STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Office of General Counsel
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CERTIFIED MAIL
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RECEIPT NO. 7005 1160 0004 7332 4834

January 12, 2009

Tom Kilgore, CEO
Tennessee Valley Authority
400 Summit Hill Drive
Knoxville, TN 37902-1499

Re: Commissioner's Order, Case No. OGC09-0001
In the Matter of: Tennessee Valley Authority

Dear Mr. Kilgore:

Enclosed please find an Order issued by Commissioner James H. Fyke on behalf of the Tennessee Department of Environment and Conservation in the above referenced matter. Please read it carefully and pay special attention to the NOTICE OF RIGHTS section.

Sincerely,

David Henry
Assistant General Counsel

Enclosure

Cc: Knoxville Field Office
Patrick Parker, WPC
Alfreda Freeman, EPA Water Management Division

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

IN THE MATTER OF:	)	**DIVISION OF WATER POLLUTION CONTROL**
TENNESSEE VALLEY AUTHORITY	)	**CASE NO. OGC09-0001**

ORDER

NOW COMES James H. Fyke, Commissioner of the Tennessee Department of Environment and Conservation, and states:

PARTIES

I.

James H. Fyke is the duly appointed Commissioner of the Tennessee Department of Environment and Conservation (the "Department").

II.

The Tennessee Valley Authority (hereinafter "Respondent" or "TVA") is a governmental entity with facilities throughout the State of Tennessee. Service of process may be made on Tom Kilgore CEO at 400 Summit Hill Drive, Knoxville, TN, 37902-1499

JURISDICTION

III.

Whenever the Commissioner, with the concurrence of the Governor, finds that an emergency exists imperatively requiring immediate action to protect the public health, safety, or welfare, or the health of animals, fish, or aquatic life, or a public water supply, or recreational, commercial, industrial, agricultural, or other reasonable uses, the Commissioner may, without prior notice, issue an order reciting the existence of such an emergency and requiring that such action be taken as the Commissioner deems necessary to meet the emergency, pursuant to Tennessee Code Annotated § 69-3-109(b)(1), the Water Quality Control Act, (the "Act"). Further, if the violator fails to respond or is unable to respond to the Commissioner's Order, the Commissioner has authority to take such emergency action as the Commissioner deems necessary, or contract with a qualified person or persons to carry out the emergency measures. The Commissioner may assess the person or persons responsible for the emergency condition for actual costs incurred by the Commissioner in meeting the emergency, pursuant to T.C.A. § 69-3-109(b)(2) of the Act.

IV.

"Waters of the State" are defined by T.C.A. §69-3-103(33). Pursuant to T.C.A. § 69-3-105(a)(1), all waters of the state have been classified by the Tennessee Water Quality Control Board for suitable uses. Department Rule 1200-4-4, "*Use Classifications for Surface Waters, et al*", is contained in the *Official Compilation of Rules and Regulations for the State of Tennessee*. Accordingly, the ~~Emory River, Clinch River and Tennessee River are waters of the state. The~~ Emory River, Clinch River and the Tennessee River have been classified for the

following uses: domestic water supply, industrial water supply, fish and aquatic life, recreation, irrigation, livestock watering and wildlife, and navigation.

V.

Notwithstanding the fact that TVA is a federal entity, TVA is subject to the jurisdiction of the Water Quality Control Act because sovereign immunity has been waived by Congress in regard to the activities addressed in this Order by the Clean Water Act (33 U.S.C. §1323); and, in addition, the Clean Air Act (42 U.S.C. §7418), and the Resource Conservation and Recovery Act (42 U.S.C. §6961). Further, by having applied for and received permits under the Solid Waste Disposal Control Act and the Water Quality Control Act, as stated herein, TVA has acknowledged that its activities in regard to fly ash are subject to the requirements of these laws.

FACTS

VI.

Kingston Fossil Plant is located at the confluence of the Emory and Clinch Rivers near Kingston, Tennessee. It is one of TVA's larger fossil plants. In approximately 1958 this facility began use of a 244 acre settling pond for ash containment. This settling pond covered the area where the current Settling Pond, Stilling Pond and Landfill Cells 1, 2, 3 & 4 now reside

VII.

Fly ash is the residue from burning coal that is collected from the air pollution control equipment at the plant -- specifically, the electrostatic precipitators. In layman's terms, this is the material that makes the smoke black

(i.e., the dark colored particulates that comes out of the stack). Bottom ash is the residue collected in the bottom of the boiler after combustion of coal.

VIII.

The Environmental Protection Agency ("EPA") issued TVA National Pollutant Discharge Elimination System Permit #TN0005452 (hereinafter "NPDES permit") permit on April 30, 1976. In 1986, TVA constructed artificial wetlands to treat seepage from the dike along the southern portion of the ash pond. This was in response to an EPA order that cited TVA for the unpermitted discharge of this material.

IX.

On September 1, 2003, the Department's Water Pollution Control Division (WPC) issued TVA its most recent NPDES permit for the Kingston facility. The permit authorizes discharge of water from the ash settling pond to the plant intake channel (the intake draws water from the Emory River) and discharge of cooling water to the Clinch River downstream from the mouth of the Emory River. The permit requires that a certain amount of free water volume be maintained in the ash pond to provide adequate treatment prior to discharge. This requirement necessitates periodic dredging of the ash settling pond.

X.

In 1995, TVA submitted a closure plan for the settling pond to the Department's Solid Waste Management Division (SWM). At this time, the

dredge cells were considered by TVA to be part of the settling pond since they were contained within the dikes of the pond. When TVA submitted the settling pond closure plan to SWM, the plan identified the year 2015 as the date for the actual closure of the settling pond. This raised permitting issues relevant to the long term regulation and management of the settling pond. SWM took the position that the activity proposed by TVA was the operation of a landfill, rather than simply the closure of the settling pond. Eventually TVA agreed and on June 29, 1999, TVA modified the settling pond closure application, changing it into an application for a Class II landfill for the disposal of the ash waste. SWM issued TVA the requested Class II landfill permit on September 26, 2000.

XI.

On December 22, 2008, containment structures surrounding portions of the Class II landfill failed. This resulted in a catastrophic release of coal ash sludge to the environment. The ash slide disrupted power, ruptured a gas line, caused one home to be knocked off its foundation and damaged others. Swan Pond Road and a local railroad track were covered and blocked by the ash flow. The ash inundated waters of the state including but not limited to two inlets of the Emory River.

XII.

Emergency management efforts began immediately and are on-going. TVA continues to manage the flow of the Clinch and Tennessee Rivers to minimize the possibility of water from the plant entering into the Kingston water supply intake. A sediment catchment dam now extends approximately 150 ft into

the Emory River. Barges have been brought in to retrieve trees and other debris caused by the ash flow. TVA police continue to assist local law enforcement with maintaining security for the homes in the affected area. An EPA contractor performed a reconnaissance in the affected area to determine the feasibility of implementing an ash sampling plan. Samples of the ash pile were taken. EPA's contractor also continues to monitor the progress of removal activities on Swan Pond Road and the railroad.

ORDER

XIII.

WHEREFORE, after consideration of the foregoing and with the concurrence of the Governor, I, James H. Fyke, pursuant to the authority vested by T.C.A. §69-3-109(b), have found that an emergency exists imperatively requiring immediate action to protect the public health, safety, or welfare, or the health of animals, fish, or aquatic life, or a public water supply, or recreational, commercial, industrial, agricultural, or other reasonable uses, do hereby **ORDER that:**

1. The Respondent shall continue to implement measures to (a) prevent the movement of contaminated materials into waters of the state, and (b) where feasible, minimize further down-stream migration of contaminated sediments. Respondent shall prevent access by the public to any areas that it owns that pose any health or safety hazard to the public.

2. Respondent shall fully cooperate with and provide support for the Department's comprehensive review of all TVA coal ash impoundments located

within the State of Tennessee. This review shall include but not be limited to a thorough assessment of the structural integrity of all of TVA's coal ash impoundments by independent professional engineers, environmental management professionals, or other experts deemed qualified by the Department.

3. Within 20 days after the receipt of this Order, the Respondent shall submit to the Department all existing studies, reports and memoranda that are potentially relevant to explaining or analyzing the cause of the catastrophic failure of the containment structures surrounding portions of its Kingston Class II landfill. This shall include, but not be limited to, all structural integrity analyses, engineering studies, results of previous investigations, any documents that discuss the potential for failure of the containment structures surrounding the Kingston Class II landfill and any documents that recommend limiting the use of the landfill due to structural problems and water levels within the landfill. To the extent possible this information shall be submitted to the Department in an electronic format that is word and term searchable.

4. Respondent shall fully cooperate with and provide support for the Department's initial assessment of the impact of the ash release on all waters of the state, including the reservoir, its tributaries, wetlands, and groundwater. The assessment shall include, but not be limited to, (a) the current extent of contaminated sediments, (b) present impacts to fish and aquatic life, (c) a projection of future transport and distribution of contaminated sediments, (d) a projection of the duration and severity of future impacts to waters of the states,

and (e) any safety hazard posed by the ash to workers or the public through inhalation, ingestion, or engulfment.

5. Within 45 days after the receipt of this Order, the Respondent shall prepare and submit to the Department a Corrective Action Plan ("CAP"). The CAP shall include:

A. a plan for the comprehensive assessment of soil, surface water, and ground water; remediation of impacted media; and, restoration of all natural resources damaged as a result of the coal ash release;

B. a plan for monitoring the air and water in the area during the cleanup process;

C. a plan to ensure that public and private water supplies are protected from contamination and that alternative water supplies are provided if contamination is detected,

D. a plan addressing both the short term and long term management of coal ash at the Kingston Plant, including remediation and stabilization of the failed ash waste cells, proper management of the recovered ash, and a revised closure plan for the Class II ash disposal facility; and,

E. a plan to address any health or safety hazards posed by the ash to workers and the public.

6. Following a review of the CAP and all background information, the Department will schedule a meeting which the Respondent shall attend. The Respondent shall furnish or bring with it to this meeting all data, information,

reports, and/or records that the Department specifies when scheduling this meeting. At this meeting, the Department will specify any revisions to the CAP that are deemed to be necessary.

7. Upon approval by the Department, the Respondent shall implement the CAP according to the schedule approved by the Department.

8. The Respondent shall submit to the Department all data that is obtained during implementation of the CAP. Following receipt and evaluation of this information, the Department will schedule an assessment conference which the Respondent shall attend (the Department may elect to conduct this conference by telephone, in this case the Respondent is required to participate). The purpose of this conference will be to discuss existing data and determine any reasonable and necessary further investigation, remedial action, and/or long term monitoring and maintenance.

9. If at or following this conference the Department determines that additional investigation, remedial action and/or long term monitoring and maintenance is reasonable and necessary, the Respondent will submit, as the Department may direct, a plan(s) for performing the additional activities.

10. Upon approval by the Department, the Respondent shall implement this plan(s) according to the schedule approved by the Department.

11. The Respondent shall submit to the Department a written report describing the performance and results of any additional work required pursuant to paragraph 10 above. Following receipt and evaluation of this report, the Department will schedule a conference, which the Respondent must attend. The purpose of this

conference is to discuss the work performance and results and determine what, if any, additional work must be performed.

12. The activities specified in paragraphs 9, 10, and 11 will be repeated until no longer deemed necessary by the Department.

13. After each submittal required of the Respondent pursuant to this Order, the Department will review that submittal to determine whether, in the opinion of the Department, it is adequate. If the Department determines that it is not adequate, the Department will, after consultation with the Respondent, either (i) require the Respondent to amend the submittal to correct deficiencies specified by the Department, or (ii) revise the submittal to correct the deficiencies.

14. The Respondent may request a time extension for any deadline included in this Order or in Plans approved pursuant to this Order prior to the deadline. The time extension may be granted by the Commissioner for good cause shown.

15. The Respondent shall pay all costs associated with the Department's investigation of the ash release and oversight of the implementation of this Order. These costs shall include, but are not limited to, mileage, lab expense, salary, benefit and administrative costs for the Department's employees and other state employees actively employed in oversight of work under this Order or investigation of the ash release (including preparation for and attendance at meetings), and the current State overhead rate. Oversight costs also include expenditures for office space and related expenses in the vicinity of the ash release, services contracted for by the Department that facilitate or support the Department's investigation of the ash release and oversight of work under this

Order, including but not limited to, the review of plans and reports submitted by TVA pursuant to this Order, and for the independent inspection and review of the structural integrity of all TVA coal ash impoundments located within the State of Tennessee. The Department shall provide the Respondent with periodic statements reflecting oversight costs incurred. Within sixty (60) days of the receipt of each such statement, the Respondents shall pay to the Department the amount invoiced.

16. At any time deemed necessary by the Department, the Department may schedule an assessment conference that the Respondent shall attend.

17. All information, reports, or studies submitted by the Respondent to the Department under the terms of this Order shall contain the following notarized statement:

> I certify under penalty of law, including but not limited to penalties for perjury, that the information contained in this document and on any attachment is true, accurate and complete to the best of my knowledge, information and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for intentional violation.

18. Upon completion of all tasks set forth in this Order, the Department shall issue to the Respondent a letter stating the requirements of this Order have been fulfilled and no further action of the Respondent is required under this Order.

RESERVATION OF RIGHTS

This Order addresses corrective action for the emergency situation that currently exists. This Order does not in any way relieve TVA of obligations imposed by the Tennessee Water Quality Control Act, or any other State or Federal law. The issuance of this Order shall not be deemed an election by the department to forego any civil or criminal action to seek penalties, fines, or other appropriate relief under the Act, or any other law. The department expressly reserves the right to issue further Orders under the Water Quality Control Act or other laws to require further or different corrective action based on changes of conditions or new information, to assess civil penalties for all violations of the law, and to assess all damages allowed by law.

NOTICE OF RIGHTS

Tennessee Code Annotated §§69-3-109 and 69-3-110 require the Respondent to comply immediately with this Order. The same laws also allow the Respondent to secure review (appeal) of this Order. To do so, a written petition setting forth the grounds (reasons) for requesting a hearing before the Water Quality Control Board must be RECEIVED by the Department within THIRTY (30) DAYS of the date the Respondent received this Order or it will become final (not subject to review). If a petition for a hearing is filed, the law also requires that it be held within three days from its receipt by the Board.

Artificial Respondents (corporations, limited partnerships, limited liability companies, etc.) cannot engage in the practice of law. They may secure review (appeal) before the Water Quality Control Board only through an attorney licensed to practice law in Tennessee. Natural Respondents may represent themselves or be represented by an attorney licensed to practice law in Tennessee. Low- income individuals may be eligible for representation at no cost or reduced cost through a local bar association or legal aid organization.

Any hearing of this case before the Board will be a contested case hearing governed by T.C.A. § 4-5-301 *et seq.* (the Uniform Administrative Procedures Act) and the Department of State's Uniform Rules of Procedure for Hearing Contested Cases before State Administrative Agencies. Such hearings are in the nature of a trial before the Board sitting with an Administrative Law Judge. The Respondent may subpoena witnesses to testify.

At the conclusion of a hearing the Board has the authority to affirm, modify, or deny the Emergency Order. Furthermore, the Board has the authority to assess damages incurred by the Department including, but not limited to, all docketing expenses associated with the setting of the matter for a hearing and the hourly fees incurred due to the presence of an administrative law judge and a court reporter.

Issued by the Commissioner of the Tennessee Department of Environment and Conservation on this 12th day of January, 2009.

James H. Fyke, Commissioner
Department of Environment and
Conservation

Any petition for review (appeal) must be directed to David Henry, Assistant General Counsel, Department of Environment and Conservation, 401 Church Street, 20th Floor L&C Tower, Nashville, Tennessee 37243-1548. The case number should be written on all correspondence regarding this matter.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been served upon the Respondent by sending a true and correct copy of same by U.S. certified mail, return receipt requested, postage prepaid.

This the 12th day of January, 2009.

David L. Henry
Assistant General Counsel
Department of Environment & Conservation
401 Church Street, L&C Tower 20th Floor
Nashville, Tennessee 37243-1548