 10-year, and 100-year frequency flood events, for both the presently existing and the proposed conditions;
 - (c) Slope, cross section, and capacity of the presently existing stream channel and average bankful velocity.

B. Designs and Specifications.

- (1) References used by the designer shall be cited in the application submitted to the Administration, especially where unusual features are incorporated in the design.
- (2) Specifications shall be written to assure that design criteria, with regard to the quality of the materials and methods of construction, will be met or exceeded.

(3) The length of culverts shall be limited to a maximum of 150 feet unless it can be demonstrated through an environmental study that any adverse impacts will be adequately mitigated.

(4) The proposed project shall be designed to safely withstand the hydrostatic and hydrodynamic forces associated with at least the 100-year frequency flood event throughout the project area.

(5) Adequate protection shall be provided in the design of all bridge piers, abutments, and culvert entrances and outlets to prevent damage due to scour. Protective measures may not prevent the passage of fish.

(6) Culverts shall have at least one cell placed at least 1 foot below the invert of the stream. In the case of bedrock foundations, culverts shall be designed without a concrete invert unless measures are incorporated into the design to ensure that fish habitat or migration patterns are not adversely affected.

(7) All bridges shall completely span stream channels which have a width from top-of-bank to top-of-bank of 80 feet or less, as measured along the centerline of the proposed roadway.

(8) The outlet velocity of culverts which is associated with the dominant discharge may not exceed the existing stream channel velocity associated with the dominant discharge. A higher than existing stream channel velocity may be allowed at a culvert outlet when or if measures are incorporated into the design to prevent increases in stream channel erosion.

(9) The maximum allowable Froude number, associated with the 100-year frequency flood event as calculated through the bridge opening or at the outlet of the culvert, shall be as follows:

(a) 0.9, if the presently existing Froude number is less than or equal to 0.9; or

(b) The presently existing Froude number, if the presently existing Froude number is greater than 0.9.

(10) The Froude number, Fr, shall be given by:

$$Fr = V \text{ divided by } (gy)^{0.5}$$

when, V = average velocity, in feet per second;

g = acceleration of gravity, in feet per second per second;

y = depth, in feet.

C. Repair of Bridges and Culverts. Before commencing the repair of any bridge or culvert, the owner shall apply for, in writing, and obtain a permit from the Administration for the proposed work. The application for a permit shall give the name and address of the applicant, details of the proposed changes, referenced to the existing structure, and shall be accompanied by the necessary plans and specifications. If the proposed work may best be explained by description, this description shall be included as part of the application along with the proposed time of commencement and completion of construction, as well as other information the Administration may require.

D. Emergency Repairs.

(1) In an emergency, a person may make only the minimum repairs necessary to safeguard life and property against imminent danger without obtaining prior written approval of the Administration for the necessary emergency repairs.

(2) The person initiating repairs shall contact the Administration within 24 hours.

(3) To the extent possible, all work shall conform to the requirements specified by the Administration.

(4) If additional works, maintenance, or repairs not necessary to safeguard life and property against imminent danger are also considered by the owner, the owner shall obtain a permit in accordance with Regulation .02 of this chapter.

(5) Except as provided in §D(1) of this regulation:

(a) The Administration shall be notified before any motorized equipment enters the stream channel; and

(b) Approval from the Administration shall be obtained before any channel modifications are initiated in conjunction with emergency repairs.

26.17.04.07

07 Changes in Stream Channels or Floodplains.

A. In addition to the general requirements, as described in Regulation .04 of this chapter, the following special requirements shall apply to applications for changes in stream channels or floodplains. The following information shall be submitted with the application unless specifically waived by the Administration:

- (1) Alternate proposal studies.
- (2) Geologic investigations and conclusions based upon geologic maps, surface investigations, seismic or other geophysical studies, or borings.
- (3) Type and source of borrow and fill materials to be used in construction.
- (4) Estimated cost of the project and the length of time required for construction.
- (5) Construction plans and specifications.
- (6) Construction Schedule. The construction schedule shall include the following:
 - (a) The sequence of construction excavation, structure, and embankment construction;
 - (b) Equipment stream crossings and storage areas;
 - (c) Means for diverting stream flow during construction;
 - (d) Means for controlling the dewatering discharges;
 - (e) Means for controlling runoff during the various construction phases.
- (7) Map and measurement of the drainage area upstream of the proposed project.
- (8) General plan of proposed project, showing location; land ownership; contours of presently existing ground and proposed fill or excavation; presently existing and proposed structures, buildings, roads, and drainage structures; the proposed additionally inundated area associated with the 100-year flood event; and all cross sections taken.
- (9) Design report, which shall, at a minimum, include the following:
 - (a) Discharge-frequency curve, which shall include the discharge in cubic feet per second, associated with the 2-year, 10-year, and 100-year frequency flood events.
 - (b) Slope, cross section, capacity, and velocity of the presently existing stream channel.
 - (c) Water surface profiles computed using an energy balancing method, showing the invert elevation of the stream bed, water surface elevations in feet above mean sea level, and water velocity, by segment, in feet per second, associated with the 2-year, 10-year, and 100-year frequency flood events, for both the presently existing and proposed conditions, at each cross section. Cross sections shall be taken at appropriate intervals to a point, both downstream and upstream of the proposed project, where the presently existing and proposed water surface profiles coincide.
 - (d) Cross section plots, showing stream and floodplain elevations as well as any proposed modifications and water surface elevations.

B. Design and Specifications.

- (1) References used by the designer shall be cited in the application submitted to the Administration, especially where unusual features are incorporated in the design.
- (2) Specifications shall be written to assure that design criteria, with regard to the quality of the materials and methods of construction, will be met or exceeded.
- (3) Proposed floodplain encroachments may not increase the tractive force by more than 10 percent during the passage of the 2-year and 10-year frequency flood events unless it can be demonstrated that the channel will remain stable.
- (4) Proposed floodplain encroachments may not reduce the natural meander width of the channel as measured from outside bank to outside bank.
- (5) Proposed floodplain encroachments, except for roadways, culverts, and bridges, shall be designed to provide a minimum of 1 foot of freeboard above the elevation of the 100-year frequency flood event. In addition, the elevation of the lowest floor of all new or substantially improved residential, commercial, or industrial structures shall also be at least 1 foot above the elevation of the 100-year frequency flood event.
- (6) Proposed unlined earth channels may not change the tractive force associated with the 2-year and the 10-year frequency flood events, by more than 10 percent, throughout their length unless it can be demonstrated that the stream channel will remain stable.
- (7) Proposed lined channels may not change the tractive force associated with the 2-year and the 10-year frequency flood events, by more than 10 percent, at their downstream terminus unless it can be demonstrated that the stream channel will remain stable.
- (8) An environmental study, which identifies existing natural resources as well as proposed mitigation measures to offset the impacts of the channelization, shall accompany a proposed channel change.

C. Repair. Before beginning the repair of any works permitted pursuant to this regulation, the owner shall apply for, in writing, and obtain a permit from the Administration for the proposed work. The application for a permit shall include the name and address of the applicant, details of the proposed changes, referenced to the existing structure, and shall be accompanied by the necessary plans and specifications. If the proposed work may best be explained by description, this description shall be included as part of the application along with the proposed time of commencement and completion of construction, as well as other information the Administration may require.

D. Emergency Repairs.

- (1) In an emergency, a person:
 - (a) May make the minimum repairs necessary to safeguard life and property against imminent danger without prior written approval of the Administration;
 - (b) Shall notify promptly the Administration of the emergency repairs necessary and the extent of work underway;
- (2) Work shall conform to any requirements specified by the Administration.
- (3) If additional works, maintenance, or repairs not necessary to safeguard life and property against imminent danger are considered by the owner, a permit shall be required in accordance with Regulation .02 of this chapter.
- (4) In all cases, including emergencies described in §D(1)(a) of this regulation:
 - (a) The Administration shall be notified before any motorized equipment enters the channel; and
 - (b) Approval from the Administration shall be secured before any channel modifications are initiated in conjunction with emergency repairs.

26.17.04.07

07 Changes in Stream Channels or Floodplains.

A. In addition to the general requirements, as described in Regulation .04 of this chapter, the following special requirements shall apply to applications for changes in stream channels or floodplains. The following information shall be submitted with the application unless specifically waived by the Administration:

- (1) Alternate proposal studies.
- (2) Geologic investigations and conclusions based upon geologic maps, surface investigations, seismic or other geophysical studies, or borings.
- (3) Type and source of borrow and fill materials to be used in construction.
- (4) Estimated cost of the project and the length of time required for construction.
- (5) Construction plans and specifications.
- (6) Construction Schedule. The construction schedule shall include the following:
 - (a) The sequence of construction excavation, structure, and embankment construction;
 - (b) Equipment stream crossings and storage areas;
 - (c) Means for diverting stream flow during construction;
 - (d) Means for controlling the dewatering discharges;
 - (e) Means for controlling runoff during the various construction phases.
- (7) Map and measurement of the drainage area upstream of the proposed project.
- (8) General plan of proposed project, showing location; land ownership; contours of presently existing ground and proposed fill or excavation; presently existing and proposed structures, buildings, roads, and drainage structures; the proposed additionally inundated area associated with the 100-year flood event; and all cross sections taken.
- (9) Design report, which shall, at a minimum, include the following:
 - (a) Discharge-frequency curve, which shall include the discharge in cubic feet per second, associated with the 2-year, 10-year, and 100-year frequency flood events.
 - (b) Slope, cross section, capacity, and velocity of the presently existing stream channel.
 - (c) Water surface profiles computed using an energy balancing method, showing the invert elevation of the stream bed, water surface elevations in feet above mean sea level, and water velocity, by segment, in feet per second, associated with the 2-year, 10-year, and 100-year frequency flood events, for both the presently existing and proposed conditions, at each cross section. Cross sections shall be taken at appropriate intervals to a point, both downstream and upstream of the proposed project, where the presently existing and proposed water surface profiles coincide.
 - (d) Cross section plots, showing stream and floodplain elevations as well as any proposed modifications and water surface elevations.

B. Design and Specifications.

(1) References used by the designer shall be cited in the application submitted to the Administration, especially where unusual features are incorporated in the design.

(2) Specifications shall be written to assure that design criteria, with regard to the quality of the materials and methods of construction, will be met or exceeded.

(3) Proposed floodplain encroachments may not increase the tractive force by more than 10 percent during the passage of the 2-year and 10-year frequency flood events unless it can be demonstrated that the channel will remain stable.

(4) Proposed floodplain encroachments may not reduce the natural meander width of the channel as measured from outside bank to outside bank.

(5) Proposed floodplain encroachments, except for roadways, culverts, and bridges, shall be designed to provide a minimum of 1 foot of freeboard above the elevation of the 100-year frequency flood event. In addition, the elevation of the lowest floor of all new or substantially improved residential, commercial, or industrial structures shall also be at least 1 foot above the elevation of the 100-year frequency flood event.

(6) Proposed unlined earth channels may not change the tractive force associated with the 2-year and the 10-year frequency flood events, by more than 10 percent, throughout their length unless it can be demonstrated that the stream channel will remain stable.

(7) Proposed lined channels may not change the tractive force associated with the 2-year and the 10-year frequency flood events, by more than 10 percent, at their downstream terminus unless it can be demonstrated that the stream channel will remain stable.

(8) An environmental study, which identifies existing natural resources as well as proposed mitigation measures to offset the impacts of the channelization, shall accompany a proposed channel change.

C. Repair. Before beginning the repair of any works permitted pursuant to this regulation, the owner shall apply for, in writing, and obtain a permit from the Administration for the proposed work. The application for a permit shall include the name and address of the applicant, details of the proposed changes, referenced to the existing structure, and shall be accompanied by the necessary plans and specifications. If the proposed work may best be explained by description, this description shall be included as part of the application along with the proposed time of commencement and completion of construction, as well as other information the Administration may require.

D. Emergency Repairs.

(1) In an emergency, a person:

(a) May make the minimum repairs necessary to safeguard life and property against imminent danger without prior written approval of the Administration;

(b) Shall notify promptly the Administration of the emergency repairs necessary and the extent of work underway;

(2) Work shall conform to any requirements specified by the Administration.

(3) If additional works, maintenance, or repairs not necessary to safeguard life and property against imminent danger are considered by the owner, a permit shall be required in accordance with Regulation .02 of this chapter.

(4) In all cases, including emergencies described in §D(1)(a) of this regulation:

(a) The Administration shall be notified before any motorized equipment enters the channel; and

(b) Approval from the Administration shall be secured before any channel modifications are initiated in conjunction with emergency repairs.

26.17.04.08

08 Temporary Construction in a Stream Channel or Floodplain.

A. In addition to the general requirements as described in Regulation .04 of this chapter, the requirements in §§B—E of this regulation apply to applications for temporary changes in stream channels or floodplains unless specifically waived by the Administration.

B. Temporary Sediment-Trapping Devices. The following special requirements shall apply to applications for temporary sediment-trapping devices within the waters of the State during construction operations:

(1) Temporary sediment-trapping devices shall conform to the technical requirements in the "1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control" which is incorporated by reference under COMAR 26.17.01.11;

(2) Earth embankments greater than 3 feet high may not be permitted;

(3) Temporary sediment control trapping devices may be constructed within the 100-year frequency floodplain if all of the following conditions are met:

(a) Fill material may not be placed any closer to the stream than 50 percent of the distance between the 100-year frequency floodplain limit and the top of the stream bank closest to the trapping device;

(b) Fill material may not be placed within 25 feet of the top of the stream bank;

(c) Upon completion of the control device, all exposed soil areas shall be stabilized within 7 days following initial disturbance;

(d) Care shall be taken during construction, maintenance, and removal of temporary sediment control devices to prevent unnecessary removal or damage to trees and other natural features;

(e) Sediment removed during maintenance of the trapping device shall be placed outside the limits of the 100-year floodplain and stabilized within 14 days;

(f) Upon stabilization of all areas that drain to the control device, the device shall be removed and all remaining disturbed areas returned to their original contour and permanently stabilized within 14 days;

(4) The applicant shall submit the following information to the Administration:

(a) A vicinity sketch indicating north arrow and scale and in such detail as to easily locate the proposed project;

(b) A plan or plans at an appropriate scale indicating at least:

(i) The existing topography and the proposed grading and earth disturbance to take place including indications of the volume of material and surface area involved, and any spoil or borrow involved,

(ii) Storm drainage provisions, including data on the velocities of flow at outfalls and site conditions at points of discharge,

(iii) Erosion and sediment control provisions including design details and schedule of application,

(iv) Time schedule of construction indicating the anticipated start and completion of the project, and staging of the grading, storm drainage, utilities, and erosion and sediment control;

(c) A general description of the predominant soil types on the site, as described by the appropriate soil survey information available through the soil conservation district from the U.S. Soil Conservation Service.

C. Temporary Access Crossings. The following special requirements shall apply to applications for temporary access crossings within the waters of the State:

(1) Temporary access crossings shall conform to the technical requirements in the "1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control" which is incorporated by reference under COMAR 26.17.01.11;

(2) Earth embankments for an access road greater than 3 feet high may not be permitted;

(3) The applicant shall submit the following information to the Administration:

(a) General plan of the proposed project showing:

(i) Location;

(ii) Land ownership;

(iii) Cross section of presently existing stream channel;

(b) Construction plans and specifications;

(c) Type and source of materials to be used in construction;

(d) Erosion and sediment control provisions including design details and schedule of application.

D. Temporary Utility Crossings. The following special requirements shall apply to applications for utility crossings within the waters of the State that cross streams or floodplains and are either buried below the presently existing grade or are suspended above the 100-year frequency flood elevation, so that they do not cause any permanent damage to the course, current, or cross section of a stream or body of water, including the floodplain:

(1) Temporary utility crossings shall conform to the technical requirements in the "1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control" which is incorporated by reference under COMAR 26.17.01.11;

(2) For stream crossings, the pipe or cable and any protective encasement shall either be buried a minimum of 3 feet below the stream bed, unless the Administration believes that a rigid bottomed stream bed exists, or be elevated a minimum of 1 foot above the 100-year frequency flood elevation;

(3) Buried utilities and their appurtenances, except at stream crossings, shall be located such that a 25-foot wide buffer zone is maintained between the limits of construction and the nearest top of the stream bank.

(4) The following information shall be submitted with the application:

(a) Construction plans and specifications;

(b) Type and source of materials to be used in construction;

(c) Erosion and sediment control provisions including design details and schedule of application;

(d) General plan of the proposed project showing:

(i) Location;

(ii) Land ownership;

(iii) Cross section of presently existing stream channel;

(iv) Existing topography.

E. Storm Drain Outfalls. The following requirements apply to applications for temporary construction in the floodplain for outfall pipes, flumes, and ditches, providing there are no permanent alterations to the course, current, or cross section of a stream or body of water:

(1) Construction shall conform to the technical requirements of the "1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control" which is incorporated by reference under COMAR 26.17.01.11;

(2) Permanent floodplain obstructions to flow may not be permitted;

(3) The following information shall be submitted with the application:

(a) General plan of the proposed project showing:

(i) Location;

(ii) Land ownership;

(iii) Cross section of presently existing stream channel and proposed drainage outfall;

(b) Construction plans and specifications;

(c) Type and source of materials to be used in construction;

(d) Erosion and sediment control provisions including design details and scheduled application;

(e) Time schedule of construction indicating the anticipated start and completion of the project, and staging of the grading, storm drainage, utilities, and erosion and sediment control.

26.17.04.10

.10 General Waterway Construction Permit.

A. A person shall be permitted by this regulation to make changes in the course, current, or cross section of the 100-year frequency floodplain if the conditions specified in this regulation for these activities are met and the project is not located in the stream channel or floodplain of a wild and scenic river as defined in Natural Resources Article, §8-402, Annotated Code of Maryland. The changes include the following:

(1) Clearing and grading activities in the 100-year frequency floodplain when:

(a) Less than 5,000 feet of land area and less than 100 cubic yards of earth are disturbed,

(b) Habitable structures are not constructed, and

(c) Permanent obstructions are not created that would affect the hydraulic characteristics of the floodplain;

(2) Temporary construction on the waters of the State which meet the special requirements of Regulation .08B, C, D, and E of this chapter; or

(3) Minor maintenance and repair of existing structures that are located in the waters of the State.

B. In addition to the conditions imposed on the categories of construction activities set forth in §A of this regulation, an owner of a project site subject to the general waterway construction permit shall do all of the following:

(1) Provide the Administration with 30 days advance written notice of the planned construction activity including any required plans, specifications, and the construction schedule, and provide anticipated dates of the beginning of construction activity;

(2) Allow reasonable inspection of the site by representatives of the Administration;

(3) Maintain construction plans and specifications at the construction site for reasonable inspection by the Administration during construction;

(4) When applicable, obtain an approved sediment and erosion control plan from the local soil conservation district before construction;

(5) Provide for specifically designed measures, which shall be included in the construction plans, to minimize sediment pollutants from entering the waters of the State for those construction activities within a stream channel that are not subject to the requirements of COMAR 26.17.01.05, which requires an approved erosion and sediment control plan for certain activities; and

(6) Provide the Administration with written notice within 30 days after completion of the project.

26.17.04.11

11 Criteria for Evaluating Applications.

A. The criteria described herein are presented to assist persons in preparing their permit applications and to provide a consistent basis for the Administration's decisions. The Administration shall follow the criteria, unless the Administration determines that the overall public interest requires a variance. In that case, written documentation justifying the variance shall have been submitted by the applicant and will be approved in writing by the Administration, for inclusion in the record. As the basis for approval, denial, or modification of a permit, the Administration shall weigh all public advantages and disadvantages. The administration shall grant the permit, if approval of the project is in the best public interest and the plans for the project provide for the greatest feasible utilization of the waters of the State, adequately preserve the public safety, and promote the general public welfare. The criteria described in § B of this regulation shall apply to all applications. Depending on the purpose of the proposed project, additional specific criteria, as described in subsequent sections, shall also apply.

B. General Criteria.

(1) In all cases where the proposed project is on a stream in the State Scenic and Wild Rivers Program and, in the case of other streams, when necessary, the Administration shall advise the applicant of the outstanding scenic, fish, wildlife, and other recreation values to the citizens of the State. In these cases, the applicant shall consider alternatives less harmful to the stream's value as a scenic and wild resource. Construction of an impoundment upon a scenic or wild river is contrary to the public interest, if that project floods an area of unusual beauty, blocks the access to the public of a view previously enjoyed, or alters the stream's wild qualities.

(2) A dam or other structure impeding the natural flow of a scenic and wild river may not be constructed, operated, or maintained in a scenic and wild river, and channelization may not be undertaken unless specifically approved. The Secretary's approval authority under Natural Article, §8-406, is delegated to the Director of the Water Resources Administration or the Director's designee. The Director or the designee shall consider the comments received from the Department of Natural Resources as well as the standards established in §B(1) of this regulation to protect the river's scenic and wild qualities.

(3) In the evaluation of permit applications, the Administration shall consider the blockage of free passage of fish to be contrary to the public interest, except as provided in Natural Resources Article, §4-502(d), Annotated Code of Maryland.

(4) Category II, III, or IV dams may not be built or allowed to impound water in any location where a failure is likely to result in the loss of human life or severe damage to streets, major roads, public utilities, or other high value property.

(5) Proposed projects that eliminate or significantly and adversely affect aquatic or terrestrial habitat and their related flora and fauna are not in the public interest. At a minimum, all in-stream construction shall be prohibited from October through April, inclusive, for natural trout waters and from March through May, inclusive, for recreational trout waters. In addition, the construction of proposed projects, which may adversely affect anadromous fish spawning areas, shall be prohibited from March 15 through June 15, inclusive. For projects when there is no reasonable alternative to the adverse effects on nontidal wetlands or other aquatic or terrestrial habitat, the applicant shall be required to provide measures to mitigate, replace, or minimize the loss of habitat.

(6) Proposed projects which increase the risk of flooding to other property owners are prohibited, unless that area subject to additional risk of flooding is purchased, placed in designated flood easement, or addressed by other means acceptable to the Administration.

(7) The construction or substantial improvement of any residential, commercial, or industrial structure in the 100-year frequency floodplain and below the water surface elevation of the 100-year frequency flood may not be permitted. Minor maintenance and repair may be permitted. In addition, the modifications of existing structures for flood-proofing purposes may be permitted. Flood-proofing modifications shall be designed and constructed in accordance with specifications approved by the Administration.

C. Flood Control Criteria.

(1) Multiple purpose use shall be preferred over single purpose use.

- (2) The proposed project shall achieve the purposes intended.
- (3) At a minimum, the proposed project shall provide for a 50 percent reduction of the average annual flood damages.
- (4) Flood Control Techniques.

(a) Flood control techniques that shall be considered include:

- (i) Relocation;
- (ii) Evaluation;
- (iii) Flood-proofing;
- (iv) Flood control dams;
- (v) Levees and dikes;
- (vi) Stormwater detention or retention structures;
- (vii) Flood warning systems;
- (viii) Public acquisition;
- (ix) Storm drain and stream maintenance;
- (x) Tax adjustment policies;
- (xi) Subdivision, zoning, and related ordinances; and
- (xii) Other practical methods.

(b) Channelization shall be the least favored flood control technique.

(5) The applicant shall provide a written analysis and financial statement detailing the benefits and costs of the project and identifying the project's beneficiaries. This information shall be made a part of the public record.

D. Agricultural Drainage Criteria.

(1) The Administration shall permit agricultural drainage only to the extent that it provides substantial agricultural benefits.

(2) The design of the proposed channel shall prevent direct over bank flow into the ditch. This may be accomplished with reverse slopes, vegetated buffers, and controlled inlets.

(3) The downstream end of the proposed system shall be truncated as far upstream as possible.

(4) Approved soil conservation district conservation plans shall be properly implemented and maintained.

(5) Measures shall be incorporated in the project to minimize adverse environmental impacts.

E. Variances. If the Administration determines, from the information submitted in conjunction with the application, that the overall public interest requires a variance, the Administration may grant relief from the strict application of the criteria, upon request. All requests for variances shall be considered by the Administration in accordance with the following:

(1) A variance may not be granted for any construction, development, use, or activity that would cause any increase in the 100-year frequency flood elevation unless the Administration finds the variance to be in the best public interest;

(2) If granted, a variance shall involve only the least modification necessary to protect the public interest;

(3) If a variance is granted, the Administration shall notify the applicant in writing that:

(a) The granting of the variance may result in increased premium rates for flood insurance,

(b) These variances may increase the risks to life and property;

(4) Structures, including those involving variances, shall be designed and constructed so as to have the capability of resisting the hydrostatic and hydrodynamic loads and pressures, effects of buoyancy, and other forces associated with at least the 100-year frequency flood event.

26.17.04.12

.12 Violations of Statutory, Regulatory, or Permit Requirements.

A. Action on Violation. If the Administration determines that there has been a violation of any provision of Environment Article, §§5-501—5-514, Annotated Code of Maryland, of any regulation, or of any permit, it shall cause a written complaint to be served upon the alleged violator. The complaint shall specify the nature of the violation. After, or concurrent with, service of the complaint, the Administration may exercise one of the following options:

(1) Issue an administrative order requiring necessary corrective action to be taken within the time prescribed in its order. Any person named in the order may request in writing a hearing before the Administration not later than 10 days after the date the order is served, in which case a hearing shall be scheduled within 10 days from receipt of the request. A decision shall be rendered within 10 days from the date of the hearing.

(2) Require the alleged violator to file a written report regarding the alleged violation.

(3) Require the alleged violator to appear before the Administration at a time and place the Administration specifies to answer the charge outlined in the complaint.

(4) Require the alleged violator to file a written report regarding the alleged violation and appear before the Administration at a time and place the Administration specifies to answer the charges outlined in the complaint. If the Administration exercises the option provided by §A(2) of this regulation, the alleged violator may request in writing a hearing before the Administration not later than 10 days after the date that notice of the requirement of the written report is served. The following apply:

(a) The appearance of the alleged violator before the Administration under the options provided by §A(3) or (4) of this regulation constitutes an administrative hearing and the party has the right of any party in a contested case provided in State Government Article, §§10-201—10-217, Annotated Code of Maryland.

(b) If the Administration exercises the option provided by §A(2), (3), or (4) of this regulation, it may not issue an order requiring corrective action to be taken as a result of the alleged violation before expiration of the time set for filing any report and holding any hearing required under these paragraphs. After that, the Administration may issue an order requiring necessary corrective action to be taken within the time prescribed in the order. A person is not entitled to a hearing before the Administration as a result of this order.

(c) Notice of a hearing or of a requirement that a written report be filed shall be served on the alleged violator personally or by certified or registered mail to his last known post office address not less than 10 days before the time set for the hearing or filing of a report.

(d) Each order the Administration issues under the provisions of this section shall be served on the person affected personally or by certified or registered mail to his last known post office address. The order shall become effective immediately according to its terms upon service.

B. Administrative Action With Regard to Permit. Upon failure by the owner to comply with the requirements of an administrative order, a permit may be modified or suspended. Modification or suspension of a permit shall be effective without stay upon receipt by the owner of appropriate notice. Upon written request for a hearing by the owner in accordance with the procedure specified in §A of this regulation, a hearing shall be held, but the administrative action may not be stayed pending the hearing.

C. Emergency Action. Under emergency conditions, such as violation or imminent violation of any applicable State requirement, a permit may be modified or suspended. Modification or suspension of a permit shall be effective without stay upon receipt by the permittee of appropriate notice. Upon written request by the permittee for a hearing before the Administration, in accordance with the procedure specified in §A of this regulation, a hearing will be held, but the administrative action may not be stayed pending the hearing.

D. Permit Review. The Administration may review any permit which it has issued in order to determine whether the:

- (1) Conditions of the permit have been satisfied; or
- (2) Permit should properly be modified, suspended, or revoked.

E. Permit Modification. If it is found that amendments and changes are necessary to insure safety or for other valid reasons, the Administration may order or permit the necessary revision of plans and specifications. However, if conditions are revealed which will not permit safe construction, the permit shall be revoked.

F. Permit Revocation.

(1) A permit may be revoked after notice to the permittee and opportunity for a hearing if the Administration determines that any of the following have occurred:

(a) The permittee has failed to comply with the requirements of an administrative action pursuant to §A, D, or E of this regulation;

(b) False or inaccurate information was contained in the application for the permit;

(c) Conditions or requirements of the permit have been or are about to be violated;

(d) Substantial deviation from plans, specifications, or requirements has occurred;

(e) The permittee has failed to allow an authorized representative of the Administration upon presentation of proper credentials to:

(i) Enter at any reasonable time upon permittee's premises where the structure is located, pertinent operations are conducted, or records are required to be kept under terms and conditions of the permit;

(ii) Have access to and copy any records required to be kept under terms and conditions of the permit;

(iii) Inspect facilities to insure compliance with the conditions of the permit;

(iv) Inspect any monitoring equipment or method required in the permit;

(f) Change in conditions exists requiring temporary or permanent modification or elimination of the permitted operation.

(2) The permittee has the right to be heard regarding the revocation of the permit upon a request in writing not later than 10 days after the date on which the revocation notice is served. The Administration shall schedule a hearing within 10 days from receipt of the request and give a decision within 30 days from the date of the hearing.

G. Statutory Remedies. The provisions of the regulation may not be construed to limit or otherwise affect the authority of the Administration to proceed against violators pursuant to Environment Article, §§5-513 and 5-514, Annotated Code of Maryland.

26.17.04.13

.13 Public Hearings.

A. Except as provided otherwise in this section, the Administration shall provide notice of an opportunity for a public hearing, within 1 month after filing an application for a permit to:

- (1) Construct or reconstruct a reservoir, dam, or other waterway obstruction;
- (2) Construct a waterway; or
- (3) Dredge, fill, bulkhead, or change the shoreline as required by this chapter.

B. The provisions of this regulation do not apply to those projects that meet the criteria established for a general waterway construction permit as specified in Regulation .10 of this chapter.

C. The Administration may waive holding a public hearing on any application, if:

- (1) There is an emergency to save life or property;
- (2) There is a request to make minor repairs or routine maintenance;
- (3) Roads, bridges, or culverts meet minimum design standards set forth herein and the construction does not adversely affect known water resources projects or have potentially significant adverse environmental effects;
- (4) Dams are classed by the Administration in Category IV;
- (5) Plans of other projects that conform to water resources development plans accepted and adopted by the Administration were subject to public hearing and the Administration's review finds no changed conditions in them since the last public review and comment to justify another hearing;
- (6) Temporary construction meeting the minimum design standards set forth herein;
- (7) There is a request to make minor changes or modifications to existing permits.

D. The notice for and conduct of the public hearing shall be in conformance with COMAR 26.01.07. The notice for the public hearing shall be made upon the acceptance of a complete application, as follows:

- (1) The Administration shall prepare and insert the notice in the Maryland Register and required newspapers. The cost of this notice shall be borne by the applicant.
- (2) The applicant shall, by the date of publication of the above notice in the Maryland Register, notify all of the following of the application and hearing and certify same to the Administration before or at the hearing:
 - (a) All adjacent property owners;
 - (b) The mayor or chief executive official of each affected municipality;
 - (c) The legislative body and chief executive official of each affected county;
 - (d) The soil conservation districts affected; and
 - (e) Other persons, as requested in writing by the Administration.

26.17.04.9999

Administrative History

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