



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

**Subject:                   Situation Report (SitRep) # 6**

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

**To:                         Distribution List**

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

**Reporting Period:    1600 02/08/2014 to 1600 02/09/2014**

**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 remains in Unified Command with Duke Energy (Duke), North Carolina Department of Environment and Natural Resources (NCDENR), the Virginia Department of Environmental Quality (VDEQ), and the US Fish and Wildlife Service (FWS).
- 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.
- EPA Site information can be found at [http://www.epaos.org/site/site\\_profile.aspx?site\\_id=9065](http://www.epaos.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>

### **Water and Sediment Sampling**

- Water quality sampling is being conducted by Duke, NCDENR, EPA-SESD and the EPA Region 4 START Contractor Tetra Tech. Sampling locations include the spill source, several downstream locations, and potable water intakes at the Danville and South Boston, Virginia, water treatment plants (WTP). Duke, and NCDENR sampling results can be found at the aforementioned web sites. EPA Region 4 is developing an EPA website for distribution of EPA analytical data and other site information.
- SESD revised their sampling density from ½ mile intervals to full 1 mile intervals along the Dan River. The purpose of the sampling is to document the extent and thickness of the ash plume and collect particle sizing information which will be used to develop a distribution model for the plume.

On February 7<sup>th</sup> and 8<sup>th</sup>, one SESD water sampling team collected 10 samples from 10 river miles starting at the release point. One background sample was taken 1.5 miles upstream from the discharge point. Another crew began sampling at the Danville Dam and worked their way back towards the facility down 4 river miles, collecting 4 additional samples.

- NCDENR continues to collect water quality samples and added an additional sampling point for a new total of at four locations, one upstream of the Duke facility and three downstream. The furthest downstream location collected by NCDENR is located at the Virginia/North Carolina border. Sample results are pending.
- VDEQ is currently assessing the need to begin river sampling on their side of the border and reports that they may begin early next week.
- 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 and Virginia Department of Health.

### **Coal Ash Basin Sampling**

- The EPA is waiting for results from the two samples collected from the primary coal ash basin. Samples collected will be analyzed for benzene/toluene/ethylbenzene/xylene (BTEX), Total Metals, Toxicity Characteristic Leachate Procedure (TCLP) Metals,

### **Mitigation Activities**

- Duke determined that the installed permanent plug at the discharge point end of the breached sewer pipe was sufficiently cured to allow the resumption of excavation activities at 1630, February 8<sup>th</sup>. A drain line was installed inside the plug in order to relieve head pressure during the curing process and to facilitate the complete grouting of the pipe. The water from this line is being collected and pumped back into the ash pond. There is currently no active release into the river.
- Based on the results of the grout cure, Duke resumed excavation of the damaged line beneath the ash cell. Once it is completely uncovered, Duke will grout the entire length of the pipe and permanently reroute the drainage around the ash pond.
- Duke has identified an area of exposed ash near the facility outfall. Estimated at 250 cubic yards, Duke is developing plans to remove the ash using a physical removal methodology and a filter skirt to protect the waterway from additional impact. This area represents approximately 1% of the estimated release. State and Federal partners have been updated on the proceedings and have expressed no reservations with the proposed action.

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

- The EPA Region 4 CIC is engaged with Duke Energy developing site-specific facts sheets 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 EPA Region 4 has received validated sampling results and has submitted a second information sheet for OEA review prior to public release.
- Duke has received analytical results back and has posted the data on its website, referenced above.
- Region 3 has provided a designated Public Information Officer (PIO) for the incident.
- A Community Briefing will be held in Danville Tuesday evening. Additional Briefings are planned for Eden on Wednesday, and South Boston on Thursday.

### **Personnel and Work Schedules**

- Crews are working two 12 hour shifts :
  - 0700 hours – 1900 hours
  - 1900 hours – 0700 hours
- Current EPA Personnel On Site:
  - 3 Region 4 On-Scene Coordinators, 1 CIC
  - 3 Region 3 On-Scene Coordinators, 1 PIO
  - 5 SESD
  - 1 EPA ERT Technical Specialist
  - 4 START
  - 1 QSI Contractor Support
- Personnel rotations were instituted for the Operations Section Chief and the Planning Section Chief today.
- Matt Taylor will be the R4 ERRB point of contact for the week of February 10-14, 2014.

### **STATE Reps**

NCDENR	1
VA DEQ	1

## **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. The Region 4 REOC will begin drafting content for the page to explain data and methodologies in simple language for public consumption.
- Region 4 media and regulatory programs are providing support as necessary as requested by the on-scene Incident Management Team.
- The Incident Command and R4 REOC are currently devising a workflow for all data, which will track the approvals and review process from collection to public release.

## **ATTACHMENTS**

Facility Layout Map

Unified Sampling Location Map

Duke Energy Sampling Location Map

**Situation Updates are currently being posted by 1700 each day.**