

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Eden NC Coal Ash Spill - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region IV

**Subject:** POLREP #8  
Coal Ash Assessments continue on the Dan River  
Eden NC Coal Ash Spill  
B41W  
Eden, NC  
Latitude: 36.4878601 Longitude: -79.7189733

**To:**  
**From:** Ken Rhame, Region 4 OSC, Myles Bartos, Region 3 OSC,  
**Date:** 5/10/2014  
**Reporting Period:** April 14th thru April 19th, 2014

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	B41W	<b>Contract Number:</b>	
<b>D.O. Number:</b>		<b>Action Memo Date:</b>	
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	Emergency
<b>Response Lead:</b>	PRP	<b>Incident Category:</b>	Removal Assessment
<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	2/3/2014	<b>Start Date:</b>	2/3/2014
<b>Demob Date:</b>		<b>Completion Date:</b>	
<b>CERCLIS ID:</b>		<b>RCRIS ID:</b>	
<b>ERNS No.:</b>	1073018, 1073040	<b>State Notification:</b>	
<b>FPN#:</b>		<b>Reimbursable Account #:</b>	

**NOTE:** Fifteen (15) Situation Reports (SITREPS) were generated for the reporting period beginning February 3, 2014 through February 21, 2014. The SITREPS can be found at [http://epaossc.org/site/doc\\_list.aspx?site\\_id=9065](http://epaossc.org/site/doc_list.aspx?site_id=9065). Future response updates will be transmitted via Pollution Reports (POLREPS) using the established POLREP distribution process.

#### 1.1.1 Incident Category

Emergency Response, Inactive Facility

#### 1.1.2 Site Description

The Dan River Steam Station is a decommissioned coal-fired electric generation plant operated by Duke-Energy. The plant is located in Eden, NC adjacent to the Dan River. Duke-Energy began decommissioning the plant in 2012 when a new natural gas-fired electric generation facility was brought on-line. The main powerhouse building and two wet coal ash storage impoundments remain along with ancillary structures. Two dry coal ash storage landfills also remain on-site.. The two ash impoundments (primary and secondary) contain a total of approximately 1.2 million tons of coal ash.

##### 1.1.2.1 Background and Description of Threat

See previous POLREPS for background and description of threat.

##### 1.1.2.1 Removal Site Inspection

Duke Energy reported that 50,000 – 82,000 tons (60,000 – 100,000 Cubic Yards) of coal ash and 27 million gallons of coal ash contaminated water was released to the Dan River. This estimate was later updated to 30,000 - 39,000 tons of coal ash. Coal ash deposits in the river vary from up to 6 feet at the storm drain outfall to a few inches down-river. The majority of the coal ash appears to have deposited between the release location and the City of Danville Dam, approximately 20 river miles for the release site. Initial water quality monitoring and sampling indicated elevated metals concentrations that exceeded State water quality standards and EPA Removal Screening Levels.

## 2. Current Activities

### 2.1 Operations Section

### 2.1.1 Narrative

The following activities occurred during this reporting period:

**Coal Ash Assessments along the Dan River:** Coal ash deposition assessments were conducted along the Dan River into Kerr Reservoir. 30 locations have been identified for sample collection and assessment. Samples will be analyzed for metals content and % ash content.

**WTP Sediment/Coal Ash Removal:** Duke's clean up contractor, Phillips and Jordan (P&J) completed removal of sediment that contained coal ash (approximately 5% coal ash content) from the South Boston Water Treatment Plant system. This material was transferred to Danville WTP pending final disposal at a properly permitted disposal facility. Work to remove sediments that contain coal ash at the Danville WTP continue. P&J continue to process the material through a temporary onsite water treatment plant that separates solids from the liquids.

Duke's clean up contractor, Phillips and Jordan (P&J) continued to make minor changes to the proposed ash removal work plan for the Schoolfield Dam area of the Dan River; approximately 3000 cubic yards from an area upstream of the Schoolfield Dam in Danville, Va. The dredging efforts in the river are expected to commence in early May.

P&J is also generating a work plan for removal of approx 50 cubic yards from the confluence of Town Creek and the Dan Rivers. This location is approximately two miles from the initial release point.

**Public Availability Session, Danville, Virginia:** EPA Region 3 and Region 4 hosted a public availability session in Danville on Monday, April 14th to discuss the dredging operations with Danville residents. All federal, state and local agencies involved in the assessment and clean up operations attended.

**Weekly Stakeholders/Technical Working Group Meeting:** On Wednesday April 16th, the weekly meeting of all federal, state and local stakeholders was held. The purpose of this meeting is to discuss short term goals and operations, water sampling and sediment data to date and long term ecological assessments and goals. The short term Ash Assessment Plan of the Dan River was briefly reviewed again.

**Surface Water Sampling:** Surface water split sampling continued on Wednesday, April 16th with Duke-Energy and START. START continues to validate, manage and post EPA sample data as it is received from the laboratory.

**Episodic Sampling:** Due to turbidity increases greater than 50 NTU, episodic sampling was conducted at Danville and South Boston WTP.

**Offsite Rule Compliance Check:** EPA confirmed that the Upper Piedmont Regional Landfill facility Upper Piedmont Regional Landfill, Rougemont, North Carolina is acceptable to receive waste regulated by the CERCLA Off-Site Rule.

### 2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Duke Energy is the Potentially Responsible Party

### 2.1.4 Progress Metrics

<i><b>Waste Stream</b></i>	<i><b>Medium</b></i>	<i><b>Quantity</b></i>	<i><b>Manifest #</b></i>	<i><b>Treatment</b></i>	<i><b>Disposal</b></i>
Coal Ash	Solid/Liquid	~22 cu yds	N/A	N/A	Returned to the Coal Ash Basin
Ash and sediment	Solid	150 cu yds	NA	solidification	TBD

## 2.2 Planning Section

### 2.2.1 Anticipated Activities

Continue to develop, refine and implement river ash removal plans.

Review surface and drinking water sample data provided by NCDENR, VADEQ and Duke-Energy.

Continue to engage and include all response partners.

Continue to review, validate and post EPA sample data to the Site Website.

Continue to develop and release site fact sheets.

Keep the community informed through fact sheets and State/Local contacts.

#### 2.2.1.1 Planned Response Activities

Implement coal ash removal plans at the Schoolfield Dam and the Town Creek sites.

## **2.3 Logistics Section**

No new logistical information.

## **2.4 Finance Section**

No information available at this time.

## **2.5 Other Command Staff**

### **2.5.1 Safety Officer**

Duke-Energy, with EPA oversight, is providing safety officers and assistant safety officers.

### **2.5.2 Liaison Officer**

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.

### **2.5.3 Information Officer**

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

The EPA Region 3 and 4 Community Involvement Coordinators (CIC) are engaged with Duke Energy developing site-specific information updates to inform the community of on-going activities. Community briefing were held in Danville, VA, Eden, NC and the South Boston, VA. While public outcry over the spill is understandably high, the sessions were generally well-received, and EPA collected questions from the public to generate an FAQ sheet. EPA Region 4 and 3 continue to share validated sampling results with our response partners. 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.

EPA provided Virginia Department of Health and North Carolina Department of Public Health with sampling data specific to the Kerr Reservoir. VA and NC released a joint fact sheet regarding recreational use of the Kerr Reservoir based on the results.

## **3. Participating Entities**

### **3.1 Unified Command**

EPA Region 3 and 4

North Carolina Department of Environment and Natural Resources

Virginia Department of Environmental Quality

Duke Energy

### **3.2 Cooperating Agencies**

US Fish and Wildlife

US Army Corp of Engineers

US Coast Guard

North Carolina Health and Human Services

North Carolina Wildlife Resources Commission

North Carolina Office of Emergency Management

North Carolina, Rockingham County Department of Health and Human Services

North Carolina Department of Public Health

City of Eden, NC

Dan River Basin Association

Virginia Department of Environmental Quality

Virginia Department of Health

Virginia Department of Game and Inland Fisheries

Virginia Department of Health

City of Danville, VA

Town of South Boston, VA

Town of Clarksville, VA

Virginia Halifax County

## **4. Personnel On Site**

1 Region 4 On-Scene Coordinators

1 Region 3 On-Scene Coordinators

4 Superfund Technical Assistance Response Team Members

3 US Coast Guard Gulf Strike Team Members

2 Community Involvement Coordinators (CIC) - providing support from the Regional Offices

## **5. Definition of Terms**

1. OSC - On-Scene Coordinator
2. CIC - Community Involvement Coordinator
3. SEDS - Science and Ecological Support Division
4. PRP - Potential Responsible Party
5. VDEQ - Virginia Department of Environmental Quality
6. NCDENR - North Carolina Department of Environmental and Natural Resources
7. EPA - Environmental Protection Agency
8. WTP - Water (drinking) Treatment Plant
9. USACE - United States Army Corp of Engineers
10. USCG - United States Coast Guard
11. NPDES - National Pollution Discharge Elimination System Permit Program
12. USFWS - United States Fish and Wildlife Services
13. VDGIF - Virginia Department of Game and Inland Fisheries
14. VDH - Virginia Department of Health
15. NCDPH- North Carolina Department of Public Health

## **6. Additional sources of information**

### **6.1 Internet location of additional information/report**

- EPA sample results and sample location maps can be found at <http://epa.gov/region04/duke-energy/>
- EPA Operational Information can be found at <http://epaossc.org/edencoalash>
- 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>

### **6.2 Reporting Schedule**

Pollution Reports (POLREPS) will be transmitted using the established distribution process. The distribution frequency of POLREPS will vary based on the operational needs of the emergency response.

## **7. Situational Reference Materials**

No information available at this time.