

## **Dan River Coal Ash Spill FAQ**

### **NOTIFICATION**

#### **When was DENR notified of the spill?**

- Duke Energy reports that a break in a stormwater pipe beneath an ash basin at the retired Dan River Steam Station in Eden was discovered on the afternoon of Feb. 2.
- A separate state agency, the N.C. Department of Public Safety's Division of Emergency Management, was notified by Duke Energy at 6:53 p.m. Feb. 2. The EM43 report, which is used to record reports of emergencies in North Carolina, stated in an Event Description that "Duke Energy reported the release of an unknown amount of wastewater due to a busted line. An unknown amount made it's [sic] way into the Dan River, which is not a source of drinking water. Duke Energy will conduct cleanup and repair operations over the next few days."
- DENR was first notified of the coal ash spill at about 8 a.m. Feb. 3 when a DENR staff member in the Winston-Salem Regional Office received a phone call regarding the spill from a Duke representative.

#### **Did Duke Energy meet state laws regarding notification of the spill?**

- Yes, Duke Energy met the requirements for notifying the N.C. Department of Environment and Natural Resources. As required by state law and their federally mandated National Pollution Discharge Elimination System wastewater permit, Duke must notify the department within 24 hours of an incident occurring and issue a press release within 48 hours. Duke issued a press release about 4 p.m. Monday. DENR issued a news release at 5:32 p.m. Feb. 3.

#### **Has DENR publicized its concern and the actions it has taken to respond to the spill?**

- Yes. As of March 25, DENR has issued 35 news releases (the first was issued at 5:32 p.m. Feb. 3) to media statewide and across the nation. News releases have updated the department's immediate and ongoing response, including water quality sampling results, the launch of a department task force, the department's on-going investigation of all Duke Energy's coal ash impoundments in North Carolina, the status of lawsuits the state has filed against Duke Energy prior to the coal ash spill, and the agency's work with other federal and state partners in its response to the Dan River spill.
- DENR public affairs staff has created a webpage and regularly update it with maps of water quality sampling locations, a timeline of events, photos, videos, documents and news releases. The web page also includes links to other agencies, including the EPA and the U.S. Fish and Wildlife Service.
- The agency's public affairs staff has established a command post to coordinate the gathering of information about the incident and to release the latest information to media, interested parties, and agencies and others with whom the department is working on this spill.
- DENR staff members have responded to dozens of interviews from media throughout North Carolina. The agency has responded to media from The New York Times, CNN, Los Angeles Times, Bloomberg, Newsweek, Wall Street Journal, National Public Radio, the Associated Press, Reuters, Christian Science Monitor, Al Jazeera America, numerous environmental and political blogs, business journals, and dozens of media in North Carolina and Virginia.

## **WATER QUALITY SAMPLING**

### **Who's doing the water sampling in the Dan River?**

- DENR, EPA, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Virginia Department of Environmental Quality, Duke Energy and downstream municipalities are all conducting water quality testing.

### **Where is DENR sampling in the Dan River?**

- Beginning Feb. 3, DENR sampled at four locations, one upstream (Hwy. 14) and three downstream (Draper Landing, Milton, N.C., and the Virginia line) of the spill. DENR has also collected sediment and water samples downstream of the spill. DENR collected the sediment samples at the bottom of the Dan River 100 yards from the site of the spill and in North Angler Park near Danville, Va. DENR has continued to collect water samples at the same locations previously publicized and added additional water quality sampling locations, including at the Kerr Lake Reservoir in Virginia. For specific locations, please see the map on DENR's [Dan River Spill website](#).

### **How did DENR decide on those locations to conduct water quality sampling?**

- The initial sampling sites are located at bridges that allowed quick access as the spill progressed and provided information on upstream and downstream conditions. Initial water quality sampling sites also were chosen downstream of the spill site to give DENR and the EPA a clearer picture of how the spill was affecting the health of the river where the sediment was mixing with the river water. All of DENR's sampling is being coordinated with the Environmental Protection Agency. Sediment sampling sites were chosen to better characterize sediment distribution and contamination near the spill and near Danville. Federal authorities are also monitoring the riverbed at and between these sites.

### **What do DENR's sampling results tell you about the spill's impacts or possible impacts?**

- That continued monitoring is warranted, that the ash may concentrate unevenly and that instream concentrations appear to be decreasing.
- That the Dan River does not have a clean bill of health. DENR is concerned about the deposition of coal ash residuals in riverbed sediment and how that could affect the health of the river in the long term. DENR has publicized its concerns about the long-term health of the Dan River since the state agency's first water quality sampling results were released to the public.
- The sampling DENR is conducting and the results our agency and other agencies see will better inform the agency about our short-term and long-term cleanup efforts in the Dan River.

## **DENR'S ACTIONS**

### **What has DENR done to respond to the coal ash spill?**

- Staff members in the N.C. Department of Environment and Natural Resources were on-site at the Dan River Steam Station within hours of notification and have been an almost constant presence at the site, working to gathering information, test for downstream water quality. Sediments and fish tissues.
- DENR staff members have been monitoring water quality upstream and downstream of the spill in order to determine the potential short-term and long-term impacts to public health and the aquatic environment in the Dan River.
- DENR has taken its own water quality samples, which were analyzed in the state laboratory

and released to the public. The results of those tests are being shared with the public through news releases, email, website postings and social media.

- DENR has been working with the EPA, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Virginia Department of Environmental Quality and Duke Energy to characterize the deposition and composition of the coal ash in the river and along the river banks.
- These same agencies continue to coordinate sampling efforts and share results to assess impacts to water quality, river and lake health, and appropriate next steps to address any impacts.
- At this time, the agencies are sampling water chemistry, sediments along the river banks and the river bed to collect information about aquatic life, including aquatic insects and fish communities.
- Coal ash sediment contains metal residues from the coal burning process. The agencies are working to accurately characterize the composition of coal ash sediments in the Dan River basin and assess potential effects.
- Staff members in the agency's public water supply section have been in regular contact to verify that raw water can be treated to meet all applicable federal Safe Drinking Water Act standards. The agency has been in close contact with public water supply officials in downstream municipalities, including Danville, Va. (the closest public water supply to the spill) and other public water supplies that could be affected by the coal ash spill.
- Officials in DENR's Dam Safety Program evaluated conditions of the containment dam around the coal ash lagoon. Duke Energy is operating under emergency provisions under the Dam Safety of 1967 to stabilize and repair the embankment that has been compromised on the western side of the ash pond.
- DENR Public Affairs staff members have launched a new website, used social media and issued news releases to regularly update the public and media on the agency's key actions.

#### **How does the Dan River spill compare to the TVA coal ash spill?**

- By comparison, the TVA event had much greater impacts. The TVA spill on Dec. 22, 2008 was the result of an ash dam failure that resulted in the release of 1.1 billion gallons of coal ash slurry. The spill caused the slurry (a mixture of coal ash and water) to travel across the Emory River and its Swan Pond embayment and onto the opposite shore, covering up to 300 acres of the surrounding land. The wave of slurry covered 12 homes, pushing one entirely off its foundation, and caused damage to 42 residential properties. It also washed out a road, ruptured a major gas line, obstructed a rail line, downed trees, broke a water main and destroyed power lines. The Dan River spill was the result of a stormwater pipe break underneath the coal ash pond, releasing approximately 38,000 tons of coal ash into the Dan River.

#### **Who has authority to investigate the Dan River spill?**

- State and federal agencies, including the EPA, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers and Virginia Department of Environmental Quality are all investigating the extent of the spill and environmental impacts to the Dan River. Each agency has a different responsibility in the clean-up effort. DENR's main goal is to protect public health and the waters in North Carolina.

#### **What is DENR investigating?**

- DENR is investigating the impacts to the Dan River, including metals that may be present in the water column, sediment along the banks and in the river, and information about aquatic life such as aquatic insects and fish communities.

**When can the investigation begin?**

- The investigation began immediately after DENR was notified of the spill by Duke Energy on Feb. 3. The investigation is ongoing. DENR will remain actively involved for however long it takes to ensure compliance during repairs and throughout cleanup.

**Will DENR be investigating the possibility of any crimes involved with this spill?**

- In the immediate future, DENR is focused on oversight of repair efforts and monitoring impacts to water quality and the health of the river. DENR will evaluate and determine if actions leading to the spill were negligent.

**Does DENR intend to fine Duke Energy or take any other enforcement actions?**

- Yes, DENR does expect to fine the utility as appropriate. However, DENR's first priority is to seek resource recovery through prompt, voluntary restoration of the damaged area. Following a thorough investigation of the incident, and a plan for resource recovery, the department will consider the appropriate enforcement action to take.

**Hasn't DENR already taken enforcement actions?**

- Yes, DENR has issued several notices of violation for permit violations at the Dan River plant and other plants with coal ash impoundments in North Carolina. You can learn more about those violation notices on our webpage devoted to the Dan River Spill: <http://portal.ncdenr.org/web/guest/dan-river-spill>.

**What types of enforcement actions could DENR pursue against Duke Energy?**

- DENR can issue a notice of violation against Duke Energy and assess civil penalties based on numerous factors, including the severity of the event and the types of violations. For example, turbidity, arsenic, and the discharge itself could be considered separate violations. Civil penalties are fines assessed against a responsible party for violation(s) of environmental regulations. North Carolina General Statute 143-214.5(c) requires that specific assessment factors be considered to determine the penalty amount.

**What is DENR doing to address coal ash impoundments throughout the state of North Carolina?**

- DENR has established a task force made up of specialists within the regulatory arm of the agency to explore what actions the agency can take to address coal ash impoundments statewide.
- Since the Dan River coal ash spill, DENR has also reopened environmental permits at several facilities. The agency intends to modify the permits to require Duke Energy to eliminate all unauthorized discharges and potentially move coal ash from the impoundments to lined landfills away from waterways. DENR staff members have also conducted thorough inspections of all 33 coal ash impoundments in North Carolina. The agency is also asking Duke Energy to provide engineering and emergency action plans and maps for the facilities and videos of the insides of all pipes at the impoundments.
- DENR's goal is to use the information gained through our requests and inspections to determine the best approach to address the coal ash impoundments in the future.