



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

**Subject:                   Situation Report (SitRep) # 12**

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

**To:                         Distribution List**

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

**Reporting Period:    1600 02/15/2014 to 1600 02/16/2014**

**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 OSCs 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), and the US Fish and Wildlife Service (FWS), the Virginia Department of Environmental Quality (VDEQ) continue to be part of the Unified Command.
- EPA Region 4 Science and Ecological Support Division (SESD) personnel are on site conducting sediment and water quality sampling activities.
- EPA Environmental Response Team (ERT) is assisting UC with planning for near term removal activities associated with the river.
- 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>
  - VADEQ Dan River Site Information can be found at <http://deq.virginia.gov/ConnectWithDEQ/EnvironmentalInformation/NorthCarolinaCoalAshSpill.aspx>

### **Special Message**

- 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 WTPs to determine if any additional ash is showing up in their flocculation basins. The Danville WTP has reported an increase in the turbidity of the river water. The levels are somewhat higher than expected with the increased river flow, but still only about 20% of the levels seen immediately after the spill. The plant reports that flocculation is effective in removing this sediment. They will continue to monitor the situation and report any problems.
- The US Army Corps of Engineers (COE) is holding water back at the Phillpot Dam upstream of the spill site and have committed to do so at least until Monday.
- The river is expected to crest today, and water levels will drop starting tomorrow. However, releases from the Philpot Dam may counter this drop.

## **Water and Sediment Sampling**

- START collected a sediment and water sample from a stormwater outfall just downstream of the spill site. Residents report a strange orange color to the rocks at the outfall, and they were worried that it might have something to do with the spill. While EPA personnel and contractors on site believe the discoloration on the rocks is due to high iron content in the runoff, a samples of the water and sediment were collected.
- SESD collected two high-water background samples today from location upriver of the spill site.
- SESD will collect post- and pre-treatment water samples from the Danville WTP tomorrow and the South Boston WTP on Tuesday.
- 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.
- All EPA sampling results will be posted on <http://epa.gov/region4/duke-energy/>

## **Coal Ash Basin Sampling**

- The EPA has received the results of the ash basin samples from SESD. The ash was analyzed for total VOCs, SVOCs, and metals. The sample results were not compared to any health-based criteria, and are only useful in determining downstream constituents of concern. These results have been posted on the epa.gov website.
- START is currently validating another batch of coal ash samples, which included analyses for bromides and chlorides.

## **Mitigation Activities**

- Duke Energy continues with their grouting plans of the storm water drain. On site crews continue with storm water, excavation well and pipe vacuum monitoring. The sandbags employed yesterday were effective in holding back the surface runoff and excavation activities have resumed.
- The scaffolding surrounding the outfall for the 36-inch stormwater pipe that NCDENR has requested Duke close is too unstable to safely access. Duke is working on plans to shore up the scaffolding.

- Analysis of NCDENR's samples of the 36-inch outfall have been delayed due to laboratory machine maintenance. NCDENR hope to begin the analysis within the next few days.
- Duke's contractors attempted to collect ash from the river's edge today, but high water and swift current made it too difficult and unsafe. 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 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.
- 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**

- Crews are working two 12 hour shifts :
  - 0700 hours – 1900 hours
  - 1900 hours – 0700 hours

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

- 1 Region-4 On-Scene Coordinators, 0 CIC
  - Shift change to occur tomorrow with OSC Eichinger replacing OSC Williamson.
- 0 Region-3 On-Scene Coordinators, 0 PIO
- 9 SESD
- 0 EPA ERT Technical Specialist
- 3 START

### **STATE Reps**

- NCDENR 1
- VA DEQ 0

### **Other Federal**

- 1 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

Unified Sampling Location Map

**Situation Updates are currently being posted by 1700 each day. ERRB will evaluate the necessity of daily situation reports during the next reporting period.**