Tennessee Department of Environment and Conservation
General Aquatic Resource Alteration Permit for
Utility Line Crossings

Effective Date: April 7, 2015
Expiration Date: April 6, 2020

Activities Covered by this Permit

This general permit authorizes the construction, maintenance, repair, rehabilitation or replacement of utility line crossings of streams and wetlands, including subsurface crossings by directional drill or bore. The cumulative number of crossings that may be authorized under this general permit is dependent on the trenching technique, and line alignment in relation to water resources. For example, a greater number of crossing points may be authorized for utility line types that typically involve directional drilling and do not follow surface topography, such as fiber optic, gas transmission, and electric lines, than for gravity sewer lines utilizing traditional blasting or hoe-ramming trenching techniques.

In addition, certain activities may be performed without submittal of an application or written authorization from the division prior to the commencement of work, provided the work is performed in accordance with the applicable terms and conditions of this general permit:

a) Utility line activities employing non-invasive technologies such as pipe bursting, or slip-lining.
b) Up to 3 crossings (boreholes) utilizing horizontal directional drilling, provided no Federal or State-listed deemed in need of management, threatened, or endangered aquatic species are located within one-mile of the project location, and all special conditions, including subparts of condition #4 are met.
c) Utility lines suspended from a culvert, bridge, or similar structure.

Certain activities due to size, location or potential water quality impacts are not covered under this general permit, as described in both the Special and General Conditions sections. Activities not qualifying for authorization under this general permit may be authorized by a standard (individual) permit provided that all requirements of the *Tennessee Water Quality Control Act of 1977* (the *Act*) are met.

Special Conditions

1. No blasting will be permitted in the excavation of trenches that parallel or lie within 50 feet of a stream or wetland, including all stream crossings.

2. In the case of proposed utility lines that follow the stream gradient or otherwise parallel the stream channel, the number of crossings shall be minimized to the maximum extent practicable

3. Flowable fill trench plugs will be placed throughout any trench running parallel within 50 feet of a stream channel, spaced at a maximum of 200 linear feet apart, or halfway between stream crossings, if less than 400 feet. Trench plugs will be at least ten feet in length, and extend to approximately 6 inches below normal surface elevation

4. Crossings that utilize horizontal directional drilling are authorized, provided that:

    a. Entry and exit locations are at least 50 feet from the stream bank or wetland margin.

    b. The depth of bore below the streambed is sufficient to reasonably prevent release of drilling fluid, based on the parent material.

c. A site-specific contingency and containment plan for inadvertent release of drilling fluid must be established prior to commencement of work. This plan must include notification to the division upon release to surface waters.

5. For open trenching techniques, jack and bore, and auger boring, up to 5 crossings may be authorized. For gravity sewer lines, groundwater loss will be prevented by backfilling all open trench stream crossings with flowable fill or concrete between manholes on either side of the stream. Manholes shall not be located in wetlands.

6. For gravity sewer line installations, as-builts or record drawings of the line installation will be submitted to the division 45 days after completion of the project.

7. The alignment of new utility line crossings shall intersect the stream channel as close to 90 degrees or as perpendicular as possible. Alignment shall be no less than 45 degrees angle from the centerline of the stream.

8. New utility line crossings shall be located such as to avoid permanent alteration or damage to the integrity of the stream channel or wetland. Large trees, steep banks, rock outcroppings etc., should be avoided.

9. The crossing shall be designed to prevent the impoundment or loss 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. In the case of streams with bedrock streambeds, special provisions shall be made to prevent the loss of stream flow due to fracturing of the bedrock.

10. The excavation and fill activities associated with the utility line crossing of non-navigable streams shall be kept to a minimum and shall be separated from flowing waters. 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. For navigable streams as defined by §10 of the *Rivers and Harbors Act of 1899*, the excavation and fill activities associated with utility line crossing may be accomplished within the flowing water.

11. Maintenance, repair and rehabilitation of existing utility lines in wetlands are authorized provided that all of the following special provisions are met.

    a. the total amount of excavation or fill within wetlands, including temporary equipment access roads does not exceed 50 cubic yards;

    b. the wetlands alteration is located within the right of way of the existing utility line; and

    c. Temporary impacts to wetlands shall be mitigated by the removal and stockpiling of the first 12 inches of topsoil, prior to construction. Upon completion of construction activities, all temporary wetland impact areas are to be restored to pre-construction contours, and the stockpiled topsoil spread to restore these areas to pre-construction elevation. Other side-cast material shall not be placed within the temporary impact locations. Permanent vegetative stabilization using native species of all disturbed areas in or near the wetland must be initiated within 14 days of project completion (see also *Landscaping with Natives* at tneppc.org). Non-native, non-invasive annuals may be used as cover crops until native species can be established

12. All spoil material from trench excavation, bore pits and other earth disturbing activities shall be deposited in an upland location and stabilized within 7 days in order to prevent erosion into waters of the state.

13. All dewatering activities shall be conducted in such a manner as to prevent the discharge of sediment-laden water into waters of the state.

General Conditions

1. All activities must be accomplished in conformance with the approved plans, specifications, data and other information submitted in support of the ARAP application (form CN-1091) and the limitations, requirements and conditions set forth herein. Failure to comply with the terms and conditions of this permit is a violation of the Tennessee Water Quality Control Act of 1977 (the Act), and is subject to penalty in accordance with T.C.A. §69-3-115.

2. Activities, either individually or cumulatively, that may result in greater than *de minimis* degradation to waters of the state are not covered. This general permit shall not be used incrementally to combine with other activities resulting in a net loss of water resource values.

3. Clearing, grubbing, and other disturbance to riparian vegetation shall be kept at the minimum necessary for slope construction and equipment operations. Unnecessary riparian vegetation removal, including trees, is prohibited. Non-native, non-invasive annuals may be used as cover crops until native species are established. Native riparian vegetation must be reestablished after work is completed. Coverage under this permit does not serve to waive any local riparian buffer protection requirement, and permittees are responsible for obtaining any necessary local approval.

4. This activity may not result in the permanent disruption to the movement of fish or other aquatic life.

5. Activities that adversely affect wetlands, or impair surface water flow into or out of any wetland areas are prohibited.

6. Activities located in a component of the National Wild and Scenic River System or waters designated as Outstanding National Resource Waters are not covered.

7. Activities occurring in known or likely habitat of state or federally listed threatened, endangered, deemed in need of management, or species of special concern may not be authorized without prior coordination with the Tennessee Wildlife Resources Agency (TWRA) and TDEC Division of Natural Areas (DNA) to determine if any special conditions are required to avoid and/or minimize harm to the listed species or their habitat. Adverse effects to federally listed threatened and endangered species are not permitted without prior authorization from the United States Fish and Wildlife Service (USFWS) as required by Section 7 or Section 10 under the Endangered Species Act.

8. Work shall not commence until the permittee has obtained all necessary authorizations 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.

9. Backfill activities must be accomplished in a manner that stabilizes the streambed and banks to prevent erosion. All contours must be returned to pre-project conditions to the extent practicable, and the completed activities may not disrupt or impound stream flow.

10. The use of monofilament-type erosion control netting or blanket is prohibited.

11. This permit does not authorize impacts to cultural, historic or archaeological features or sites.

12. This permit does not authorize access to private property. Arrangements concerning the use of private property shall be made with the landowner.

13. Where practicable, all activities shall be accomplished in the dry. All surface water flowing towards this work shall be diverted using cofferdams and/or berms constructed of sandbags, clean rock

(containing no fines or soils), steel sheeting, or other non-erodible, non-toxic material. All such diversion materials shall be removed upon completion of the work.

14. All activities must be carried out in such a manner as will prevent violations of water quality criteria as stated in TDEC Rule 0400-40-03. This includes, but is not limited to, the prevention of any discharge or use of materials that may be harmful to humans, terrestrial or aquatic life, or causes a condition in which visible solids, bottom deposits or turbidity impairs the designated uses of waters of the state.

15. Erosion prevention and sediment control measures must be in place and functional before any earth moving operations begin, and shall be designed according to the department's *Erosion and Sediment Control Handbook* (www.tn.gov/environment/wpc/sed_ero_controlhandbook/). Permanent vegetative stabilization using native species of all disturbed areas in or near the stream channel must be initiated within 15 days of project completion (see also *Landscaping with Natives* at tneppc.org). Non-native, non-invasive annuals may be used as cover crops until native species can be established.

16. The permittee is responsible for obtaining coverage under the National Pollutant Discharge Elimination System (NPDES) *General Permit for Storm Water Discharges from Construction Activities* where clearing, grading or excavation results in an area of disturbance of one or more acres, or activities that result in the disturbance of less than one acre if it is part of a larger common plan of development or sale.

17. Stream beds shall not be used as linear 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 bank vegetation is disturbed. The crossing shall be constructed so that stream or wetland 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.

Obtaining Permit Coverage

Utility Line Crossing activities requiring written notification and authorization may obtain coverage by submitting a signed and completed application (form CN-1091), along with any other required information, to the division. Work shall not commence until a written Notice of Coverage (NOC) from the division is received. As noted above, not all activities may be eligible for coverage under this general permit and coverage may be denied when appropriate.

Each Notice of Coverage under this general permit is valid until the expiration date specified on the NOC. If the expiration date on an NOC extends beyond the date the General Permit is modified, reissued, or revoked, and the permittee has commenced or is under contract to commence this activity before the expiration date, the permittee may have up to twelve (12) months from the date of the modification, reissuance, or revocation of the General Permit to complete the activity under the present terms and conditions of the general permit.

An application fee as established in Rule 0400-40-11-.02 will be assessed to applicants intending to receive an NOC to conduct activities under this general permit. An annual maintenance fee will be assessed to those individuals holding general permit coverage unless a Notice of Termination (NOT) form is received prior to the one-year anniversary of the issuance date of the NOC, or the NOC was issued for less than a one-year term. An NOT form can be downloaded from the division's ARAP webpage (http://www.tn.gov/environment/permits/arap.shtml).

APPROVED: _____ DATE: 10/8/15

Tisha Calabrese Benton
Director, Division of Water Resources