

APR 19 2017



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
 1-888-891-8332 (TDEC)

DIVISION OF WATER RESOURCES

Application for Aquatic Resource Alteration Permit (ARAP) & State §401 Water Quality Permit

OFFICIAL STATE USE ONLY		Site #:	Permit #:	NRS17.114	
Section 1. Applicant Information (individual responsible for site, signs certification below)					
Applicant Name: John C. Kammeyer					
Company: Tennessee Valley Authority			Signatory's Title or Position: Vice President, Civil Projects		
Mailing Address: 1101 Market Street, Mail Stop LP 5D-C			City: Chattanooga	State: TN	Zip: 37402
Phone: 423-751-8246		Fax:	E-mail: jckammey@tva.gov		
Section 2. Alternate Contact/Consultant Information (a consultant is not required)					
Alternate Contact Name: Brad Love					
Company: Tennessee Valley Authority			Title or Position: Water Permitting Specialist		
Mailing Address: 1101 Market Street, Mail Stop BR 4A-C			City: Chattanooga	State: TN	Zip: 37402
Phone: 423-751-8518		Fax:	E-mail: bmlove@tva.gov		
Section 3. Fee (check appropriate box and submit requisite fee with application)					
<input type="checkbox"/> No Fee Submitted		<input checked="" type="checkbox"/> Fee Submitted with Application		Amount Submitted: \$ 500 - RCD jfk	
Current fee schedules for Aquatic Resource Alteration Permit processing may be found at the Division of Water Resources webpage at http://www.tn.gov/environment/permits/arap.shtml or by calling (615) 532-0625. Make checks payable to "Treasurer, State of Tennessee".					
Section 4. Project Details (fill in information and check appropriate boxes)					
Site or Project Name: KIF Stilling Pond Closure - Stormwater Outfall Construction			Nearest City, Town or Major Landmark: Kingston Fossil Plant		
Street Address or Location: 714 Swan Pond Road, Harriman, TN 37748					
County(ies): Roane		MS4 Jurisdiction: N/A		Latitude (dd.ddd): 35.905968	
				Longitude (dd.ddd): -84.504325	
Resource Proposed for Alteration: <input type="checkbox"/> Stream <input type="checkbox"/> Wetland <input checked="" type="checkbox"/> Reservoir					
Name of Water Resource: Emory River / Watts Bar Reservoir					
Brief Project Description (a more detailed description is required under Section 8): Construction of a stormwater outfall structure consisting of conveyance piping and headwall along a man made rip rapped dike which will discharge stormwater only after the stilling pond area at Kingston is closed.					
Does the proposed activity require approval from the U.S. Army Corps of Engineers, the Tennessee Valley Authority, or any other federal, state, or local government agency? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
If Yes, provide the permit reference numbers: Preconstruction Notification under NWP 7 submitted concurrently					
Is the proposed activity associated with a larger common plan of development? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
If Yes, submit site plans and identify the location and overall scope of the common plan of development.				Plans attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If applicable, indicate any other federal, state, or local permit authorizations that the overall project site (common plan of development) has obtained in the past (i.e. construction general permit coverage and/or other ARAPs): N/A					
Section 5. Project Schedule (fill in information and check appropriate boxes)					
Start date: June 2017			Estimated end date: April 30, 2018		
Is any portion of the activity complete now? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe the extent of the completed portion:					

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The required information in Sections 6-11 must be submitted on a separate sheet(s) and submitted in the same numbered format as presented below. If any question is not applicable, state the reason why it is not applicable.

Section 6. Project Description		Attached	
		Yes	No
6.1	A narrative description of the scope of the project	<input type="checkbox"/>	<input type="checkbox"/>
6.2	USGS topographic map indicating the exact location of the project (<i>can be a photographic copy</i>)	<input type="checkbox"/>	<input type="checkbox"/>
6.3	Photographs of the resource(s) proposed for alteration with location description (<i>photo locations should be noted on map</i>)	<input type="checkbox"/>	<input type="checkbox"/>
6.4	A narrative description of the existing stream and/or wetland characteristics including, but not limited to, dimensions (e.g., depth, length, average width), substrate and riparian vegetation	<input type="checkbox"/>	<input type="checkbox"/>
6.5	A narrative description of the proposed stream and/or wetland characteristics including, but not limited to, dimensions (e.g., depth, length, average width), substrate and riparian vegetation	<input type="checkbox"/>	<input type="checkbox"/>
6.6	In the case of wetlands, include a wetland delineation with delineation forms and site map denoting location of data points	<input type="checkbox"/>	<input type="checkbox"/>
6.7	A copy of all hydrologic or jurisdictional determination documents issued for water resources on the project site	<input type="checkbox"/>	<input type="checkbox"/>

Section 7. Project Rationale		Attached	
		Yes	No
Describe the need for the proposed activity, including, but not limited to, the purpose, alternatives considered, and what will be done to avoid or minimize impacts to streams or wetlands.		<input type="checkbox"/>	<input type="checkbox"/>

Section 8. Technical Information		Attached	
		Yes	No
8.1	Detailed plans, specifications, blueprints, or legible sketches of present site conditions and the proposed activity. Plans must be 8.5 x 11 inches. Additional larger plans may also be submitted to aid in application review. The detailed plans should be superimposed on existing and new conditions (<i>e.g., stream cross sections where road crossings are proposed</i>)	<input type="checkbox"/>	<input type="checkbox"/>
8.2	For both the proposed activity and compensatory mitigation, provide a discussion regarding the sequencing of events and construction methods	<input type="checkbox"/>	<input type="checkbox"/>
8.3	Depiction and narrative on the location and type of erosion prevention and sediment control (EPSC) measures for the proposed alterations	<input type="checkbox"/>	<input type="checkbox"/>

Section 9. Water Resources Degradation (degree of proposed impact) <i>Note that in most cases, activities that exceed the scope of the General Permit limitations are considered greater than de minimis degradation to water quality.</i>	
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>My activity, as proposed:</p> <p>a. <input type="checkbox"/> Will not cause measurable degradation to water quality</p> <p>b. <input checked="" type="checkbox"/> Will only cause de minimis degradation to water quality</p> <p>c. <input type="checkbox"/> Will cause more than de minimis degradation to water quality (<i>Complete additional sections 9-11</i>)</p> <p>d. <input type="checkbox"/> Unsure/need more information</p> </div> <div style="width: 35%; text-align: right;"> <p>TN. DEPT. OF ENV. & CONSERVATION</p> <p>APR 19 2017</p> <p>DIVISION OF WATER RESOURCES</p> </div> </div> <p><i>For information and guidance on the definition of de minimis and degradation, refer to the Antidegradation Statement in Chapter 0400-40-03-.06 of the Tennessee Water Quality Criteria Rule: https://www.tn.gov/sos/rules/0400/0400-40/0400-40-03.20131216.pdf. For more information on specifics on what General Permits can cover, refer to the Natural Resources Unit webpage at http://www.tn.gov/environment/permits/arap.shtml</i></p>	

If you checked "c." above in Section 9, complete the following 2 sections, 10-11.

Section 10. Detailed Alternative Analysis		Attached	
		Yes	No
10.1	Analyze all reasonable alternatives and describe the level of degradation caused by each of the feasible alternatives	<input type="checkbox"/>	<input type="checkbox"/>
10.2	Discuss the social and economic consequences of each alternative	<input type="checkbox"/>	<input type="checkbox"/>
10.3	Demonstrate that the degradation associated with the preferred alternative will not violate water quality criteria for uses designated in the receiving waters, and is necessary to accommodate important economic and social development in the area	<input type="checkbox"/>	<input type="checkbox"/>


Application for Aquatic Resource Alteration Permit (ARAP) & State §401 Water Quality Permit

Section 11. Compensatory Mitigation		Attached	
		Yes	No
11.1	A detailed discussion of the proposed compensatory mitigation	<input type="checkbox"/>	<input type="checkbox"/>
11.2	Describe how the compensatory mitigation would result in no net loss of resource value	<input type="checkbox"/>	<input type="checkbox"/>
11.3	Provide a detailed monitoring plan for the compensatory mitigation site	<input type="checkbox"/>	<input type="checkbox"/>
11.4	Describe the long-term protection measures for the compensatory mitigation site (e.g., deed restrictions, conservation easement)	<input type="checkbox"/>	<input type="checkbox"/>

Certification and Signature

An application submitted by a corporation must be signed by a principal executive officer; from a partnership or proprietorship, by the partner or proprietor respectively; from a municipal, state, federal or other public agency or facility, the application must be signed by either a principal executive officer, ranking elected official, or other duly authorized employee.

"I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury".

John C. Kammeyer	VP, Civil Projects		4/17/2017
Printed Name	Official Title	Signature	Date

Submitting the form and obtaining more information Note that this form must be signed by the principal executive officer, partner or proprietor, or a ranking elected official in the case of a municipality; for details see **Certification and Signature** statement above. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC). Submit the completed ARAP Application form (keep a copy for your records) to the appropriate EFO for the county(ies) where the ARAP activity is located, addressed to **Attention: ARAP Processing**. You may also electronically submit the complete application and all associated attachments (e.g., maps, wetland delineations and narrative portions) to water.permits@tn.gov.

EFO	Street Address	Zip Code	EFO	Street Address	Zip Code
Memphis	8383 Wolf Lake Drive, Bartlett	38133-4119	Cookeville	1221 South Willow Ave.	38506
Jackson	1625 Hollywood Drive	38305-4316	Chattanooga	1301 Riverfront Pkwy., Ste. 206	37402
Nashville	711 R S Gass Boulevard	37243	Knoxville	3711 Middlebrook Pike	37921
Columbia	1421 Hampshire Pike	38401	Johnson City	2305 Silverdale Road	37601



OFFICIAL STATE USE ONLY

Received Date:	Permit Number:	Reviewer:	Field Office:
Fee amount paid:	T & E Aquatic Flora and Fauna:	Impaired Receiving Stream:	Application Review:
Date:			<input type="checkbox"/> Deficient Date: _____
Check #:	Exceptional TN Water:		<input type="checkbox"/> Complete Date: _____



Department of
Environment &
Conservation

DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF FISCAL SERVICES - FEE SECTION
CHECKS RECEIVED WITH and WITHOUT DOCUMENTATION

DIRECTIONS: Divisions must complete this form and attach it to the checks that have been received without documentation before transferring checks to the Division of Fiscal Services - Consolidated Fee Section for deposit.

Date/Time Check Received: 4-19-2017 Division: **TDEC - WPC - NRS**

Company Name: TN Valley Authority

Company ID Number: _____

Check Number: 70908 Check Amount: \$ 500.00

Type of Fee ☒ **User Code 000602** **ARAP Permit Application Fee**
☐ **User Code 000605** **ARAP Annual Maintenance Fee**
☐ **User Code 000634** **Mitigation Monitoring Fee**

Permit Number: NRS17.114

Received by: Jeanene Woodruff Phone: **615-532-0645**
Signature of Division Employee - Jeanene Woodruff

Transferred to: _____
Fee Coordinator Date/Time

TENNESSEE VALLEY AUTHORITY
SHARON M. FIGGURES

US GOVERNMENT TAX EXEMPT #62-0474417
FOR OFFICIAL USE ONLY

70908

26-2/840
3802

DATE 4-18-17

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Treasurer, State of Tennessee

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FOR _____

MP





Tennessee Valley Authority, 1101 Market Street, BR 4A, Chattanooga, Tennessee 37402-2801

DATE

April 18, 2017

Mr. Jimmy Smith
Natural Resources Section
Tennessee Department of Environment
and Conservation
William R. Snodgrass TN Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243

TN. DEPT. OF ENV. & CONSERVATION

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DIVISION OF WATER RESOURCES

Dear Mr. Smith:

**TENNESSEE VALLEY AUTHORITY (TVA) – KINGSTON FOSSIL PLANT (KIF) –
APPLICATION FOR AQUATIC RESOURCE ALTERATION PERMIT (ARAP) – STORMWATER
OUTFALL CONSTRUCTION**

Please find enclosed an application for Aquatic Resource Alteration Permit and State §401 Water Quality Certification for an upcoming project at KIF. The enclosed application includes the required project information as well as topographic and photographic maps, project drawings, and a check in the amount of \$500 to cover application processing.

In order to comply with the Federal Coal Combustion Residuals (CCR) rule as published in 40 CFR §257, TVA is working towards closure of the KIF Stilling Pond. Management of stormwater runoff from the closure area will require a new outfall structure to be constructed. The stormwater outfall will be constructed along Dike C which is man made structural dike completely hard armored with riprap.

The total length of impact along the Emory River will not exceed 25 linear feet and TVA does not believe the project will result in more than de minimis impacts to the resource. Therefore, TVA believes this work can be covered under the general ARAP for construction of intake and outfall structures. If you have questions or need additional information, please contact Brad Love at (423) 751-8518 or by email at bmlove@tva.gov.

Sincerely,

Terry E. Cheek
Senior Manager
Water Permits, Compliance, and Monitoring

Enclosures

**Tennessee Valley Authority
Kingston Fossil Plant
Stilling Pond Closure
Stormwater Outfall Construction**

Section 6.1

In order to comply with the Federal Coal Combustion Residuals (CCR) rule as published in 40 CFR §257, TVA is working towards closure of the Kingston Fossil Plant Stilling Pond. Management of stormwater runoff from the closure area will require a new outfall structure to be constructed.

The stormwater outfall will discharge along the man made KIF Stilling Pond Dike C slope to the Emory River. The stormwater outfall will consist of 4 - 48" HDPE pipes discharging through a common headwall depicted between Stations 215+00 and 220+00 in the attached drawings and discharge along the existing dike slope with Class A-1 riprap discharge apron added as needed to mitigate erosion. The total length of impact along the Emory River will not exceed 25 linear feet.

Sections 6.2 and 6.3

Please see attached topographic and photographic maps of the project area.

Section 6.4 and 6.5

TVA's proposed project is adjacent to the Emory River. The proposed project will not alter the existing stream because the outfall structure will be constructed along the existing Stilling Pond Dike which is a man made structural dike completely hard armored with riprap.

Section 6.6

No impacts to wetlands are proposed in this project.

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Section 6.7

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No hydrologic or jurisdictional determinations were issued for this project.

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Section 7.0

As previously detailed, in order to comply with the CCR rule TVA has decided to close the KIF Stilling Pond. A new process water pond for NPDES wastewater discharges has been constructed and placed in service; therefore, there is no longer a need for the Stilling Pond as a treatment system for NPDES compliance.

TVA considered three alternatives for closure of the Stilling Pond at Kingston which are further detailed in the programmatic Environmental Impact Statement prepared for ash impoundment closure. Those three alternatives included the no action alternative, closure in place, and closure by removal. TVA's selected alternative is closure in place which includes construction of a stormwater outfall.

**Tennessee Valley Authority
Kingston Fossil Plant
Stilling Pond Closure
Stormwater Outfall Construction**

Section 7.0 continued

TVA does not expect appreciable impact to the resource as a result of constructing the stormwater outfall structure. The outfall structure will be constructed along the manmade Stilling Pond dike which is already completely hardened from previous structural upgrades.

Section 8.1

Please see the attached detailed plans and specifications for the proposed work.

Section 8.2

All work will be performed from the shoreline along the stilling pond dike. The general construction sequence for the stormwater outfall will be performed as follows:

- Install Erosion Prevention and Sediment Control Measures
- Construct cap system and conveyance ditches within the Stilling Pond Closure footprint
- Excavate and place discharge piping penetration in Stilling Pond dike
- Backfill pipe penetration with flowable fill
- Construct outlet headwall

Section 8.3

The proposed project takes place along the rip rapped stilling pond dike adjacent to the Emory River. Erosion prevention and sediment control measures will be implemented in accordance with the attached drawings.

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Tennessee Valley Authority
Kingston Fossil Plant
Stormwater Outfall Construction
ARAP Satellite Overview

TN. DEPT. OF ENV. & CONSERVATION

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SDMCLIN 14237512450 TVA 1101 MARKET ST. LPBA-C CHATTANOOGA TN 37402	1.0 LBS	LTR	1 OF 1
SHIP TO: MR. JIMMY R. SMITH, MANAGER 14237512450 DIVISION OF WATER RESOURCES, NAT RE 312 ROSA L. PARKS AVE, 11TH FLOOR WILLIAM R. SNODGRASS TN TOWER NASHVILLE TN 37243			
		TN 371 9-02 	
UPS NEXT DAY AIR TRACKING #: 1Z 311 380 01 9201 1799		1 	
BILLING: P/P			
Reference No.1: 203147:1.1 Reference No.2: 203147		 <small>XC1 17.02.14 NV45 84-04 01/2017</small>	

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