

Pre-Assessment Screen Determination

for

Dan River Coal Ash Spill in North Carolina and Virginia

Issued by:

**State of North Carolina, Commonwealth of Virginia, and United States Department of
Interior in their joint capacity as Trustees for Natural Resources**

March 2014

1.0 INTRODUCTION

Pursuant to the authority of Section 107(f) of the Federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 42 U.S.C. § 9607(f); Federal Water Pollution Control Act, as amended, 33 U.S.C. 125, et seq. (CWA); Subpart G of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Sections 300.600, 300.605; and other applicable Federal and State laws, designated Federal and State authorities may act on behalf of the public as natural resource trustees to pursue claims for natural resource damages for injury to, destruction of, or loss of natural resources resulting from the release of hazardous substances to the environment. Claims may be pursued against parties that have been identified as responsible for releasing hazardous substances to the environment. Under CERCLA, sums recovered by trustees as damages shall be used to restore, replace, or acquire the equivalent of such natural resources.

The first step in developing a natural resource damage claim is the preparation of a pre-assessment screen (PAS). The PAS provides the basis for the Trustees' determination that further investigation and assessment efforts are warranted, and that there is a reasonable probability of making a successful claim against the party or parties responsible for the release of hazardous substances. It is based on a review of the readily available information on hazardous substance releases and the potential impacts of those releases on natural resources under the trusteeship of Federal and State authorities.

This PAS addresses potential claims for natural resource damages for injury to, destruction of, or loss of natural resources resulting from the release of hazardous substances to the Dan River, and adjacent habitat (Site). This PAS was prepared in accordance with the PAS provision of the Federal regulations for natural resource damage assessments (NRDA) under CERCLA, 43 CFR Part 11, Subpart B, sections 11.23 through 11.25. The natural resource trustees for the Dan River who have participated in the preparation of this PAS include the State of North Carolina (North Carolina), acting through its Department of Environment and Natural Resources (NCDENR), the Commonwealth of Virginia (Virginia), acting through its Department of Environmental Quality, Northeast Regional Director of the U.S. Fish and Wildlife Service (Service), and the Southeast Regional Director of the Service acting as Authorized Official on behalf of the Secretary of the Department of the Interior (DOI) (collectively the "Trustees").

A review of readily available information has led the Trustees to conclude that releases of inorganic contaminants/hazardous substances associated with coal ash and coal ash pond water from the Duke Energy Dan River Steam Station (Facility) in Eden, North Carolina, have occurred. These releases may have affected reaches of the Dan River in North Carolina and Virginia over many miles downstream and natural resources for which Federal and State agencies may assert trusteeship under Section 107(f) of CERCLA and the NCP. Specifically, the Trustees have determined that:

- A release of hazardous substance has occurred;
- Natural resources for which the Trustees may assert trusteeship under CERCLA have been or are likely to have been adversely affected by the release;
- The quantity and concentration of the released hazardous substance is sufficient to potentially cause injury to natural resources;
- Data sufficient to pursue an assessment are readily available or likely to be obtained at a reasonable cost; and
- Response actions, if any, carried out or planned, may not or will not sufficiently remedy the injury to natural resources without further action.

Trusteeship

The President has designated Federal resource trustees in the NCP, 40 C.F.R. § 300.600 and through Executive Order 12580, dated January 23, 1987, as amended by Executive Order 13016, dated August 28, 1996. Pursuant to the NCP, the Secretary of the DOI acts as a trustee for natural resources and their supporting ecosystems, managed or controlled by the DOI. In this matter, the Service is acting on behalf of the Secretary of the DOI as trustee for natural resources under its jurisdiction, including but not limited to migratory birds and endangered and threatened species.

In accordance with 42 U.S.C. 9607(f)(2)(B) and the NCP, the Virginia Secretary of Natural Resources has been designated the natural resource trustees by the Governor of Virginia. In this matter, that responsibility has been delegated to the Director of the Department of Environmental Quality. The State of North Carolina has designated the Secretary of the North Carolina Department of Environment and Natural Resources as its Natural Resource Damages trustee representative. In this matter, that responsibility has been delegated to the Division Director for the Division of Waste Management. The State trustees act on behalf of the public as trustee for natural resources, including their supporting ecosystems, within the boundaries of their state, or belonging to, managed by, controlled by, or appertaining to North Carolina and Virginia.

The State trustees have, or share trusteeship, with the Service over the natural resources potentially affected in this matter. This shared trusteeship is reflected in the coordinated wildlife management practices of the Service, North Carolina, and Virginia, and is consistent with the management policies of North Carolina, Virginia, and the Service.

1.2 Description of the Assessment Area

The assessment area is defined in the DOI regulations as:

the area or areas within which natural resources have been affected directly or indirectly by the discharge of oil or release of a hazardous substance and that serves as the geographic basis for the injury assessment (43 CFR 11.14(c)).

The assessment area at a minimum includes, but is not limited to the point of discharge from the Facility's storm sewer management pipe in Rockingham County, North Carolina downstream (approximately 77 river miles) to and including Buggs Island Lake (John H. Kerr Reservoir), located in Virginia and North Carolina. In total, the potentially affected surface water route encompasses waters in Rockingham, Caswell, Person, Granville, Vance, and Warren Counties in North Carolina and Pittsylvania, Halifax, Charlotte, and Mecklenburg Counties in Virginia. However, coal ash and contaminants of potential concern (COPCs) have been, and continue to be, transported by natural processes such as high river flow, erosion, and wind. As such, the boundaries of the assessment area may be amended as more data become available.

2.0 INFORMATION ON THE SITE AND THE RELEASE OF HAZARDOUS SUBSTANCES

2.1 Time and Quantity of the Release

At approximately 1500 hours on February 2, 2014, security officials at the Facility located in Eden, North Carolina, noticed liquefied coal ash leaking from a buried storm sewer into the Dan River. A sinkhole had formed just inside the primary ash pond which appeared to be the result of a break in a 48-inch diameter stormwater pipe. Ash material and ash pond water within the reservoir leaked through the break in the pipe, flowing out into the Dan River. The sinkhole was in close proximity to the embankment adjacent to South Edgewood Road and precipitated a slope failure in the upstream face of the embankment. Initial efforts by Duke Energy were not fully successful in stopping the release. The NCDENR was notified of the release by Duke Energy on February 3, 2014, and investigated the facility. Once a release of coal ash and ash pond water was confirmed, the United States Environmental Protection Agency (EPA) was notified and requested to assist. The volume of ash released was initially estimated between 50,000 tons and 82,000 tons. According to EPA¹, that estimate has been reduced to 39,000 tons of ash and 27 million gallons of ash pond water released into the Dan River.

2.2 Hazardous Substance Released

Coal ash is a gray, powdery byproduct of burning coal to produce energy. Coal ash is composed of materials remaining after coal is burned, including fine sand (called silica), unburned carbon

¹ EPA On Scene Coordinator Kevin Eichinger (2/20/2014 email to T. Augspurger, Service)

and various metals such as arsenic, boron, cadmium, chromium, copper, lead, mercury, nickel, selenium, and zinc; compounds that have potential to be COPCs associated with the Dan River release. Preliminary screening of analytical results of surface water, coal ash, and sediment samples collected during the spill response emergency phase allow the Trustees to refine a release-specific list of COPCs; however, sampling is ongoing and the majority of sediment analytical results are not yet available. Therefore, the COPCs identified herein should be considered the minimum list based on known exceedances of screening levels given that additional screening is pending.

To gain more detailed information on the composition of the released coal ash and identify COPCs, EPA, collected ash samples from the ash pond, the interior of the stormwater pipe, and mixed sediment and ash samples from within the assessment area. These samples were screened using the probable effects concentration (PEC; MacDonald 2000), and guidelines for interpreting biological effects of metals (U.S. Bureau of Reclamation 1998). That initial screening of sediment samples indicates arsenic is a COPC. In addition, EPA's Science and Ecosystem Support Division (SESD) collected sediment samples at 1 mile intervals in the Dan River downstream of the Facility (including through Danville, Virginia) and then at greater spatial intervals throughout the remaining riverine portion of the Dan River system. Metals analytical results for those samples indicate that both selenium and arsenic are COPCs. At a minimum, arsenic and selenium are considered COPCs for sediment at this time.

Validated surface water analytical results currently available were also screened against North Carolina water quality standards for aquatic life, EPA ambient water quality criteria (criterion maximum concentration [CMC] and criterion continuous concentration [CCC] adjusted to river-specific hardness of 30 mg/L as CaCO₃), and Virginia water quality standards for aquatic life. Based on that review, the following COPCs and parameters exceeded state and/or federal water quality standards: copper, selenium, iron, turbidity, zinc, and lead. Additional detail regarding the frequency of exceedance is discussed in section 3.2.

It is reasonable to focus NRDA investigations on a subset of COPCs due to the complicated ecological nature of the assessment area, the limited information regarding certain COPCs, and time and budget constraints. Based on this initial screening, COPCs on which to focus NRDA investigations related to the Dan River ash release include, but may not be limited to, arsenic, copper, selenium, iron, turbidity, zinc, and lead.

2.3 History of the Current and Past Use of the Site Identified as the Source of the Discharge of a Hazardous Substance

Named for its proximity to the Dan River, construction of the Dan River Steam Station – a cutting-edge coal unit – commenced in 1948. Units 1 and 2 came online in 1949 and 1950 respectively, and by 1955, a third unit was added. All in all, \$31 million was spent for the station's net capacity of 276 megawatts (MW).

However, by 2008, the technology had quickly surpassed the three units that comprised the station. Duke Energy announced plans to retire the station's three units, along with three natural gas combustion turbines that had been in operation since 1968.

When the three units were retired on April 1, 2012, the company was already in the midst of replacing the outdated technology. A few hundred yards away, a new natural gas facility was near completion.

The final months of 2012 saw the retirement of the smaller gas units in October and commercial operation of Dan River Combined-Cycle Station in December. The new 620-MW station is cleaner and more efficient, serving up to 620,000 customers – nearly double the capacity of the retired steam station (Duke Energy 2014).

At the time of the release, the facility was permitted to discharge low volume wastes, boiler cleaning wastewater, ash disposal, stormwater, boiler blowdown and metal washing wastewater from the ash basin (NCDWQ 2013).

2.4 Potentially Responsible Parties (PRPs)

Duke Energy is the sole owner and operator of the Dan River Steam Station at the time of the release and is responsible for historic operational activities at the site; therefore, Duke Energy is considered a potentially responsible party for the release.

2.5 Damages Excluded from Liability Under CERCLA or CWA

The regulations at 43 CFR Part 11.24 provide that the Trustees must determine whether the damages being considered are barred by specific defenses or exclusions from liability under CERCLA or the Clean Water Act (CWA). The Trustees must determine whether the damages from the discharge or release:

- (1) Have been specifically identified as an irreversible and irretrievable commitment of natural resources in an environmental impact statement or other comparable environmental analysis, that the decision to grant the permit or license authorizes such commitment of natural resources, and that the facility or project was otherwise operating within the terms of its permit or license, so long as, in the case of damages to an Indian tribe occurring pursuant to a Federal permit or license, the issuance of that permit or license was not inconsistent with the fiduciary duty of the United States with respect to such Indian tribe;
- (2) And the release of hazardous substance from which such damages have occurred wholly before the enactment of CERCLA; or

- (3) Resulted from the application of a pesticide product registered under the Federal Insecticide, Fungicide, and Rodenticide Act 7 U.S.C. 135-135k; or
- (4) Resulted from any other federally permitted release, as defined in section 101 (10) of CERCLA; or
- (5) Resulted from the release or threatened release of recycled oil from a service station dealer described in section 107(a)(3) or (4) of CERCLA if such recycled oil is not mixed with any other hazardous substance and is stored, treated, transported or otherwise managed in compliance with regulations or standards promulgated pursuant to section 3014 of the Solid Waste Disposal Act and other applicable authorities.

The Trustees do not believe that any potential injuries referred to herein meet one or more of the above criteria, nor are they subject to the exceptions to liability provided in 107(f), (i), and (j) and 114(c) of CERCLA, and section 311 (a)(2) or (b)(3) of the CWA. Therefore, the continuation of an assessment of injuries to natural resources is not precluded.

In addition to exemptions under CERCLA, the Trustees must determine whether the discharge meets one or more of the exclusions provided in section 311(a)(2) or (b)(3) of the CWA. Excluded discharges in the CWA are:

- (1) Discharges in compliance with a permit under section 402 of the CWA;
- (2) Discharges resulting from circumstances identified and reviewed and made a part of the public record with respect to a permit issued or modified under section 402 of the CWA, and subject to a condition in such permit;
- (3) Continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under section 402 of the CWA, which are caused by events occurring within the scope of relevant operating or treatment systems;
- (4) Discharges incidental to mechanical removal authorized by the President under subsection (c) of this section; and
- (5) Discharges into the waters of the contiguous zone or which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson-Stevens Fishery Conservation and Management Act of 1976), where permitted under the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973, and where permitted in quantities and at times and locations or under such circumstances or conditions as the President may, by regulation, determine not to be harmful.

The Trustees have likewise evaluated the discharge or releases into the Site, and will not be pursuing damages for any discharge(s) that meets any of the criteria listed above.

3.0 PRELIMINARY IDENTIFICATION OF RESOURCES POTENTIALLY AT RISK

3.1 Preliminary Identification of Pathways

Pathway is an essential component of the determination of injury to natural resources. Pursuant to 43 CFR 11.14(dd), a pathway is defined as:

The route or medium through which...a hazardous substance is or was transported from the source of the discharge or release to the injured resource.

The primary mechanism for release of coal ash and its associated contaminants was the broken storm water management line. Secondary pathways include transport by storm water runoff, erosion, surface water, and wind. Possible pathways resulting in exposure of biota to ash-related hazardous substances include direct contact with suspended or dissolved contaminants in the water column, direct contact with contaminated sediments, direct contact with contaminated sediment interstitial pore water, exposure by re-suspended, pre-contaminated sediments, ingestion of contaminated sediment during foraging or feeding, and/or indirect contact through ingestion of contaminated prey species, including bioaccumulation.

3.2 Sampling of Exposed Areas and Potentially Injured Natural Resources

Water

Following the release, surface water grab samples were collected by Duke Energy, EPA (Superfund Technical Assessment and Response Team [START] and SEDS), NCDENR, and VADEQ. Sampling locations include the spill source, several downstream locations, and potable water intakes at the Danville and South Boston, Virginia, water treatment plants (WTP). In addition, at a subset of sediment sampling locations (with sufficient water depth), EPA Region 4's SEDS team collected water column samples (including a minimum of a surface and sediment/water interface grab sample). Drinking water sampling (including raw and finished water) was also conducted by Duke Energy, Virginia Department of Health, EPA START and SEDS teams. Of the samples collected to date, only validated surface water results from Duke Energy through 2/23/2014 were included in screening against NC Water Quality standards for aquatic life, EPA ambient water quality criteria (CMC and CCC adjusted to river-specific hardness of 30 mg/L as CaCO₃), and VA water quality standards for aquatic life. Filtered and unfiltered results were assessed when available. Based on the screening of available data, NC standards were exceeded for turbidity ($n = 64$), copper ($n = 2 \mid 31$, filtered \mid unfiltered), selenium ($n = 0 \mid 1$), and iron ($n = 9 \mid 173$). Screening against VA state standards for aquatic life is

pending; however, like the NC screening, at a minimum one unfiltered sample (grab from State Road 1761 at NC/VA border on 2/3/2014) exceeded the selenium standard. The EPA CMC for zinc was exceeded on one occasion (2/20/2014 at the South Boston Water Treatment Plant raw water intake) and CCCs were exceeded for lead ($n = 2 \mid 128$), zinc ($n = 1 \mid 1$), and selenium ($n = 1$, unfiltered result from SR 1761 on 2/3/2014). The Trustees compared surface water copper concentrations to EPA's 1996 hardness-based copper criteria (there were insufficient data to compare against the 2007 biotic ligand model-based criteria). Using these criteria, the CMC was exceeded ($n = 13 \mid 76$) and the CCC was also exceeded ($n = 26 \mid 118$) in filtered and unfiltered samples. The extent to which exceedances of screening values for COPCs is reflective of the release vs. upstream conditions has not yet been determined.

Sediment

Sediment samples were also collected from the river by SESD at one mile intervals along the Dan River in areas immediately downstream (including through Danville, VA) and then at greater spatial intervals throughout the remaining riverine portion of the Dan River system. The purpose of the sampling was to determine qualitatively the extent of ash deposits and collect particle sizing information to develop a distribution model for the plume. SESD metal results were available for a subset of sites for screening purposes. That screening indicated that the threshold effect concentration (TEC) for arsenic was exceeded ($n = 7$) while the PEC was not (MacDonald et al. 2000). Selenium results exceeded a screening value (of 1.5 ppm dry weight, $n = 12$) for "potential" for toxic hazard in the absence of identification of any specific food-web pathway of particular concern (Skorupa, pers. comm. 2014). Six samples exceeded a concentration (4 ppm dry weight) above which adverse effects on some fish and wildlife species occur (U.S. Bureau of Reclamation, 1998). In addition to EPA SESD sampling, sediment collections were performed by NCDENR, and VADEQ. That initial screening indicates arsenic and selenium are COPCs for sediment based on exceedance of the effects levels cited above in a sediment sample from just downstream of the release where ash was concentrated.

Ash Depth Reconnaissance

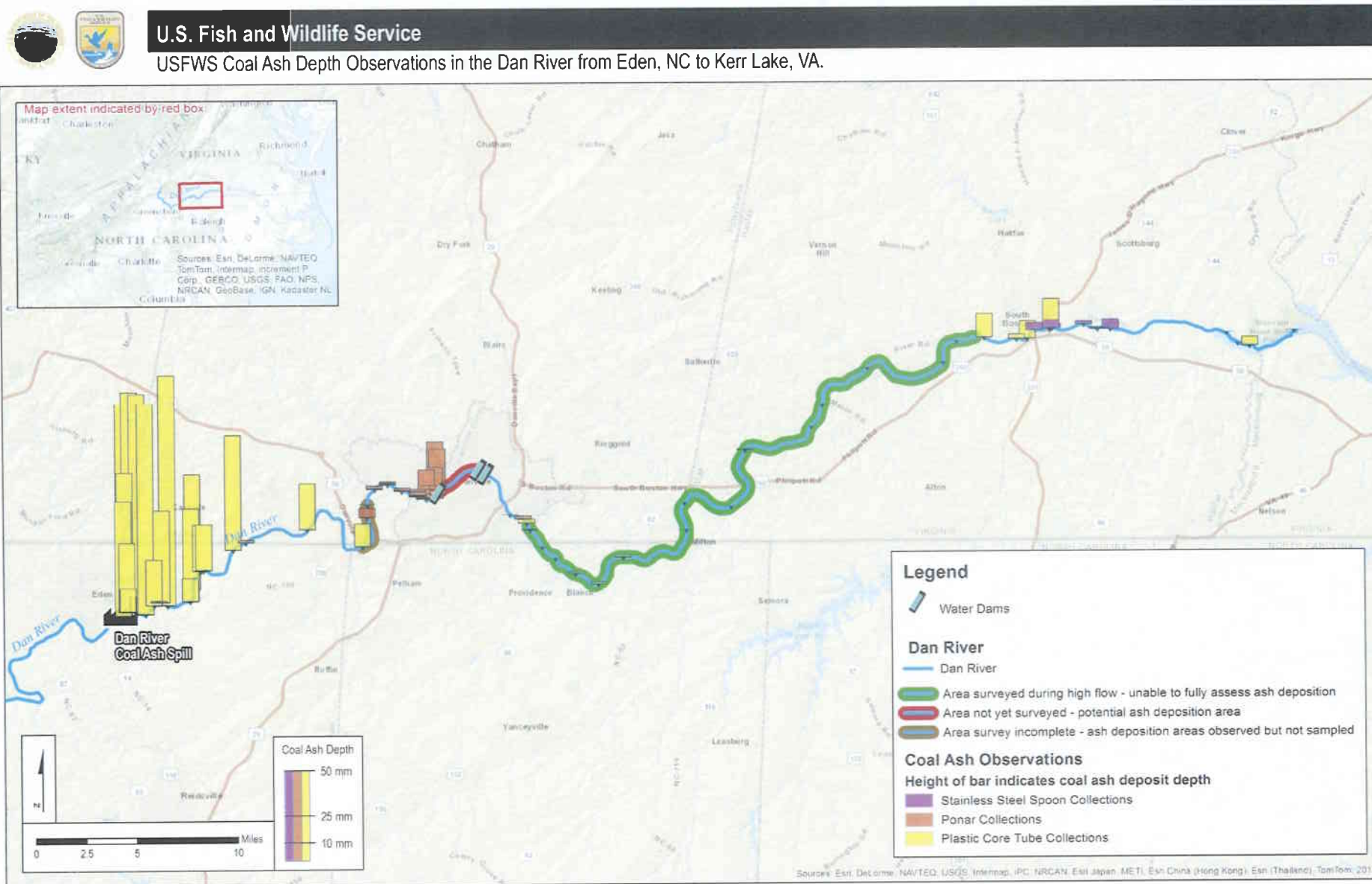
The Service conducted reconnaissance of depositional areas identified visually during boat-based surveys between the release site and Kerr Lake headwaters and recorded observations of ash depth overlying native sediments (Figure 1). That reconnaissance identified a coal ash bar about 75 feet long and 15 feet wide which had as much as five feet of ash or ash/sand mix over the natural stream bottom downgradient of the release point. Along with EPA and Duke Energy, ash deposits were found covering natural sediment over five inches thick atop sand bars within two miles of the spill site (Figure 2), and two inches thick to the North Carolina/Virginia line about nine miles downstream. Further downstream as far as South Boston, Virginia, observations included one-eighth to one-half inch of ash on sandbars and other depositional areas, and traces of ash all the

way to Kerr Lake.

Figure 2. Coal ash deposit overlying native sediment collected from the Dan River via gravity core within 2 miles downstream of the release (Credit: T. Augspurger, USFWS).



Figure 1. USFWS Coal Ash Depth Observations in the Dan River (February 8 – February 19, 2014)



3.3 Potentially Affected Resources

Natural resources affected or potentially affected include, but are not limited to the following, all of which fall within the jurisdiction of the Trustees:

- freshwater fish, including the federally listed endangered Roanoke logperch (*Percina rex*);
- migratory birds, including songbirds, waterfowl, raptors, and others;
- lands, including wetlands, flood plain, and instream;
- aquatic and terrestrial plants, invertebrates, including the federally listed endangered James spiny mussel (*Pleurobema collina*), and microorganisms, and;
- surface waters and sediments.

Services provided by these natural resources include, but are not limited to, the following:

- habitat for trustee species, including food, shelter, breeding areas, and other factors essential to survival, and;
- recreational uses such as sport fishing, water-contact recreation, boating, canoeing, hiking, nature observation, hunting, and other activities.

Loss of services may include the ecological impairment of a resource (e.g., decrease in reproduction) or diminished human use of a resource (e.g., limited opportunity to participate in recreational fishing). For example, it is reasonable to assume that the coal ash deposit adjacent to the site that has prompted a time critical removal action will likely suffer a complete (i.e., 100 percent) reduction in services for the period commencing with coal ash removal and extending until conditions sufficient to allow initiation of biota re-colonization return.

4.0 GENERAL CRITERIA FOR PROCEEDING WITH A DAMAGE ASSESSMENT

In accordance with section 43 CFR § 11.23, the Trustees have determined that all of the following criteria have been met.

4.1 Criterion 1 - A release of a hazardous substance has occurred.

Information reviewed by the trustees indicates that hazardous substances have been emitted, emptied, discharged, allowed to escape, disposed, or otherwise released directly or indirectly in the Dan River. As described in Section 3.2, various sampling programs have been established by multiple agencies to document release-related impacts to surface water and sediment.

Additionally, the results of an initial reconnaissance of the depth of ash material overlying native sediments was completed between February 8 and February 19, 2014, encompassing visually apparent depositional areas in reaches extending approximately 70 river miles downstream of the release site. Results of preliminary sampling and reconnaissance efforts confirm the presence of ash material overlying sediments and ash-related COPCs in surface water in the Dan River.

4.2 Criterion 2 - Natural resources for which the trustees may assert trusteeship under CERCLA have been or are likely to have been adversely affected by the release.

The exposed areas and the natural resources adversely affected by the releases of COPCs are within the purview of the Trustees as defined under CERCLA. The release of hazardous substances from the Facility may have affected, and may continue to affect, migratory birds, fish, aquatic insects, freshwater mussels, reptiles, amphibians, surface water and sediment of the Dan River, a variety of human uses of the Dan River, and the general supporting habitat for all of these resources. Trust resources may also have been affected by the physical impacts of coal ash on their habitat and potential impacts of ash removal on habitat and food resources.

In addition to the ecological services potentially affected by ash-related contaminants, regulatory advisories and other warnings have occurred as a result of the release of coal ash from the Site and have affected human use of trust resources:

Dan River in North Carolina downstream of the Duke Power-Eden spill site (Issued February 12, 2014 and ongoing, NCDHHS 2014)

- Recreational Water Advisory. Public health officials with the North Carolina Department of Health and Human Services (NCDHHS) recommend that persons avoid recreational contact with water and sediment; they also recommend that people do not contact submerged or floating coal ash, or ash washed up on the riverbank. The Virginia Department of Health (VDH) has also issued warnings against contact with coal ash.
- Fish and Shellfish Consumption. NCDHHS recommends that persons not eat all fish or shellfish collected from the Dan River in North Carolina downstream of the Duke Power-Eden spill site.

4.3 Criterion 3 - The quantity and concentration of the released hazardous substances are sufficient to potentially cause injury.

Various media types were collected from the ash pond, ash/native sediment deposit adjacent to the site, and surface waters in the Dan River and analyzed for COPCs. The data from these

samples indicate that COPC levels (including, but not limited to, arsenic, copper, selenium, iron, turbidity, zinc, and lead) have exceeded action and guidance levels for ecological receptors and has the potential to do so into the future.

4.4 Criterion 4 - Data sufficient to pursue an assessment can be obtained at a reasonable cost.

Data relevant to natural resources and potential injuries resulting from exposure to metals in the Dan River are available to the Trustees. These data include information on contaminant releases, concentrations in the environment, and the effect of contamination on natural resources. In addition, the Trustees can use available information and literature from recent coal ash releases when appropriate (e.g., Tennessee Valley Authority Kingston Fossil Plant 2008 ash release and associated studies) to inform development of assessment activities and site-specific data needs. Given the available information, the Trustees believe that any outstanding required data sufficient to pursue an assessment can be obtained at a reasonable cost compared to the potential damage claim.

4.5 Criterion 5 - Response actions, if any, carried out or planned do not or will not sufficiently remedy the injury to natural resources without further action.

The end of the storm water management line has been permanently plugged. Duke Energy plans to continue work on engineering designs for plugging the entire length of the pipe and permanently abandoning the system. Primary remediation efforts have been to stabilize and recover the released coal ash, however to date, only one area immediately adjacent to the release site, a coal ash bar about 75 feet long and 15 feet wide which had as much as five feet of ash or ash/sand mix over the natural stream bottom, has been targeted for removal.

At the time of the preassessment screen determination, planned emergency response actions are targeted for near-term completion and future remedial planning is ongoing; however, the Trustees conclude that in combination response and future remedial actions are incapable of remedying injuries to natural resources and the services provided by those resources without further action due to the following:

- The lag time for completion of removal /remedial actions and the potential additional ecological recovery time associated with those actions (e.g., dredging of ash overlying native river sediments).
- Removal and remedial actions do not have the capacity to restore lost services to the public resulting from release-related regulatory advisories.

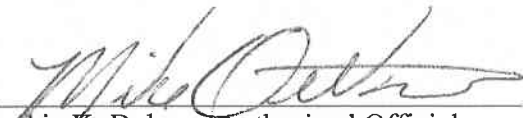
- Hydrologic and access conditions in the Dan River downstream of the release Site are likely to preclude removal of all of the ash material released. The fate of ash deposits that may remain in the Dan River system is uncertain and there is potential for ongoing or future injury (e.g., due to resuspension and redistribution of ash during weather or high flow events).

5.0 PRE-ASSESSMENT SCREEN DETERMINATION

Based on the information in this PAS, the Trustees have made the preliminary determination that the criteria specified in 43 CFR § 11.23 have been met. The Trustees further determine that current information indicates that there is reasonable probability of making a successful NRDA claim for injuries to natural resources under their trusteeship pursuant to CERCLA § 107. The trustees have further determined that an assessment should be carried out within the Dan River Watershed in accordance with Federal Regulations 43 CFR § 11, Subparts C and E. Thus, we the undersigned designated natural resource trustee agencies, acting on behalf of the public, pursuant to Federal and State law, do find sufficient cause and intend to seek restoration or compensation for injuries suffered by natural resources for which we are responsible. The outcome of this process will be measures to restore natural resources in the Dan River watershed.

*Preassessment Screen Determination
Dan River Coal Ash Release
March 2014*

Natural Resource Trustee:



Cynthia K. Dohner, Authorized Official
U.S. Department of Interior

3/17/14 Date

*Preassessment Screen Determination
Dan River Coal Ash Release
March 2014*

Natural Resource Trustee:

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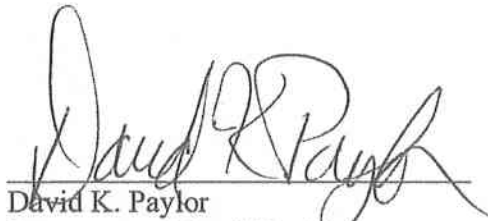
Dexter Matthews
State of North Carolina,
Director, Division of Waste Management,
Department of Environment and Natural Resources

3-19-14

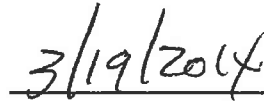
Date

*Preassessment Screen Determination
Dan River Coal Ash Release
March 2014*

Natural Resource Trustee:

A handwritten signature in black ink, appearing to read "David K. Paylor", written over a horizontal line.

David K. Paylor
Commonwealth of Virginia,
Director, Department of Environmental Protection

A handwritten date "3/19/2014" in black ink, written above a horizontal line.

Date

6.0 REFERENCES

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