



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4**

Subject: Situation Report (SitRep) # 15

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

To: Distribution List

From: Region 4 Regional Emergency Operations Center

Reporting Period: 1600 02/19/2014 to 1600 02/21/2014

Introduction

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

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.epaosc.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. Water levels are expected to gradually decrease beginning over this weekend. It is anticipated that river ops should be possible again starting Monday, February 24.

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.
 - Both the Danville and South Boston WTPs report an increase in the turbidity of the river water. They will continue to monitor the situation and report any problems.
 - EPA is current assessing the possibility of a standardized action plan to sample the WTPs during high turbidity events.

- Both plants report no problems with removing the increased sediment, and there is no impact to the finished water.
- SESD collected pre- and post-treatment samples at the Danville WTP on Thursday, 02/19/2014.
- START collected pre- and post-treatment samples at the Clarksville WTP on Thursday, 02/19/2014.
- 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 as approved.

Surface Water and Sediment Sampling

- SESD is unable to collect sediment samples due to the high and swift water levels. SESD is demobilizing over the weekend and will return Monday, when the water levels are expected to fall.
- NCDENR collected from their 5 standard locations both Thursday, 02/19/24 and today. The NCDENR locations are generally accessible without a boat.
- 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 collected 200 fish tissue samples from 18 species of fish at the Schoolfield Dam in Danville. The analyses are expected to take several weeks to process.

Mitigation Activities

- Duke Energy continues with their grouting plans of the 48" storm water drain. They are preparing to pour a 1,000-foot section on Saturday 2/22/2014.
- 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.

- Overnight, Duke installed a bulkhead on the pipe and plugged a 40-foot section using over 10 cubic yards of grout. After a 12-hour curing time, the grout will be tested for hardness. If it is properly cured, Duke is making plans to begin grouting the remaining portion of the pipe. The pipe discharge has been 100% stopped by this plug.
- 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 gave an interview with NBC Nightly News, which is expected to air Friday or Saturday.
- The Eden, NC, community briefing was held on February 19th and the South Boston, VA, community briefing was held on February 20th. 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 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
 - 1 On-Scene Coordinator. Perry Gaughan took over EPA response and assessment operations on Friday, 02/21/2014 and Kevin Eichinger will de-mobilized back to Atlanta
 - 1 CIC. CIC is demobilizing on 02/21/2014 and will remobilize on an as-needed basis. They will continue to support field operations from the Regional office.
 - 3 Superfund Technical Assessment And Response Team (START). START will step down support to 2 personnel beginning Saturday, 02/22/2014.
 - 0 SESD. SESD will remobilize back on Monday 2/24/2014 when river levels are expected to drop.
- REGION 3
 - 0 On-Scene Coordinators. R3 OSC will mobilize back on Monday 2/24/2014.
 - 0 PIO. PIO will remobilize on an as-needed basis. They will continue to support field operations from the Regional office.
 - 0 START. R3 expects to mobilize 2 START personnel on Monday 02/24.2014.

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

Situation Updates are currently being posted by 1700 every other day. ERRB, in consultation with Region 3 and our State partners, has determined that activities are shifting from the abandonment of the 48-inch stormwater pipe and the prevention of further release into the river to the sampling and removal of ash from the river near the outfall area. As such, this will be the last SitRep for this project. Future project updates will be transmitted via Pollution Reports (PolReps) using the established PolRep distribution process. Additionally PolReps are posted to the site web page at epaosc.org.