

**Appendix D – Aquatic Resource Alteration Permit General Permit
for Construction and Removal of Minor Road Crossings**

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General Permit for Construction and Removal of Minor Road Crossings

Effective Date: July 1, 2005
 Expiration Date: June 30, 2010

This general permit authorizes the construction and/or removal of minor road crossings. A "minor road crossing" is defined in Rule 1200-4-7-.03 as a bridged or culverted roadway fill across a stream or river which results in the alteration of 200 linear feet or less of stream bed (on a single stream) or shoreline. This permit also authorizes other transportation crossings of the same size restriction such as linear crossings of greenway trails.

Failure to comply with the terms and conditions of this permit is a violation of the *Tennessee Water Quality Control Act of 1977* and is subject to penalty in accordance with T.C.A. §69-3-115.

Exclusions

This general permit shall not be used to authorize activities in the following circumstances:

- 1) where the total length of road crossing is more than 200 feet on a single stream, for the entire project, including transitions;
- 2) where a portion of the proposed activity is located in a component of the National Wild and Scenic River System, a State Scenic River, waters designated as Outstanding National Resource Waters;
- 3) where the proposed activity may adversely affect wetlands;
- 4) where a portion of the proposed activity is located in any waterway which is identified by the department as having contaminated sediments, and where the activity will likely mobilize the contaminated sediments;
- 5) when the proposed activity will adversely affect a species formally listed on either state or federal lists of threatened or endangered species or their critical habitat;
- 6) where the design of the crossing is anticipated to significantly alter the hydraulics of the stream, such as under-sizing or over widening the channel;
- 7) when the department determines that the proposed activities, either individually or cumulatively, may result in degradation to waters of the state; or
- 8) when an individual permit is otherwise required.

Projects not qualifying for authorization under this general permit, may be authorized by an individual permit, provided that all requirements of the *Tennessee Water Quality Control Act of 1977* are met.

Notification

Applicants proposing to construct or remove a road crossing shall notify the division by submission of an original, signed application (form CN-1091) along with the following minimum information:

- (a) a cover letter explaining the scope of the project;
- (b) a USGS topographical map showing the exact location of the proposed project; and
- (c) a single copy of construction plans and drawings which include all dimensions and specifications for the proposed work, as well as pollution control methods and/or structures.

Where the total width of the fill or disturbance to the stream channel for construction for the road crossing is less than 25 feet, activities may commence without written authorization from the division. For crossings greater than 25 feet, work shall not commence until the applicant has received written authorization from the division that the proposed activities may proceed under this general permit or that an individual permit has been issued.

All activities covered under this general permit shall comply with all terms and conditions contained hereinafter.

Terms and Conditions

- 1) The work shall be accomplished in conformance with the accepted plans, specifications, data and other information submitted in support of the above mentioned application and the limitations, requirements, and conditions set forth herein.
- 2) Applicant is responsible for obtaining the necessary authorization pursuant to applicable provisions of §10 of *The Rivers and Harbors Act of 1899*; §404 of *The Clean Water Act* and §26a of *The Tennessee Valley Authority Act*, as well as any other federal, state or local laws.

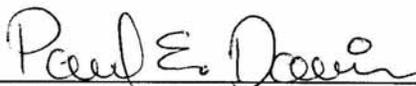
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- 3) Applicant is responsible for obtaining coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Construction Activities for construction sites involving clearing, grading or excavation that result in an area of disturbance of one or more acres, and activities that result in the disturbance of less than one acre if it is part of a larger common plan of development or sale.
- 4) Stream alterations authorized by this general permit must be a part of a single and complete project. This general permit shall not be used in incremental means to combine with other projects to alter larger areas of the stream.
- 5) This permit does not authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, cul-de-sacs and turn arounds.
- 6) Where practicable, the bottom of culverts should be constructed below the stream bed level, in a manner that allows natural substrate to reestablish.
- 7) The activity may not be conducted in a manner that would permanently disrupt the movement of fish and aquatic life.
- 8) Applicant is responsible for complying with all applicable floodplain regulations. It is the responsibility of the applicant to contact local government officials to determine what the regulations are at the specific location of the proposed project.
- 9) The width of the fill associated with the crossing shall be limited to the minimum necessary for the actual crossing.
- 10) Only clean rock used for the road crossing may be placed directly in the stream. Clean rock can be of various type and size, depending on the application. Clean rock shall not contain fines, soils or other wastes or contaminants.
- 11) The crossing shall be culverted, bridged or otherwise designed to prevent the impoundment of normal or base flows. Base flow is the usual or normal flow of the stream that is supplied primarily by groundwater from springs and seeps, but not affected by rapid runoff during and after rainfall.
- 12) Checkdams shall be utilized where runoff is concentrated. Clean rock, log, sandbag or straw bale checkdams shall be properly constructed to detain runoff and trap sediment. Checkdams or other erosion control devices are not to be constructed in stream. Clean rock can be of various type and size, depending on the application. Clean rock shall not contain fines, soils or other wastes or contaminants.
- 13) Stream beds shall not be used as transportation routes for construction equipment. Temporary stream crossings shall be limited to one point in the construction area and erosion control measures shall be utilized where stream banks are disturbed. Stream crossings should be constructed of clean rock and stream flow should be conveyed in appropriately sized pipe. The crossing shall be constructed so that stream flow is not obstructed. Following construction, all materials used for the temporary crossing shall be removed and disturbed stream banks shall be restored and stabilized if needed.
- 14) Removal of road crossings shall be done in the dry to the maximum extent practicable.
- 15) Where a crossing is removed, the channel shall be returned to stable conditions, which replicates the characteristics (dimensions, shape, substrate, etc.) of the upstream and downstream conditions.
- 16) Upon removal of a crossing, stream banks shall be stabilized. Materials used in bank stabilization shall include clean rock, riprap, anchored trees or other non-erodible materials found in the natural environment.
- 17) Materials used in road crossing projects shall be free of contaminants, including toxic pollutants, hazardous substances, waste metal, construction debris and other wastes as defined by T.C.A. 69-3-103(18).
- 18) The excavation and fill activities associated with the road crossing shall be kept to a minimum and shall be separated from flowing waters except in instances involving only the placement of a culvert and clean rock. The crossing shall be constructed in the dry to the maximum extent practicable, by diverting flow utilizing cofferdams, berms, temporary channels or pipes. Temporary diversion channels shall be protected by non-erodible material and lined to the expected high water level.
- 19) Excavated materials, removed vegetation, construction debris, and other wastes shall be removed to an upland location and properly stabilized or disposed of in such a manner as to prevent reentry into the waterway.
- 20) Material may not be placed in a location or manner so as to impair surface water flow into or out of any wetland area.

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- 21) Sediment shall be prevented from entering waters of the state. Erosion and sediment controls shall be designed according to the size and slope of disturbed or drainage areas to detain runoff and trap sediment and shall be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices.
- 22) Erosion and sediment control measures shall be in place and functional before earth moving operations begin, and shall be constructed and maintained throughout the construction period. Temporary measures may be removed at the beginning of the work day, but shall be replaced at the end of the work day.
- 23) Sediment should be removed from sediment traps, silt fences, sedimentation ponds, and other sediment controls as necessary, and shall be removed when design capacity has been reduced by 50%. Discharges from sediment basins and traps shall be through a pipe or lined or well-grassed channel so that the discharge does not cause erosion.
- 24) Litter, construction debris, and construction chemicals exposed to storm water shall be picked up prior to anticipated storm events (e.g. forecasted by local weather reports), or otherwise prevented from becoming a pollutant source for storm water discharges (e.g., screening outfalls, daily pick-up, etc.). After use, silt fences should be removed or otherwise prevented from becoming a pollutant source for storm water discharges.
- 25) Clearing, grubbing and other disturbance to the riparian vegetation shall be kept at the minimum necessary for slope construction and equipment operations. Unnecessary riparian vegetation removal, including trees, is prohibited.
- 26) Pre-construction vegetative ground cover shall not be destroyed, removed or disturbed more than 10 calendar days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.
- 27) Stabilization measures shall be initiated within seven days after the construction activity has temporarily or permanently ceased.
- 28) Temporary or permanent soil stabilization shall be accomplished within 15 days after final grading or other earth work. Permanent stabilization with perennial vegetation (using native herbaceous and woody plants where practicable) or other permanently stable, non-eroding surface shall replace any temporary measures as soon as practicable.
- 29) Muddy water to be pumped from excavation and work areas shall be held in settling basins or filtered prior to its discharge into surface waters. Settling basins shall not be located closer than 20 feet from the top bank of the stream and water shall be discharged through a pipe, well grassed or lined channel or other equivalent means so that the discharge does not cause erosion and sedimentation.
- 30) Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the state. All spills shall be reported to the appropriate emergency management agency and to the division. In the event of a spill, measures shall be taken immediately to prevent pollution of waters of the state, including groundwater.
- 31) This general permit does not authorize impacts to cultural, historical or archaeological features or sites.
- 32) Where authorization is required, the division will establish an expiration date for coverage under this general permit that is specific to the authorization and separate from the general permit expiration date.

APPROVED:



Paul E. Davis, Director, Water Pollution Control

DATE: 6-30-05

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