



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## INFORMATION UPDATE – KERR RESERVOIR

### Eden North Carolina Ash Spill

### Eden, Rockingham County, NC

No. 4

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*This site information update summarizes the response, ongoing activities, and next steps.*

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#### **For additional information regarding this Site please visit:**

<http://epa.gov/region4/duke-energy/index.html>

[www.vdh.state.va.us](http://www.vdh.state.va.us)

[www.deq.virginia.gov](http://www.deq.virginia.gov)

<http://portal.ncdenr.org/web/guest/dan-river-spill>

[www.epi.publichealth.nc.gov](http://www.epi.publichealth.nc.gov)

[www.fws.gov/contaminants](http://www.fws.gov/contaminants)

[www.epa.gov/coalashrule](http://www.epa.gov/coalashrule)

<http://www.duke-energy.com/Dan-River/>

#### **Response History**

On Feb. 2, officials estimate up to 39,000 tons of coal ash spilled into the Dan River at Eden about 80 miles upstream from the Kerr Reservoir. Ash or grey colored water was seen in the reservoir just a few days after the coal ash spill. There is a collaborative effort between numerous agencies to ensure that a thorough assessment is conducted in order to protect human health and the environment. This group includes EPA, North Carolina Department of Natural Resources (NCDENR), Virginia Department of Environmental Quality (VADEQ), North Carolina Department of Public Health (NC DPH), Virginia Department of Health (VDH), United States Fish and Wildlife Services (FWS) and Army Corp of Engineers (ACOE) along with county and local partners along the Dan River and Kerr Reservoir.

#### **Risk Screening**

EPA continues to conduct extensive sampling of water and sediment for metals of concern which may be present in coal ash, such as arsenic and selenium, all along the Dan River and into Kerr Reservoir. Based on consultations with the U.S. Army Corps of Engineers, several key locations were identified for sampling in and near the reservoir. These include, but are not limited to, the confluence of the Dan and Staunton Rivers, Buffalo Swim Beach, Buffalo Creek Point, and Clarksville. Once surface water and sediment samples are analyzed for these contaminants, the results are compared to the EPA's screening levels to evaluate potential impacts to human health and the environment.

#### **Potential Impacts to Human Health**

To determine if there are potential impacts to human health, water and sediment data collected from the Kerr Reservoir are being compared to human health risk-based screening levels based on a potential recreational exposure. There have been no exceedances in human health screening in the surface water samples collected from Kerr Reservoir for contaminants of concern from the coal ash. A few sediment samples had slight exceedances of screening levels for iron, thallium, and chromium. These contaminants are not an indicator of ash and may likely be from another source. EPA has provided these results to North Carolina Department of Health and the Virginia Department of Health, for further review. EPA will continue to assess at these locations. Please note that direct contact or ingestion of untreated lake water could potentially expose an individual to contaminants not associated with coal ash such as bacteria or viruses.

It should be noted that prior to the coal ash spill, portions of the Dan River and Kerr Reservoir were already under fish consumption advisories due to the presence of contaminants not related to the coal ash spill. Those advisories remain in place. For more information on fish consumption advisories for Virginia and North Carolina, please visit:

- [www.vdh.virginia.gov/epidemiology/DEE/PublicHealthToxicology/Advisories/](http://www.vdh.virginia.gov/epidemiology/DEE/PublicHealthToxicology/Advisories/).
- <http://epi.publichealth.nc.gov/oe/fish/advisories.html>.

As a precautionary measure, the EPA recommends that if you come in direct contact with any substance that you believe to be coal ash, wash it off with soap and water.

#### **Ongoing Activities**

Beginning early April, the EPA started collecting sediment samples for Polarized Light Microscopy (PLM) analysis. In this analytical method, samples are examined under a microscope by a trained analyst to visibly identify and count the types of material present (sand, clay, coal ash, etc.). The purpose of PLM analysis is to identify what percentage ash may be present in a sediment sample. Eleven locations were sampled from the Staunton River State Park and into the Kerr Reservoir. All PLM data collected to date in the Kerr Reservoir is non-detect for coal ash.

#### **Next Steps**

Sampling of water quality, sediments and fish tissues will continue in Kerr Reservoir for as long as it is necessary to make sure the lake is safe for recreational uses. Collection of samples is being conducted by an interagency team that includes specialists with the VADEQ, NCDENR, FWS, and EPA.