STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

IN THE MATTER OF:)
TENNESSEE VALLEY AUTHORITY	ORDER NUMBER OGC19-0004
RESPONDENT	}

COMMISSIONER'S ORDER

PREAMBLE

This Commissioner's Order (Order) establishes a transparent, comprehensive process for the investigation, assessment, and remediation of the Tennessee Valley Authority's historic management and disposal of coal combustion residuals (CCR) at its coal-fired power plant in Gallatin, Sumner County, Tennessee (TVA Gallatin Fossil Plant). In addition, this Order outlines a process for a field demonstration and related activities to evaluate closure methodology and remediation effectiveness at the site's historic storage location in order to further inform corrective actions at TVA's Gallatin Fossil Plant.

Pursuant to Tennessee Code Annotated Section 68-211-107(c) all solid waste disposal facilities must have groundwater monitoring and if sampling results indicate that ground water protection standards are exceeded, an assessment monitoring program is required. Corrective measures are specified in Chapter 0400-11-01-.04 of the Rules and Regulations of the State of Tennessee.

Therefore, this Order is issued pursuant to the provisions of the Tennessee Solid Waste Disposal Act, the State's implementing rules and regulations, and in furtherance of the public policies specified therein.

PARTIES

I.

David W. Salyers, P.E., is the duly appointed Commissioner of the Tennessee Department of Environment and Conservation (the Department).

II.

Tennessee Valley Authority (TVA) is a federal agency and instrumentality of the United States Government pursuant to the Tennessee Valley Authority Act of 1933, as amended, 16 U.S.C. Sections 831-831ee. Service of process may be made on Jeffrey Lyash CEO at 400 W. Summit Hill Drive, Knoxville, TN, 37902-1499

JURISDICTION

TENNESSEE SOLID WASTE DISPOSAL ACT

III.

"Solid waste" is defined as "spent material, byproducts, . . . ash, sludge, and all discarded material including solid, liquid, [or] semisolid . . . material resulting from industrial, commercial, and agricultural operations." Tenn. Code Ann. § 68-211-103(8). CCR is a solid waste.

IV.

The Department is authorized to exercise general supervision over the operation and maintenance of solid waste processing facilities and disposal facilities or sites. Such general supervision shall apply to all the features of operation or maintenance *which* do or *may* affect the public health and safety or the quality of the environment *and which* do or *may affect* the proper processing and disposal of solid wastes. Tenn. Code Ann. § 68-211-107(a) (Emphasis added). The Commissioner is also empowered to undertake inspections and investigations of such facilities, operations, and sites. *Id.*

The Department shall require all solid waste disposal facilities to have a groundwater monitoring program and report sampling results to the department at least once each year. If sampling results indicate that ground water protection standards are exceeded, the owner or operator of the facility shall commence an assessment monitoring program, in accordance with regulations adopted by the board and carry out all corrective measures specified by the commissioner. Tenn. Code Ann. § 68-211-107(c) (Emphasis added). Further, required corrective measures are specified in Chapter 0400-11-01-.04 of the Rules and Regulations of the State of Tennessee.

SCOPE OF THE ORDER

VI.

This Order shall apply to the historic disposal site known as Non-Registered Site #83-1324 (the NRS) located at the TVA Gallatin Fossil Plant.

ORDER

VII.

WHEREFORE, I, David W. Salyers, P.E., hereby ORDER TVA to perform the following actions and comply with the conditions set forth below.

A. Completion of Environmental Assessment Report

On January 21, 2016, the Davidson County Chancery Court entered Agreed Temporary Injunction Between the State of Tennessee and Tennessee Valley Authority in the matter of *State of Tennessee et. al. v. Tennessee Valley Authority*, Davidson County Chancery Court No. 15-23-IV. As part of that order, TVA developed and implemented an Environmental Investigation Plan (EIP) for the TVA Gallatin Fossil Plant to fully characterize the hydrology and geology of the site

and identify the extent of soil, surface water, and groundwater contamination by CCR material. In compliance with the Court's Consent Order, TVA shall complete and submit for approval to the Department the Final Environmental Assessment Report (EAR) for the TVA Gallatin Fossil Plant. The Final EAR shall be prepared, and the underlying investigative work shall be completed consistent with the standards of Paragraphs 2 and 3 of the Agreed Temporary Injunction Between the State of Tennessee and Tennessee Valley Authority, entered on January 21, 2016. The Final EAR shall be submitted within 60 days of TDEC's determination of completion of the ongoing environmental investigation.

B. Treatability Test and Field Demonstration

TVA shall conduct a laboratory-based treatability test and, subsequently, a field demonstration aimed at adjusting pH along the NRS boundary adjacent to the Cumberland River to determine whether such an adjustment can be an effective method to meet groundwater protection standards:

- TVA shall prepare and submit to the Department for approval all proposed work
 plans for the proposed treatability test and field demonstration project. TVA
 may submit its plan at any time, but not later than 90 days after the Effective
 Date of this Order. The plan shall include interim benchmarks based on clear
 performance standards.
- 2. The proposed project shall be completed within five years of the Department's approval of the final plan.
- 3. TVA may request and the Department may approve at its discretion for good cause shown extensions of time for the project.

- 4. Prior to the commencement of the project, TVA shall prepare and submit to the Department for approval a plan for continued monitoring of groundwater monitoring wells and discharge locations in the Cumberland River identified through the ongoing environmental investigation pursuant to the parties' Agreed Temporary Injunction. Samples will be analyzed for CCR parameters listed in 40 CFR Part 257, Appendices III and IV along with additional parameters required by the state groundwater monitoring program (copper, nickel, silver, vanadium, and zinc). Samples shall also be analyzed for pH and byproducts of the treatment process or field demonstration approved in the plan. Monitoring shall begin no later than 30 days after the Department's approval of the monitoring plan.
- 5. Following the completion of the project, based on the final EAR and data collected in the field demonstration, TVA shall complete and submit to the Department for approval a Corrective Action/Risk Assessment (CARA) Plan for closure of the NRS and remediation of groundwater contamination. The CARA Plan shall specify all actions TVA proposes and the basis for those actions. As appropriate, the final CARA Plan shall include:
 - i. the method(s) TVA proposes to remove and/or close-in-place CCR material at the NRS;
 - ii. the method(s) TVA proposes to remediate CCR-contaminated soil, surface water, and groundwater at the NRS;
 - iii. the method(s) TVA proposes to restore any natural resources damaged as a result of the CCR wastewater treatment and on-site CCR disposal;
 - iv. a plan for monitoring the air and water in the area during the cleanup process;
 - v. a plan to ensure that public and private water supplies are protected from CCR contamination and that alternative water supplies are provided to local citizens if CCR contamination above groundwater protection standards is detected in groundwater drinking wells;

vi. a plan addressing both the short-term and long-term management of CCR at the NRS, including remediation and stabilization of the NRS with design drawings and appropriate supporting engineering calculations.

The CARA Plan shall include a schedule of activities to be completed by TVA.

- 6. As part of the parties' agreement in *State of Tenn. et. al. v. Tenn. Valley Auth.*, Davidson County Chancery Court Docket No. 15-23-IV, TVA will provide a copy of its proposed CARA Plan to Tennessee Clean Water Network and Tennessee Scenic Rivers Association (the Citizens Groups) at the same time it submits its proposal to the Department for review. The Citizens Groups will have 30 days to provide comments on TVA's proposal to the Department and TVA.
- 7. The Department and TVA shall discuss the draft CARA Plan and any changes the Department may determine are necessary for tentative approval of the plan. Following completion of the Public Involvement process set forth in Section VII.C. of this Order, the Department shall decide to either accept or reject the CARA Plan. Should the Department disapprove the CARA Plan, the Department shall provide comments identifying the deficiencies. TVA shall correct the deficiencies and resubmit the CARA Plan to the Department for final approval.
- 8. TVA shall implement the corrective action for closure of the NRS and remediation of groundwater contamination no later than 30 days after the Department's approval of the CARA Plan.

C. Public Involvement

The Department shall identify opportunities for TVA and the Department to involve the public during the processes of this Order. This shall include providing the Public notice and 30 days to comment before the Department approves the submitted CARA Plan. TVA shall have at least 30 days to provide the Department its responses to the comments received before the Department makes a final determination on the plan under review. After consideration of all public comments and TVA's responses, the Department will approve, request modifications, or reject the proposed CARA Plan.

D. Additional Time

TVA may request a time extension for any deadline in this Order, or in plans approved pursuant to this Order, prior to the deadline. The Commissioner may grant the time extension for good cause shown by TVA.

E. Reimbursement of Costs

TVA shall pay all reasonable costs associated with the Department's 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 (including preparation for and attendance at meetings), and the current State overhead rate. Oversight costs also include expenditures for separate office space and related expenses, services contracted for by the Department that facilitate or support the Department's oversight of work under this Order. The Department shall provide TVA with periodic statements reflecting oversight costs incurred. Within 60 days of the receipt of each such statement, TVA shall pay to the Department the amount invoiced.

F. Point of Contact and Written Communications

The Department and TVA shall designate two individuals to serve as the primary technical and compliance points of contact for implementation of this Order, in writing, sent to the other party. The Citizens Groups shall designate two individuals to serve as the primary points of contact for submission of documents and written communications as detailed in Section VII.B. of this Order. Any party may change a designated point of contact at any time by informing the other parties to the change in writing.

G. Assessment Conferences

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

H. Effective Date

This Order shall become effective 30 days after issuance.

I. Termination of Order

Upon completion of all tasks set forth in this Order, the Department shall issue to TVA a letter stating the requirements of this Order have been fulfilled and no further action of TVA is required under this Order; provided, however, that the Department may terminate the Order earlier if changes in conditions warrant this, including changes in applicable regulations.

ASSESSMENT OF CIVIL PENALTIES

VIII.

If TVA does not meet the requirements of this Order, TVA shall pay the following administrative penalties upon request by the Department:

a. Failure to comply with any specific requirement, including deadlines set forth in this Order or which are specified in schedules that are approved by the Department pursuant to this Order: \$5,000 per noncompliance and \$1,000 for each day until the noncompliance is remedied.

The Department, in its discretion, may waive a potential penalty in whole or in part for good cause including, but not limited to, a showing by TVA that events beyond its control (i.e., a force majeure event such as act of God, acts of war or terrorism, and/or construction, labor, or equipment delays) impeded or prevented it from complying.

SITE ACCESS

IX.

During the effective period of this Order, and until the Department determines that all activities under this Order have been completed, the Department and its representatives or designees, upon presentation of credentials, shall have access during normal business hours and, upon reasonable notice, at non-business hours to the sites listed in Section VI. of this Order. Such access may be for the purpose of monitoring activities; verifying data; conducting investigation; inspecting and copying records, logs, or other documents that are not subject to a legally applicable privilege; and/or conducting other activities associated with the implementation of this Order. Nothing herein shall limit or otherwise affect the Department's right of entry, pursuant to any applicable statute, regulation, or permit. The Department and its representative shall comply with all reasonable health and safety plans published by TVA or its contractor and used by site personnel for the purpose of protecting life and property.

RESERVATION OF RIGHTS

X.

In issuing this Order, the Department does not implicitly or expressly waive any provision of the Tennessee Solid Waste Disposal Act or the regulations promulgated thereunder, or the

authority to assess costs, civil penalties, and/or damages incurred by the State against the Respondent(s). The Department expressly reserves all rights it has at law and in equity to order further corrective action, assess civil penalties and/or damages, and to pursue further enforcement action including, but not limited to, monetary and injunctive relief. Compliance with this Order will be considered as a mitigating factor in determining the need for future enforcement action(s).

NOTICE OF RIGHTS

XI.

Respondent(s) may appeal an Order and Assessment. Tenn. Code Ann. §§ 68-211-113 and -117. To do so, a written petition setting forth the reasons for requesting a hearing must be received by the Commissioner within 30 days of the date the Respondent(s) received the Order and Assessment or the Order and Assessment will become final.

If an appeal is filed, an initial hearing of the matter will be conducted by an Administrative Law Judge (ALJ) as a contested case hearing. Tenn. Code Ann. § 68-211-113; Tenn. Code Ann. § 4-5-301 to -325 (the Uniform Administrative Procedures Act); Tenn. Comp. R. & Regs. 1360-04-01 (the Department of State's Uniform Rules of Procedure for Hearing Contested Cases Before State Administrative Agencies). Such hearings are legal proceedings in the nature of a trial. Individual Respondents may represent themselves or be represented by an attorney licensed to practice law in Tennessee. Artificial Respondents (corporations, limited partnerships, limited liability companies, etc.) cannot engage in the practice of law and therefore may only pursue an appeal through an attorney licensed to practice law in Tennessee. Low-income individuals may be eligible for representation at reduced or no cost through a local bar association or legal aid organization.

At the conclusion of any initial hearing, the ALJ has the authority to affirm, modify, or deny the Order and Assessment. Furthermore, the ALJ on behalf of the Board has the authority to assess additional 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 the ALJ and a court reporter.

Any petition for review must be directed to the Commissioner of the Department of Environment and Conservation, c/o Jenny L. Howard, General Counsel, Department of Environment and Conservation, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 2nd Floor, Nashville, Tennessee 37243. Payments of the civil penalty and/or damages shall be made payable to the "Treasurer, State of Tennessee" and sent to the Division of Fiscal Services - Consolidated Fees Section, Tennessee Department of Environment and Conservation, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 10th Floor, Nashville, Tennessee 37243. Technical questions and other correspondence involving compliance issues should be sent to Robert Wilkinson, State of Tennessee, Division of Solid Waste Management, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 2nd Floor, Nashville, Tennessee 37243. Attorneys should contact the undersigned counsel of record. The case number should be written on all correspondence regarding this matter.

TVA has waived its right to appeal this Order as part of a negotiated settlement agreement.

Department of Environment and Conservation

Reviewed by:

Jonny Howard, BPR# 024480

General Counsel

Department of Environment & Conservation

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