



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

**Subject:                   Situation Report (SitRep) # 14**

**Eden NC Coal Ash Spill  
Lat: 36.4958644, Long: -79.7220632**

**To:                         Distribution List**

**From:                    Region 4 Regional Emergency Operations Center**

**Reporting Period:    1600 02/17/2014 to 1600 02/19/2014**

**Introduction**

<b>Site Name:</b>	<b>Eden NC Ash Spill</b>	<b>Location:</b>	<b>Eden, NC</b>
<b>Incident Date:</b>	<b>02/03/2014</b>	<b>Site ID:</b>	<b>B41W</b>
<b>Mobilization Date:</b>	<b>02/03/2014</b>	<b>Start Date:</b>	<b>02/03/2014</b>

**Background**

While conducting a routine security inspection at approximately 1500 hrs on February 2, 2014, security officials at the Duke Energy Plant located in Eden, North Carolina noticed a drop in the levels of the primary coal ash pond. Duke Energy's Environmental Division conducted a subsequent inspection and identified a coal ash release into the Dan River through a storm sewer management pipe. The pipe runs beneath the coal ash pond and drains rainfall off the facility. The pipe is not part of the ash management system. Initial efforts by Duke Energy to stop the flow were unsuccessful, and the North Carolina Department of Environment and Natural Resources (NCDENR) was notified of the release later in the day on February 2, 2014. Upon responding to the scene, NCDENR notified the United States Environmental Protection Agency (EPA) Region 4 and requested EPA assistance in the oversight of cleanup activities. Following coordination with the EPA Region 4 Telephone Duty Officer, two On-Scene Coordinators (OSC)s were deployed to the scene from Atlanta, Georgia. Due to proximity and the potential for cross-regional impacts, an OSC was deployed from EPA Region 3 to provide additional assessment and oversight support.

## **Current Activities**

The following activities occurred during this reporting period:

### **Unified Command**

- EPA Region 4, Duke Energy (Duke), North Carolina Department of Environment and Natural Resources (NCDENR), the US Fish and Wildlife Service (FWS), and the Virginia Department of Environmental Quality (VDEQ) continue to be part of the Unified Command (UC). FWS is providing support from offsite.
- EPA Region 4 Science and Ecological Support Division (SESD) personnel are on site conducting sediment and water quality sampling.
- Websites
  - EPA Site information can be found at <http://epa.gov/region4/duke-energy/> and [http://www.epaossc.org/site/site\\_profile.aspx?site\\_id=9065](http://www.epaossc.org/site/site_profile.aspx?site_id=9065)
  - Duke Energy Site information can be found at <https://www.duke-energy.com/power-plants/coal-fired/dan-river-response.asp>
  - NCDENR Dan River Site Information can be found at <http://portal.ncdenr.org/web/guest/dan-river-spill>
  - VDEQ Dan River Site Information can be found at <http://deq.virginia.gov/ConnectWithDEQ/EnvironmentalInformation/NorthCarolinaCoalAshSpill.aspx>

### **SPECIAL WEATHER MESSAGE**

- The Dan River level remains elevated due to the snow melt from the recent storm.

### **Drinking Water Treatment Plants Status and Sampling**

- The increased river flow from last week's snowfall and rain threatens to entrain ash further down the river. EPA and state partners are in communication with the water treatment plants (WTPs) to determine if any additional ash is showing up in their flocculation basins. The Danville WTP did report an increase in the turbidity of the river water. They will continue to monitor the situation and report any problems.
- SESD collected pre- and post-treatment samples at the South Boston WTP on Tuesday, 02/18/2014.
- START collected pre- and post-treatment samples at the South Boston WTP on Tuesday, 02/18/2014.

- START will collect drinking water and surface water samples from Clarksville WTP tomorrow.
- No impacts to drinking water have been reported by either the Danville or South Boston water treatment facilities.
- The EPA Region 3 OSCs continue to communicate with downstream WTPs, Virginia Department of Health, and Virginia Department of Emergency Management.
- START is currently validating and managing sample data as it is received from the laboratory. New summary data tables will be posted soon.

### **Surface Water and Sediment Sampling**

- SESD collected surface water and sediment samples on both Tuesday, 02/18/24 and today. They will continue this sampling tomorrow.
- NCDENR collected from their 5 standard locations both Tuesday, 02/18/24 and today. The NCDENR locations are generally accessible without a boat.
- START collected surface water sample from the 36" storm water line the runs under the primary ash basin
- START is currently validating and managing sample data as it is received from the laboratory. New summary data tables will be posted soon.

### **Fish Tissue Studies**

- VA DEQ is currently developing plans to conduct fish tissue sampling up-river from the Danville dam.

### **Mitigation Activities**

- EPA, NCDENR, VADEQ, Duke Energy attended a river clean up planning meeting with various state, federal and local response partners.
- Duke Energy continues with their grouting plans of the 48" storm water drain. They completed a first pour of approximately 200-300 linear feet and are relocating to a different location to complete the second pour.
- On 02/18/2014, NC DENR ordered Duke Energy to immediately halt unauthorized discharges of groundwater containing elevated levels of arsenic from a second 36-inch

concrete storm water pipe beneath the coal ash basin. This 36" was identified by EPA and NC DENR as a potential issue last week. Both EPA and NC DENR are conducting additional sampling to characterize the impacts of this discharge to water quality in the Dan River. NC DENR will evaluate this most recent violation in connection with all pending enforcement actions related to the coal ash spill.

- On 02/19/2014 crews installed a cofferdam with sump pumps and a vacuum truck to contain and pump the water from this outfall to the primary ash basin similar to the setup installed initially on the 48" outfall. They currently have approximately 90-95% containment of this water. They are currently reworking the setup to achieve 100% containment. Plans are currently in development to install a concrete plug similar to the 48" line. No ETA on this operation as of yet. They also have plugged the 36" inlet with a pneumatic plug. Storm water from the detention area is not entering the inlet to the 36" pipe and will be pumped out by A+D Environmental.
- A third storm water outfall to the Dan River, up-river from the release locations was sampled and the preliminary results have been received. NC DENR is reviewing the current NPDES Permit and evaluating this discharge.
- EPA and NC DENR are reviewing the current NPDES permit for the site and determining if there are any additional non-permitted discharges that need to be addressed.
- Duke's contractors did not attempt any ash removal today as the increased water levels made it unsafe and likely ineffective. Water levels are an estimated 3 feet higher than when the spill occurred, placing the ash in deeper water. Crews will not attempt again until the water levels return to normal.

### **Public Information and Community Involvement**

- The EPA Region 4 Community Involvement Coordinator (CIC) is engaged with Duke Energy developing site-specific information updates to inform the community of on-going activities. The EPA Region 4 Office of External Affairs continues to be actively engaged in fulfilling information requests in coordination with external affairs programs in EPA Region 3 and EPA Headquarters.
- EPA OSC and CIC meet with the City of Eden Mayor today.
- The Eden, NC community briefing will be on February 19<sup>th</sup>. The South Boston, VA community briefing is confirmed for February 20<sup>th</sup>.
- The EPA Region 4 continues to share validated sampling results with our response partners. Region 4 released a second information sheet. Validated data is prepared for public release in

coordination with the Region 4 Regional Emergency Operations Center, Region 4 Office of External Affairs, and EPA Headquarters on the incident-specific website.

- Duke and NCDENR analytical results are posted on their websites.

### **Personnel and Work Schedules**

- Duke Energy crews are working two 12 hour shifts :
  - 0700 hours – 1900 hours
  - 1900 hours – 0700 hours
- EPA and contractor personnel are now on one 12-hour shift per day, 0700-1900 hours.

### **CURRENT EPA PERSONNEL ON SITE:**

- REGION 4: 2 On-Scene Coordinator, 1 CIC
  - Perry Gaughan will take over EPA response and assessment operations on Friday, 02/21/2014 and Kevin Eichinger will de-mobilize back to Atlanta.
- REGION 3: 1 On-Scene Coordinators, 1 PIO
- 6 SESD
- 0 EPA ERT Technical Specialist
- 3 Superfund Technical Assessment And Response Team (START)

### **STATE Reps**

- NCDENR 1
- VA DEQ 1

### **Other Federal**

- 0 US Fish and Wildlife

### **Regional Emergency Operation Centers**

- Region 4 REOC personnel are assisting in production of SitReps and providing logistical and resource support.
- Region 3 REOC personnel are coordinating resource and situational support with field personnel and EPA Region 4 REOC.
- The Region 4 Technical Services Section is reviewing sampling results and providing suggestions for additional analyses and comparative values.
- Region 4 External Affairs is working closely with EPA Headquarters to stand up an EPA website for viewing of site information, including summaries of EPA analytical data.
- Region 4 media and regulatory programs are providing support as necessary as requested by the on-scene Incident Management Team.

#### **ATTACHMENTS**

Facility Layout Map

Updated Unified Sampling Location Map

Updated Sample Count Summary

**Situation Updates are currently being posted by 1700 each day. ERRB, in consultation with Region 3 and our State partners, has determined that due to a stabilization of site activity, a downgrading of the number of personnel involved, and the transition into a long-term removal action, SitReps will be produced on a 48-hour basis for the next week, at which time another assessment will be performed.**