

Questions & Answers on the Administrative Order on Consent for the Tennessee Valley Authority Kingston Fossil Fuel Plant Release

1. Why has EPA taken this action?

When the coal ash spill first occurred at the Kingston Fossil Fuel Plant on December 22, 2008, the Tennessee Valley Authority (TVA), the Tennessee Department of Environment and Conservation (TDEC) and EPA responded jointly to provide an immediate response to the initial emergency caused by the release. Shortly thereafter, on January 12, 2009, TDEC issued TVA a Commissioner's Order under which TDEC has been overseeing TVA's cleanup activities, with the technical review and input of EPA. As response activities have progressed beyond the initial response phase, TVA, EPA and TDEC have collectively determined that, given EPA's specialized expertise in responding to large-scale releases such as the one at Kingston, remaining site cleanup should be conducted under direct and primary EPA oversight. Under the Administrative Order and Agreement on Consent (AOC) entered into by EPA Region 4 and TVA, EPA will oversee TVA's cleanup of the Kingston ash spill, in consultation with TDEC, and will ensure that the cleanup of the site is comprehensive, based on sound scientific and ecological principals, moves quickly, and complies with all Federal and State environmental standards. Under the AOC, TVA commits to continue the removal of coal ash from the site in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the National Contingency Plan, and agrees to reimburse EPA for its oversight costs.

2. Now that EPA is here, who is in charge and who is responsible for what?

In accordance with the AOC, EPA will oversee the cleanup of the Kingston Fossil Fuel Plant release. EPA has designated Leo Francendese as its On-Scene Coordinator for purposes of the time-critical removal actions and Craig Zeller as its Remedial Project Manager for all other response actions to be conducted under the AOC. TVA commits to perform a comprehensive cleanup of coal ash from the Emory River and surrounding areas and has designated Michael Scott as its Project Coordinator. TVA will continue the removal of an estimated 3 million cubic yards of coal ash from the Emory River on an aggressive schedule. TVA's actions will be subject to review and approval by EPA, in consultation with TDEC, to ensure full compliance with CERCLA and the National Contingency Plan as well as state environmental requirements. Under the AOC, EPA may propose changes to TVA's planned response activities and TVA will make revisions based on EPA direction. TVA will reimburse EPA for its oversight costs. Once all removal response actions are complete, the AOC requires TVA to assess any remaining contamination to determine whether additional actions may be needed.

3. How have TVA's roles and responsibilities changed?

TVA remains responsible for performing a comprehensive cleanup of the coal ash released into the Emory River and surrounding areas. Under the AOC, TVA commits to continue the removal of coal ash from the site in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the National Contingency Plan. TVA will develop and submit a Community Involvement Plan as outlined in the AOC. To facilitate public involvement, upon EPA's request, TVA will provide \$50,000 to an eligible community group to contract an independent technical advisor. The purpose of hiring such an advisor is to help the group interpret technical documents related to the non-time critical phases of the cleanup and then share the knowledge gained with the larger community.

4. Why has EPA taken this action now? Is it a coincidence that this order is being signed just after the recent flooding event?

As response activities progressed beyond the initial response phase, TVA, EPA and TDEC collectively determined that, given EPA's specialized expertise in responding to large-scale releases, remaining site cleanup should be conducted under EPA's direct oversight. TVA and EPA, in consultation with TDEC, have been in discussions pertaining to the AOC for some time. The AOC was issued by EPA and entered into by TVA as soon as both agencies reached agreement on the terms contained therein.

5. Why is the response being conducted under CERCLA authority?

TVA and EPA agree that in order to ensure that the environmental impacts associated with the release are thoroughly assessed and that appropriate response actions are taken as necessary to protect human health and the environment, to provide for a structured process for public involvement, and to ensure that the response actions satisfy all federal as well as state environmental requirements, it is advisable and beneficial for EPA and TVA to enter into the AOC providing for the cooperative implementation of response actions at the site pursuant to the CERCLA and the National Contingency Plan. Over more than 25 years of EPA response experience, CERCLA has proven to be a highly effective tool in addressing large-scale releases and their environmental impacts, while providing the public with an appropriate role in cleanup decisions.

6. How does this action impact the Commissioner's Order?

Tennessee's Order will remain in place and enforceable. The state is committed to working closely with EPA and TVA to avoid duplication of effort.

7. What is the timeline for completing the cleanup?

It has been estimated that it will take between two and three years to complete the removal of coal ash from the Emory River. EPA's and TVA's goal in entering into the AOC is to substantially improve on that estimate. TVA will also remove coal ash

from impacted surface soils and the embayments, and will restore area waters impacted by the coal ash release. A schedule for these longer-term activities will be proposed by TVA for EPA's approval as part of the non-time critical removal process.

8. What are the next steps?

Within five days of the effective date of the AOC, TVA will begin submitting work plans for time-critical removal actions. Within 90 days, TVA will begin submitting proposals for longer term, non-time critical removal actions. EPA and TDEC experts will review all proposed response actions and work plans, and EPA will require any necessary revisions and approve all proposed actions and final work plans. Work plans for time-critical removal actions will be made available to the public for comment once they have been approved. A public comment period on proposed non-time critical removal actions will be provided before the removal actions are selected.

9. Will taxpayers foot the bill for the cleanup now that EPA has taken over?

No. EPA's costs associated with the cleanup will be reimbursed by TVA in accordance with the AOC.

10. What opportunities will there be for public comment and involvement?

The degree of public involvement that will be provided on response actions taken under the AOC will vary depending on the nature of the actions. Under the AOC, the removal of ash from the Emory River and the area east of Dike 2, is designated as a time-critical removal action. It is important that the bulk of the ash be removed from these areas as quickly as possible in order to minimize the further suspension and downstream migration of the ash. Similarly, there are other response actions, such as storm water management, dust control and air monitoring, which are designated as time-critical in the AOC because, in EPA's judgment, they need to take place immediately. While the public will be provided an opportunity to comment on time-critical response actions, the comment period will occur after the actions are selected and will not delay the initiation of those actions. However, for the remaining, less time-sensitive response actions at the site, including removal of the ash from the embayments and surface areas, and restoration of affected area waters, the public will be provided with an opportunity to review and comment on proposed response actions before decisions are made on those actions. The public will be notified via press announcements, fact sheets, and the website, whenever a public comment period opens; and they will then have thirty (30) days to review and provide comments to EPA.

TVA is also required to develop and submit a Community Involvement Plan (CIP) as outlined in the AOC. This plan will include specific activities that will be used to address community concerns and expectations. At a minimum, the CIP should

include, but not be limited to, the use of the following communication tools and activities:

- Press Announcements;
- Fact Sheets;
- Website;
- Public Meetings/Availability Sessions;
- Central Information Contacts;
- Door-to-Door Outreach;
- Restoration Advisory Board;
- Technical Assistance Program

To facilitate public involvement, at EPA's request, TVA will provide a \$50,000 award to an eligible community group to contract an independent technical advisor. The purpose of hiring such an advisor is to help the group interpret technical documents related to non-time critical response actions and then share the knowledge gained with the larger community.

11. What are the health and environmental risks associated with the coal ash release site?

Currently, the site has controls in place to limit exposure to humans and ecological receptors, but if those controls are not continued or if site conditions change, potential exposure to high concentrations of metals could present unacceptable risks to humans and the environment.

Direct skin contact with ash may cause localized irritation. Washing affected areas and removing and washing clothing are simple steps to take to remove the irritation.

Breathing airborne particulates including coal ash over long periods of time can irritate the respiratory system. People with existing lung diseases such as bronchitis, emphysema, and chronic obstructive pulmonary disease (COPD) should avoid breathing coal ash dust.

When suspended solids such as sediments and ash settle out on the bottom of rivers and streams, they can smother aquatic life and make the river bottom unsuitable for aquatic insects. Fish eggs can also be smothered, decreasing oxygenation to the point where they do not survive. Properly managed dredging will remove the ash from the bottom of the river and return the river to its natural state.

Monitoring from drinking water and air samples falls within regulatory levels. Prevention of exposure to contaminants present in the ash by continuing controls at the site and by not leaving the ash in place will continue to protect human health and the environment around the site.