



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES

William R. Snodgrass - Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243-1102

July 28, 2017

TN Valley Authority
c/o John Kammeyer
1101 Market Street, Mail Stop LP 5D-C
Chattanooga, TN 37402

Subject: Individual ARAP Permit/§401 Water Quality Certification
NRS16.142
Eastern Dike Repair
TVA Kingston Fossil Plant
Emory River Watershed
Robertson County, TN

Dear Mr. Kammeyer:

We have reviewed your proposal to make repairs along the eastern dike at the TVA Kingston Fossil Plant. These activities have been modified based on public comments and efforts by the TVA to avoid and minimize impacts to Waters of the State. This activity includes 1000 linear feet of dike stabilization with a reverse grade aggregate filter structure and to replace an outfall structure. The reverse grade filter structure will also include a seepage collection system. These impacts will occur in the KIF artificial channel along the Emory River. Mechanisms for the purpose of managing, collecting, and treating seepage flow must conform to the terms and conditions of the NPDES permit.

The attached Aquatic Resource Alteration Permit/§401 Water Quality Certification authorizes the work you have proposed in your application.

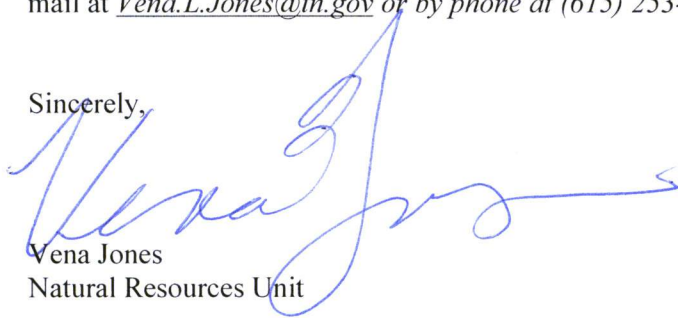
This activity is governed by the enclosed permit. The work must be accomplished in conformance with accepted plans and information submitted in support of application NRS16.142 and the limitations and conditions set forth in the permit (enclosed). It is the responsibility of the permittee to ensure that all contractors involved with this project have read and understand the permit conditions before the project begins.

Coverage Termination

Authorization under this permit cannot be extended beyond the expiration date. If all work is not completed on or before July 27, 2022 it is the applicants responsibility to apply for additional coverage.

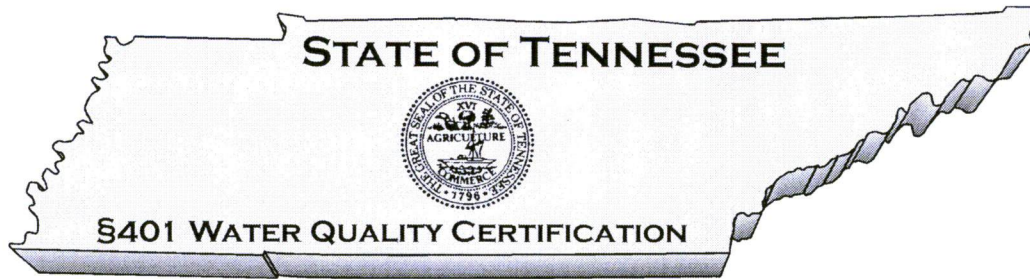
Thank you for your time and consideration. If you have any questions please contact me by e-mail at Vena.L.Jones@tn.gov or by phone at (615) 253-5320

Sincerely,

A handwritten signature in blue ink, appearing to read 'Vena Jones', with a long, sweeping horizontal stroke extending to the right.

Vena Jones
Natural Resources Unit

Encl: copy of permit
CC: DWR, Nashville Environmental Field Office
Brad Love, TVA
Tennessee Clean Water Network
Amanda Garcia, SELC
Terry Cheek, TVA
U.S. Army Corps of Engineers, Nashville Regulatory Branch
File copy



AQUATIC RESOURCE ALTERATION PERMIT NRS16.142

Pursuant to §401 of *The Federal Clean Water Act* (33 U.S.C. 1341), any applicant for a Federal license or permit to conduct any activity which may result in any discharge into the waters of the U.S., shall provide the federal licensing or permitting agency a certification from the State in which the discharge originates or will originate. Accordingly, the Division of Water Resources requires reasonable assurance that the activity will not violate provisions of *The Tennessee Water Quality Control Act of 1977* (T.C.A. §69-3-101 et seq.) or provisions of §§301, 302, 303, 306 or 307 of *The Clean Water Act*.

Subject to conformance with accepted plans, specifications and other information submitted in support of the application, pursuant to 33 U.S.C. 1341 the State of Tennessee hereby certifies the activity described below. This shall serve as authorization under T.C.A. §69-3-101 et seq.

PERMITTEE: TN Valley Authority
c/o John Kammeyer
1101 Market Street, Mail Stop LP 5D-C
Chattanooga, TN 37402

AUTHORIZED WORK: The Tennessee Valley Authority is authorized to make repairs along the eastern dike at the TVA Kingston Fossil Plan. These activities have been modified based on public comments and efforts by the TVA to avoid and minimize impacts to Waters of the State. This activity includes 1000 linear feet of dike stabilization with a reverse grade aggregate filter structure and to replace an outfall structure. The reverse grade filter structure will also include a seepage collection system. These impacts will occur in the KIF artificial channel along the Emory River. Mechanisms for the purpose of managing, collecting, and treating seepage flow must conform to the terms and conditions of the NPDES permit.

LOCATION: 714 Swan Pond Road, Harriman, TN 37748

Impact 1:

Latitude 35.902959 Longitude -84.514748

Impact 2:

Latitude 35.900718 Longitude -84.517961

EFFECTIVE DATE: July 28, 2017

EXPIRATION DATE: July 27, 2022

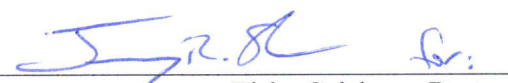

Tisha Calabrese Benton
Director, Division of Water Resources

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PART I

Authorized Impacts:

STR-1: Emory River (TN06010208001_2000)

Latitude 35.902959 Longitude -84.514748

1000 linear feet of a reverse grade aggregate filter and a lined seepage collection system along the dike in the intake channel.

STR-1: Emory River (TN06010208001_2000)

Latitude 35.900718 Longitude -84.517961

An outfall replacement for a 42" reinforced concrete pipe including riprap outlet protection.

Special Conditions:

- a. The work shall be accomplished in conformance with the revised and accepted plans, specifications, data and other information submitted in support of the revised application NRS16.142 and the limitations, requirements and conditions set forth herein.
- b. Mechanisms for the purpose of managing, collecting, and treating seepage flow must conform to the terms and conditions of the NPDES permit.
- c. All riprap areas shall be placed as to mimic the existing/proposed contours of the stream bank. Riprap shall be countersunk and placed at the grade with the existing stream substrate.
- d. Voids within the riprap shall be filled with suitable substrate to prevent loss of stream within the riprap areas. Do not over-excavate for placement of riprap. Grouting of riprap is prohibited.
- e. The use of monofilament-type erosion control netting or blanket is prohibited.
- f. Best Management Practices (BMPs) shall be stringently implemented throughout the construction period to prevent sediments, oils, or other project-related pollutants from being discharged into the Willow Branch or its tributaries.
- g. Streambeds 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 prevention and sediment control measures shall be utilized where stream banks are disturbed.
- h. Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the state. All spills must be reported to the appropriate emergency management agency, and measures shall be taken immediately to prevent the pollution of waters of the state, including groundwater, should a spill occur.

General Conditions:

- a. It is the responsibility of the permittee to convey all terms and conditions of this permit to all contractors. A copy of this permit, approved plans and any other documentation pertinent to the

activities authorized by this permit shall be maintained on site at all times during periods of construction activity.

- b. Work shall not commence until the permittee has received the federal §404 permit from the U. S. Army Corps of Engineers, a §26a permit from the Tennessee Valley Authority or authorization under a Tennessee NPDES Storm Water Construction Permit where necessary. The permittee is responsible for obtaining these permits.
- c. All work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in Rule 0400-40-03-.03 of the Rules of the Tennessee Department of Environment and Conservation. This includes, but is not limited to, the prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of waters of the state for any of the uses designated by Rule 0400-40-04. These uses include fish and aquatic life (including trout streams and naturally reproducing trout streams), livestock watering and wildlife, recreation, irrigation, industrial water supply, domestic water supply, and navigation.
- d. Impacts to waters of the state other than those specifically addressed in the plans and this permit are prohibited. All streams, springs and wetlands shall be fully protected prior, during and after construction until the area is stabilized. Any questions, problems or concerns that arise regarding any stream, spring or wetland either before or during construction, shall be addressed to the Division of Water Resource's Knoxville's Environmental Field Office (865-594-6035), or the permit coordinator in the division's Natural Resources Unit (615-253-5320).
- e. Adverse impact to formally listed state or federal threatened or endangered species or their critical habitat is prohibited.
- f. This permit does not authorize adverse impacts to cultural, historical or archeological features or sites.

PART III

Duty to Reapply

If any portion of the permitted activities, including the authorized impacts to water resources, compensatory mitigation requirements, or post-project monitoring is not completed before the expiration date of this permit the permittee must apply for permit re-issuance. The permittee shall submit such information and forms as are required to the director of the Division of Water Resources at least ninety (90) days prior to its expiration date. Such applications must be properly signed and certified.

Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.

Other Information

If the permittee becomes aware that he/she failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, then he/she shall promptly submit such facts or information.

Changes Affecting the Permit

Transfer/Change of Ownership

- a. This permit may be transferred to another party, provided there are no activity or project modifications, no pending enforcement actions, or any other changes which might affect the permit conditions contained in the permit, by the permittee if:
- b. The permittee notifies the Director of the proposed transfer at least 30 days in advance of the proposed transfer date;
- c. The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage, and contractual liability between them; and
- d. The Director does not notify the current permittee and the new permittee, within 30 days, of his intent to modify, revoke, reissue, or terminate the permit, or require that a new application be filed rather than agreeing to the transfer of the permit.
- e. The permittee must provide the following information to the division in their formal notice of intent to transfer ownership:
 - i. the permit number of the subject permit;
 - ii. the effective date of the proposed transfer;
 - iii. the name and address of the transferor;
 - iv. the name and address of the transferee;
 - v. the names of the responsible parties for both the transferor and transferee;
 - vi. a statement that the transferee assumes responsibility for the subject permit;
 - vii. a statement that the transferor relinquishes responsibility for the subject permit;
 - viii. the signatures of the responsible parties for both the transferor and transferee, and;
 - ix. a statement regarding any proposed modifications to the permitted activities or project, its operations, or any other changes which might affect the permit conditions contained in the permit.

Change of Mailing Address

The permittee shall promptly provide to the Director written notice of any change of mailing address. In the absence of such notice the original address of the permittee will be assumed to be correct.

Noncompliance

Effect of Noncompliance

All discharges shall be consistent with the terms and conditions of this permit. Any permit noncompliance constitutes a violation of applicable State and Federal laws and is grounds for enforcement action, permit termination, permit modification, or denial of permit reissuance.

Reporting of Noncompliance

24-Hour Reporting

- a. In the case of any noncompliance which could cause a threat to public drinking supplies, or any other discharge which could constitute a threat to human health or the environment, the required notice of non-compliance shall be provided to the Division of Water Resources in the appropriate Environmental Field Office within 24-hours from the time the permittee becomes aware of the circumstances. (The Environmental Field Office should be contacted for names and phone numbers of environmental response personnel).
- b. A written submission must be provided within five (5) days of the time the permittee becomes aware of the circumstances unless this requirement is waived by the Director on a case-by-case basis. The permittee shall provide the Director with the following information:
 1. A description of the discharge and cause of noncompliance;
 2. The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and
 3. The steps being taken to reduce, eliminate, and prevent recurrence of the non-complying discharge.

Scheduled Reporting

For instances of noncompliance which are not reported under subparagraph a. above, the permittee shall report the noncompliance by contacting the permit coordinator, and provide all information concerning the steps taken or planned to reduce, eliminate, and prevent recurrence of the violation and the anticipated time the violation is expected to continue.

Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the waters of Tennessee resulting from noncompliance with this permit, including but not limited to, accelerated or additional monitoring as necessary to determine the nature and impact of the noncompliance. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

Liabilities

Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Notwithstanding this permit, the permittee shall remain liable for any damages sustained by the State of Tennessee, including but not limited to fish kills and losses of aquatic life and/or wildlife, as a result of the discharge of pollutants to any surface or subsurface waters. Additionally, notwithstanding this Permit, it shall be the responsibility of the permittee to conduct its discharge activities in a manner such that public or private nuisances or health hazards will not be created.

Liability under State Law

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or the Federal Water Pollution Control Act, as amended.

This permit does not preclude requirements of other federal, state or local laws. This permit also serves as a State of Tennessee Aquatic Resource Alteration Permit (ARAP) pursuant to the Tennessee Water Quality Control Act of 1977 (T.C.A. §69-3-101 et seq.).

Reopener Clause

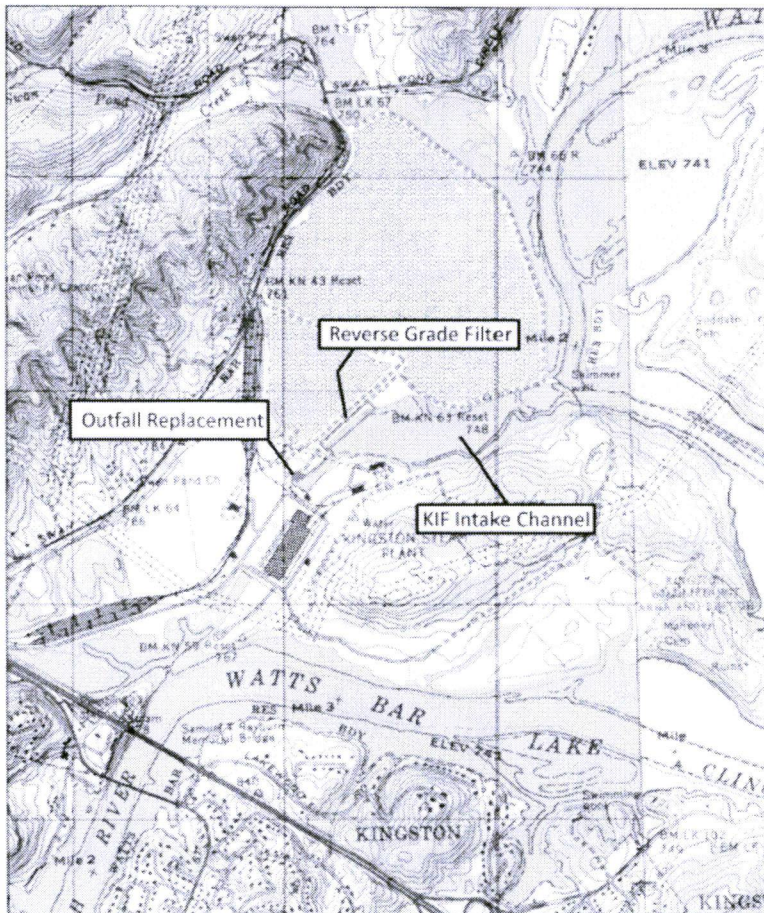
This permit may be revoked, suspended, or modified for cause, including:

1. Violation of any of the terms or conditions of this permit or of T.C.A § 69-3-101 et. seq.;
2. Obtaining the permit by misrepresentation or failing to disclose fully all relevant facts;
3. A change in any condition that requires either a temporary or permanent change in the conditions of this permit.

An appeal of this action may be made as provided in T.C.A. §69-3-105(i) and Rule 0400-40-05-.12 by submitting a petition for appeal. This petition must be filed within THIRTY (30) DAYS after public notice of the issuance of the permit. The petition must specify what provisions are being appealed and the basis for the appeal. It should be addressed to the technical secretary of the Tennessee Board of Water Quality, Oil and Gas at the following address: Tisha Calabrese Benton, Director, Division of Water Resources, William R. Snodgrass - Tennessee Tower, 312 Rosa L. Parks Avenue, Nashville, Tennessee 37243-1102. Any hearing would be in accordance with T.C.A. §§69-3-110 and 4-5-301 et seq.

APPENDIX I

Location/Topographic Map



Tennessee Valley Authority
Kingston Fossil Plant
Eastern Dike Seepage Mitigation
Reverse Grade Filter Construction Project
ARAP Topo Map

Site Designs



AECOM

TENNESSEE VALLEY AUTHORITY
KINGSTON FOSSIL PLANT

AQUATIC RESOURCE ALTERATION PERMIT APPLICATION FOR
BALL FIELD CLOSURE & DRAINAGE AND FLOW MANAGEMENT

SEEP PROTECTION REVERSE-GRADE
FILTER PROFILE VIEW