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*Saving a National Treasure*

April 30, 2018

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Submitted via [regulations.gov](http://regulations.gov)

Scott Pruitt, Administrator  
Environmental Protection Agency  
1200 Pennsylvania Ave., NW  
Washington, DC 20460

**RE: *Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Amendments to the National Minimum Criteria (Phase One); Proposed Rule***  
**Docket ID No. EPA-HQ-OLEM-2017-0286**

Dear Administrator Pruitt:

The Chesapeake Bay Foundation, Inc. (CBF) submits the following comments regarding the United States Environmental Protection Agency's (EPA) proposed rule, *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Amendments to the National Minimum Criteria (Phase One)*. EPA is proposing to make eleven changes to the final rule, *Disposal of Coal Combustion Residuals from Electric Utilities*, that was published in the federal register in 2015 (2015 CCR Rule).<sup>1</sup> CBF supports the proposed addition of boron as a listed constituent in Appendix IV and the establishment of detailed requirements for slope protection, including grassy vegetation, on coal ash.

Despite these improvements, however, CBF is concerned that other proposed changes will seriously weaken the requirements, and the environmentally protective results, of the 2015 CCR Rule. With respect to the proposals associated with the judicial remand, CBF finds lacking 1) the proposed revisions to clarify the type and magnitude of non-groundwater releases that would require a facility to comply with some or all of the corrective action procedures set forth in 40 CFR 257.96-257.98 in meeting their obligation to clean up the release and 2) the proposed revisions to modify the alternative closure provisions. In addition, CBF finds that the proposed Alternative Performance Standards unnecessarily weaken the regulations established under the 2015 CCR Rule, and create ambiguity in response procedures, increasing the likelihood of leakage and the potential for catastrophic events. Finally, EPA's proposal to allow CCR to be used during certain closure situations does not ensure that the use of CCRs is safe (and not conducive to allowing migration of harmful constituents into waterways). CBF does not believe that, after the exhaustive process undertaken to establish the 2015 CCR Rule, there is sufficient cause to make the proposed changes that weaken the Rule.

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<sup>1</sup> 80 FR 21302, April 17, 2015.

## **I. The Chesapeake Bay Foundation**

CBF is a 501(c)(3) non-profit organization, founded in 1967. The organization's mission -- carried out from offices in Maryland, Virginia, Pennsylvania and the District of Columbia -- is to restore and protect the ecological health of the Chesapeake Bay, one of the nation's most vital estuaries. As such, and on behalf of our 240,000 members across the United States, we are very interested in matters that will impact the health of the Chesapeake Bay and the waters that feed into the watershed.

## **II. Coal Ash Disposal and the Chesapeake Bay Watershed**

Many risks are associated with the management of coal ash impoundments including the leaking of contaminants from coal ash into groundwater, blowing of contaminants into the air as dust, and failure of coal ash surface impoundments. Potential contaminants in Coal Combustion Residuals (CCRs) include mercury, cadmium, arsenic, boron and other heavy metals. A recent report from Duke University discusses findings from the examination of 15 coal facilities in the Southeastern United States.<sup>2</sup> Analysis of 165 monitoring wells revealed that 49 had high CCR-contaminant levels.<sup>3</sup> The report also notes that EPA has documented reports of 113 potential – and 40 confirmed – cases of damage from the storage and disposal of CCRs with a total of 60 percent of those cases resulting in groundwater or surface water contamination from surface impoundment leakage.<sup>4</sup>

Unfortunately, numerous coal ash impoundments are located within the Chesapeake Bay watershed. Virginia alone has 132 coal ash impoundments, eleven of which are along the banks of rivers.<sup>5</sup> Data released by power plants – *as required by the 2015 CCR Rule* - shows evidence of CCR contamination in Virginia. Dominion Virginia's report regarding several of its plants in Virginia shows:

- ***High levels of chemicals like boron and chlorides***—which are the “leading indicators” according to the Environmental Protection Agency of whether coal ash pollutants are leaking out of the pits—are present in the groundwater at ***Bremo Power Station, Possum Point Power Station, and Chesterfield Power Station.***

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<sup>2</sup> Jennifer S. Harkness, Barry Sulkin & Avner Vengosh, *Evidence for Coal Ash Ponds Leaking in the Southeastern United States*, 50 Environ. Sci. Technol., 6,583,92 (2016) [hereinafter, “Harkness, et al., *Coal Ash Ponds Leaking* (2016)”].

<sup>3</sup> *Id.*, p. 1.

<sup>4</sup> *Id.*, See also, *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities: Final Rule*; United States Environmental Protection Agency, 80 FR 21302, April 17, 2015.

<sup>5</sup> <http://www.southeastcoalah.org/about-coal-ash/find-your-state/virginia/>

- Groundwater at all three sites show ***higher than normal concentrations of radium***, a radioactive element that can be found in coal ash and is commonly associated with nuclear waste. In many instances, the concentrations exceeded the allowable limit.
- Chesterfield’s Upper and Lower Ash Ponds (approximately 15 million tons of coal ash) - located on what used to be the main channel of the James River
  - 10 wells ***exceed the allowable limit for arsenic*** – in some instances, as high as 17 times the limit
  - ***Exceedances*** of the allowable limits or regional screening levels for ***beryllium, chromium, radium, lead, cobalt, thallium, and lithium.***
- ***Bremo’s North Pond*** (approximately 6 million tons of coal ash) – located on the banks of the James River
  - Elevated levels of ***lithium, mercury and radium.***
- ***Possum Point’s Pond D*** (approximately 4 million tons of coal ash) – located on a peninsula next to the Potomac
  - Five of Dominion’s wells appear to have elevated ***radium*** concentrations, with one well actually exceeding the limit.
  - Elevated levels of ***arsenic, beryllium, cobalt, and lithium,*** including in “sentinel wells” located between Pond D and the Potomac River, further confirming the fact the pollution is not contained.<sup>6</sup>

Moreover, a recent federal district court found elevated levels of arsenic in the South Branch of the Elizabeth River and Deep Creek, two waterways adjacent to the impoundments of the Chesapeake Energy Center (CEC), where CEC had for decades deposited CCRs.<sup>7</sup> Based on trial evidence showing a “direct hydrological connection”

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<sup>6</sup> *Emphasis added, Dominion’s Coal Ash Pits Polluting Our Water with Arsenic and Radium*, Southern Environmental Law Center, March 6, 2018, found at: <https://www.southernenvironment.org/news-and-press/press-releases/dominions-coal-ash-pits-polluting-our-water-with-arsenic-and-radium>; *See also:* <https://www.dominionenergy.com/about-us/electric-projects/coal-ash-pond-closure-management/groundwater-reports>

<sup>7</sup> *Sierra Club v. Va. Elec. & Power Co.*, 247 F. Supp. 3d 753 (E.D. Va. 2017).

between the ponds, the underlying groundwater and nearby surface waters through which groundwater moved freely and carried dissolved arsenic from the coal ash to surface waters, the court concluded that the CEC's impoundments were unpermitted point sources that discharged arsenic in violation of the Clean Water Act.<sup>8</sup>

### **III. The 2015 CCR Rule**

The 2015 CCR Rule established requirements for the safe disposal of coal ash from coal-fired power plants. Two major spills prompted the development of the Rule. The first occurred in 2008 at the Tennessee Valley Authority's Kingston Fossil Plant which resulted in 5.4 million -cubic yards of coal ash to be dumped into the Emory River Channel.<sup>9</sup> The second occurred in North Carolina when 39,000 tons of coal ash from a Duke Energy plant spilled into the Dan River.<sup>10</sup>

The Rule establishes technical requirements for CCR landfills and surface impoundments under subtitle D of the Resource Conservation and Recovery Act (RCRA) and promulgates national minimum criteria for existing and new CCR landfills and existing and new CCR surface impoundments and all lateral expansions of CCR units that are codified in Subpart D of Part 257 of Title 40 of the Code of Federal Regulations. The criteria include "location restrictions, design and operating criteria, groundwater monitoring and corrective action, closure requirements and post closure care, and record keeping, notification and internet posting requirements."<sup>11</sup> Except in limited circumstances, any existing unlined CCR surface impoundment that is contaminating groundwater above a regulated constituent's groundwater protection standard is also required to stop receiving CCR and either retrofit or close.<sup>12</sup> As EPA states on its website, the "final rule is the culmination of *extensive study on the effects of coal ash on the environment and public health*."<sup>13</sup> Now, EPA proposes to make changes to the 2015 CCR rule that, in substantial part, weaken it.

### **IV. EPA's Proposed Rule Changes to 2015 CCR Rule**

In response to a court decision, petitions from the Utility Solid Waste Activities Group (USWAG) and AES Puerto Rico LLP, the enactment of the WINN Act, and comments received after the publication of the 2015 CCR Rule, EPA proposes eleven changes to the CCR Rule. The proposed changes are separated into three categories:

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<sup>8</sup> *Id.* at 762-764.

<sup>9</sup> <http://www.southeastcoalash.org/about-coal-ash/coal-ash-disasters/the-dan-river-disaster/>

<sup>10</sup> *Id.*

<sup>11</sup> *Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Amendments to the National Minimum Criteria (Phase One)*[hereinafter, "Proposed CCR Rule Amendments"]; 83 FR 11584, March 15, 2018.

<sup>12</sup> *Id.*; See also: <https://www.federalregister.gov/documents/2016/08/05/2016-18353/hazardous-and-solid-waste-management-system-disposal-of-coal-combustion-residuals-from-electric>

<sup>13</sup> *Emphasis added, Final Rule: Disposal of Coal Combustion Residuals from Electric Utilities*, EPA, <https://www.epa.gov/coalash/coal-ash-rule>. 4/22/18.

(A) those based on the issued remanded back to EPA and raised during the *USWAG v. EPA* case; (B) those categorized as alternative performance standards for owners and operator of CCR Units; and (C) revisions based on comments received after the publication of the 2015 Rule. A brief description of each of EPA’s proposed changes and CBF’s position regarding each of the proposals follows.

**A. Proposals based on the issues raised during the *USWAG et al. v EPA* case.**

Several different parties, including a coalition of regulated entities and a coalition of environmental organizations, challenged the CCR Rule.<sup>14</sup> A subset of the challenges were remanded back to EPA on May 14, 2016, and EPA proposes the first three of the following changes in response to that Court decision. The fourth proposed change is also related to the case.

*1. CBF supports adding boron to the list of constituents in Appendix IV of part 257 that trigger corrective action and potentially the requirement to retrofit or close the CCR unit.*<sup>15</sup>

CBF agrees with this proposed rule modification, which would require listing boron in Appendix IV, as a constituent whose detection at heightened levels in groundwater would trigger corrective action soon after a potential release.

The 2015 CCR Rule requires facilities to employ a two-stage groundwater monitoring program, with the first stage focused on detection of constituents listed in Appendix III and the second phase being assessment of the broader set of constituents listed in Appendix IV (identified by EPA as presenting risks of concern to human health or the environment). Where assessment monitoring shows concentrations of any Appendix IV constituents at levels above established groundwater protection standards, the requirement that an existing unlined CCR surface impoundment be retrofitted or closed is triggered. Currently, boron is listed in Appendix III but not in Appendix IV. EPA explains that its exclusion from Appendix IV was due to the fact that a Maximum Contaminant Level (MCL) had not yet been established for boron under the Safe Drinking Water Act.<sup>16</sup>

Since the final rule was published, however,<sup>17</sup> EPA has recognized that the CCR Rule’s treatment of boron was inconsistent with its treatment of other constituents (e.g., lead, molybdenum, cobalt, and lithium lack MCLs but were included on Appendix IV). Moreover, EPA’s 2014 risk assessment in support of the 2015 CCR Rule shows that boron is one of nine constituents presenting unacceptable risks under

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<sup>14</sup> See, *USWAG et al. v EPA*, No. 15-1219 (DC Cir. 2015).

<sup>15</sup> Proposed CCR Rule Amendments; 83 FR 11584, 11588-11589.

<sup>16</sup> *Id.*, at 83 FR 11584, 11589.

<sup>17</sup> See *USWAG v. EPA*, No. 15-1219 (D.C. Cir.) (challenge to, inter alia, boron’s exclusion from final rule).

a range of scenarios. Indeed, it is the only one associated with risks to both human and ecological receptors. It can pose developmental risks to humans when released to groundwater and can result in stunted growth, phytotoxicity, or death to aquatic biota and plants in subsurface waters.<sup>18</sup>

In support of its current proposal to include boron in Appendix IV, EPA also notes that this constituent is a contaminant of concern in more cases (50%) than any other constituent and that boron has one of the shortest travel times of all of the coal ash constituents modeled by EPA.<sup>19</sup> This means that boron is likely to reach potential receptors before other constituents. In these, circumstances, including boron in Appendix IV would ensure corrective action soon after a potential release, prior to the appearance of slower-moving constituents hydrologically downstream from the source of the contamination.”<sup>20</sup>

CBF strongly supports the proposed step as a measure that will accelerate needed corrective action – retrofits or effective closure. In a recent study, Duke University scientists analyzed ground and surface waters from different coal ash storage sites, in 5 states.<sup>21</sup> Previous studies had found that coal ash leachates have distinctive boron and strontium isotope ratios. This study relied on isotopic signatures to delineate CCR impacts in the environment, sampling sites with no earlier known contamination from accidental releases. At Dominion Resources’ Chesterfield Power Station (Chesterfield, Virginia) and other sites, the study found high boron and strontium concentrations, along with distinctly low CCR-typical isotopes of boron values, that the researchers concluded are evidence for the discharge of coal ash pond water to local surface water.<sup>22</sup> The study also found similar evidence at the site of closed coal ash ponds, suggesting that the process of leaching to ground- and then to surface water may not stop upon pond closure.

These studies demonstrate the linkage between the CCR impoundments and the findings of high concentrations of boron in surrounding groundwater at Virginia and other sites. Inclusion of boron in the Appendix IV list would appropriately reflect the health and ecological risks of this constituent as determined in EPA’s 2014 risk assessment and also facilitate appropriate remediation and safe closure for all of the impoundments.

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<sup>18</sup> Proposed CCR Rule Amendments; 83 FR 11584, 11588-11589.

<sup>19</sup> *Id.*

<sup>20</sup> *Id.*

<sup>21</sup> Harkness, et al., *Coal Ash Ponds Leaking* (2016).

<sup>22</sup> *Id.* at E.

2. CBF supports enhancing requirements for slope protection on CCR surface impoundments, including grassy vegetation and other covers<sup>23</sup>

CBF supports this proposal, which would clarify and expand on the slope protection requirements in the 2015 CCR Rule. While the current Rule requires existing and new CCR units to ensure “adequate slope protection to protect against surface erosion, wave action, and adverse effect of sudden drawdowns,” EPA’s current proposal specifies that the impoundment owner or operator must ensure that both the surrounding slopes and pertinent surrounding areas of any CCR impoundment (new or existing) are designed, constructed, operated and maintained with effective slope protection that consists of a vegetative cover, an engineered cover or both.

The proposal would also provide a number of new definitions to eliminate ambiguities which could lead to weakened and dangerous slope conditions. Thus, the definition for “pertinent surrounding area”<sup>24</sup> is sufficiently comprehensive to prohibit site-specific decisions to ignore (or fail to maintain) near-slope stabilization measures. It also excludes certain areas on, near, adjacent to CCR impoundment where it is infeasible, impractical or unsafe to add vegetation (e.g., lined spillways, decant structures, access ways).

The definition for “grassy vegetation,”<sup>25</sup> should help ensure that vegetation installed by the owner or operator will be adequate to prevent erosion of the surface or interior of the embankment, protect against wave action, and mitigate the effects of runoff from the CCR unit.

Finally, the proposal would also supply clear performance standards: requiring the slope protection to be installed and maintained on the slopes and surrounding areas; protect against surface erosion, wave action, and adverse effects; providing for observation of and access to slopes and surroundings during routine and emergency events; and requiring woody vegetation to be removed from the slopes (with specifications on preventing any destabilization during removal).

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<sup>23</sup> Proposed CCR Rule Amendments; 83 FR 11584, 11589-11592.

<sup>24</sup> Proposed CCR Rule Amendments; 83 FR 11584, 11611 (defining “Pertinent surrounding areas” as “all areas of the CCR surface impoundment that have the potential to affect the structural stability and condition of the CCR surface impoundment, including but not limited to the toe of the downstream slope, the crest of the embankment, abutments, and unlined spillways.”)

<sup>25</sup> Proposed CCR Rule Amendments; 83 FR 11584, 1161 (defining “grassy vegetation” to mean vegetation that (1) develops shallow roots which both do not penetrate the slopes or pertinent surrounding areas of the CCR unit to a substantial depth and do not introduce the potential of internal erosion or risk of uprooting, and (2) creates a continuous dense cover that prevents erosion and deterioration of the surface of the slope or pertinent surrounding areas, thereby preventing deterioration or the surface).

3. *CBF finds lacking the proposal to clarify the type and magnitude of non-groundwater releases that would require a facility to comply with some or all of the corrective action procedures set forth in 40 CFR §§ 257.96-257.*<sup>26</sup>

Under this section, EPA is proposing to revise provisions to facilitate the most expeditious response to non-groundwater releases that are not of a “catastrophic” nature. For those releases, EPA is proposing a 180-day time limit to complete remediation (instead of an immediate response). A search of RCRA and the current regulations (including the 2015 CCR Rule) reveal that there is no definition for catastrophic. EPA seems to incorporate how it would define “catastrophic” by giving two examples of this type of release in its proposed definition of non-groundwater releases as follows:

*Non-groundwater releases* mean releases from the CCR unit other than the releases directly to the groundwater that are detected through the unit's groundwater monitoring system. Examples of non-groundwater releases include seepage through the embankment, minor ponding of seepage at the toe of the embankment of the CCR unit, seepage at the abutments of the CCR unit, seepage from slopes, ponding at the toe of the unit, a release of fugitive dust and ***releases of a “catastrophic” nature such as the release of CCR materials from CCR surface impoundments from the Tennessee Valley Authority's (TVA) Kingston Fossil Plant in Harriman, TN and the Duke Energy Dan River Steam Station in Eden, NC.***<sup>27</sup>

In addition, here are some highlights from the discussion section of the proposed rule regarding the handling of non-catastrophic incidents:

EPA designed many of the specific procedural requirements for non-groundwater releases in sections §§ 257.96-257.98 based on several notable “catastrophic” releases from CCR surface impoundments in recent history, such as the release of CCR materials from CCR surface impoundments from the Tennessee Valley Authority's (TVA) Kingston Fossil Plant in Harriman, TN, and the Duke Energy Dan River Steam Station in Eden, NC. However, EPA recognizes that all non-groundwater releases are not of a “catastrophic” nature, and may in some instances, be quite minor. Consequently, EPA is proposing to establish revised provisions to facilitate the most

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<sup>26</sup> *Id.* at 11592-11594.

<sup>27</sup> *Id.* at 11612. The new language would go in 40 C.F.R. § 257.53, Definitions.



expeditious response to a release from a CCR unit from the owner or operator, and thereby to mitigate degradation.

EPA is proposing a 180-day time limit to complete remediation of the non-groundwater release. This time frame effectively serves to limit these provisions to releases that are expected to have limited potential for harm to human health and the environment. In this regard, EPA considers that the *size and magnitude of the release*, *i.e.*, the volume of harmful constituents released, is directly related to the time required to remedy the release.

EPA has identified a number of types of releases that may occur at CCR surface impoundments, and from those, identified the subset that EPA believes could be completely remediated under the existing performance standards within 180 days. Releases that can be cleaned up within 180 days are necessarily of a *minimal volume*. EPA expects that these reduced procedures are most likely to apply to *incidental releases (including fugitive dust) that occur from seepage through the embankment, minor ponding of seepage at the toe of the embankment of the CCR unit, seepage at the abutments of the CCR unit, seepage from slopes, or ponding at the toe of the unit*, rather than releases that of a “catastrophic” nature, as catastrophic releases are normally of a magnitude that remediation cannot be completed within 180 days. EPA seeks comment on whether 180 days is the appropriate timeframe in which an owner/operator would be expected to complete remediation of a non-groundwater release under this proposed provision, or whether a shorter deadline, *e.g.*, 120 days, or a longer deadline, *e.g.*, 240 days, would be more appropriate for remediating non-groundwater releases that are expected to have *minimal impact to human health and the environment*. EPA anticipates that these releases will typically be detected by qualified personnel or qualified professional engineers during weekly or annual inspections or during periodic assessments, as specified in the design and operating criteria of the CCR rule. These types of releases can indicate concerns regarding the structural stability of the unit and that further assessment for structural

stability issues is warranted, but they do not typically constitute a substantial release of constituents to the environment in and of themselves.<sup>28</sup>

EPA also proposes compressing the reporting requirements into two steps: the initial notification of a release and the documentation that the release has been remediated. This will result in notice to the public *after* the cleanup, instead of before the cleanup. In addition, because of the revisions to RCRA in the WIIN Act, EPA proposes allowing a permitting authority in a participating state to make the determination that remediation is complete (instead of requiring such certification by a professional engineer).

CBF is concerned about the vagueness of the phrase “releases that are not of a catastrophic nature.” Merely tying the self-determination of what is “catastrophic” to how long a company itself estimates it would take to fix a problem is arbitrary, subjective and indirect, instead of setting a clear and objective standard which relates to the magnitude and perhaps suddenness of a release. This ambiguity will lead to confusion as to which instances must follow the immediate response requirements and which will have an extended time-period within which to respond. Regardless of how the phrase is defined, CBF suggests a shorter response time of 120 days and opposes the longer time frames of 180 or 240 days. Finally, the notice to the public should occur *before* the cleanup so that citizens are well informed.

4. *CBF has concerns that the proposal to modify the alternative closure provisions would lead to substantial increases in CCR-caused contamination of groundwater.*<sup>29</sup>

EPA proposes expanding an alternative closure provision that allows CCR units subject to closure (because Appendix IV constituents were detected at levels above protection standards, the unit is sited in an unstable area or similar reason) to continue for an extended period of time to accept non-CCR (as well as CCR) waste streams in some cases.

CBF is concerned about this proposal because it would risk substantial increases in CCR-caused contamination of groundwater. This is because some non-CCR waste streams may contain acids that will facilitate mobilization to the ground water of CCR trace metals throughout the period of extension. CBF suggests that if this proposal is adopted, the length of any allowed extended period (not to exceed five years) take into account the specific risks to groundwater posed by the composition of the waste stream at issue.

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<sup>28</sup> *Id.* at 11593 – 11594.

<sup>29</sup> *Id.* at 11594.

**B. CBF opposes EPA’s proposal to offer Alternative Performance Standards (under the WINN Act)<sup>30</sup> because these proposals weaken the 2015 CCR Rule.**

EPA is proposing six Alternative Performance Standards that would apply in participating states (those which have an EPA-approved CCR permit program under the WINN Act) or in those instances where EPA is the permitting authority. These proposed changes are in response to the Petitions filed by the Utilities Solid Waste Activities Group (USWAG) and AES-PR.<sup>31</sup> The WINN Act was passed in December of 2016 and establishes new statutory provisions applicable to CCR units, including authorizing states to implement the CCR rule through an EPA-approved permit program and authorizing EPA to enforce the rule and in certain situations to serve as the permitting authority.

These proposed Alternative Performance Standards would allow a state with an approved permit program or EPA to:

1. Use alternative risk-based groundwater protection standards for constituents where no Maximum Contaminant Level exists;
2. Modify the corrective action remedy in certain cases;
3. Suspend groundwater monitoring requirements if a no migration demonstration can be made;
4. Establish an alternate period of time to demonstrate compliance with the corrective action remedy;
5. Modify the post-closure care period to determine that remedies are complete; and
6. Allow Directors of states to issue technical certifications in lieu of the current
7. requirement to have professional engineers issue certifications.<sup>32</sup>

Each of these proposals unnecessarily weaken the regulations established under the 2015 CCR Rule. They will create ambiguity in response procedures, confusion in handling the disposal of coal ash waste, and increase the likelihood of leakage and the potential for catastrophic events.

We have particular concerns with the second proposal. This proposal would grant state directors the discretion to decide not to require cleanup of Appendix IV constituents released to groundwater from a CCR unit in cases where the facility owner or operator demonstrates to the director’s satisfaction that the contaminated water is not a drinking water source and is not hydraulically connected to waters to which the part 257 Appendix IV constituents are migrating or likely to migrate.

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<sup>30</sup> *Id.* at 11597 – 11605.

<sup>31</sup> The Petition was granted on September 13, 2017; AES-PR operates a coal-fired power plant in Puerto Rico.

<sup>32</sup> Proposed CCR Rule Amendments; 83 FR 11584, 11597-11605.

Recent litigation over arsenic contamination of surface waters stemming from a CCR unit at the Chesapeake Energy Center demonstrates the risks of allowing such a decision to be made by a state director on evidence only from the facility owner, without public comment.<sup>33</sup> In that case, the facility owner, Dominion Virginia Power, denied any hydraulic connection between the arsenic-contaminated groundwater underlying its CCR impoundment and surrounding surface waters, arguing that the aquifer confined the groundwater and impeded it from reaching the surface water --- a position the District Court, in the face of significant contrary evidence, was forced to rebuke as lacking candor.<sup>34</sup> Public comment is essential for director's decisions of this sort, especially when they involve risky Appendix IV constituents. Similar concerns arise with respect to the third proposal, allowing state directors the discretion to suspend groundwater monitoring for up to 10 years on evidence from a groundwater scientist (including sampling, analysis of physical, chemical and biological processes, contaminant fate and transport predictions, etc.) that there is no potential for migration of hazardous constituents to the uppermost aquifer. The proposal appears intended to capture rare situations where the hydrogeologic setting may preclude migration of constituents.<sup>35</sup> Yet, the litigation described immediately above suggests that facility owners will not be reluctant to try to pressure directors to find that this situation would apply. As suggested by this instance, a public comment opportunity to ensure that the state director has appropriate evidence would be an essential addition to this proposal. Equally important, any period of suspended groundwater monitoring should be for a period no longer than 5 years before a re-demonstration is required.

**C. EPA's revision to allow the use of CCRs in the construction of final cover systems must ensure that it will not lead to the migration of harmful constituents into waterways.**

Finally, EPA is proposing to allow the use of CCRs in the construction of final cover systems for CCR units closing pursuant to Section 257.101 that are closing with waste-in-place. EPA is also proposing specific criteria that the facility would need to meet to allow for the use of CCR in the final cover system.

Developing appropriate and safe beneficial uses of CCRs is an important step in protecting waterways from CCR contamination. In Virginia, for example, legislators recently passed legislation designed to address concerns about dangers posed by CCR impoundments that may be "closed in place" without any required removal of CCRs from unlined impoundments. The approach taken by that legislation is to focus on increasing beneficial uses of CCRs and requiring, among other things, owners/operators of each CCR units to seek proposals for recycling or beneficial use projects for the CCRs, addressing the quantity of CCRs suitable for recycling into bricks, concrete or other inert materials, the cost of such recycling or beneficial use,

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<sup>33</sup> *Sierra Club v. Va. Elec. & Power Co.*, 247 F. Supp. 3d 753 (E.D. Va. 2017).

<sup>34</sup> *Id.* at 758.

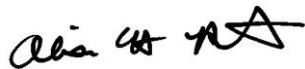
<sup>35</sup> Proposed CCR Rule Amendments; 83 FR 11584, 11602.

and the potential market demand for material recycled or beneficially used from such CCRs.<sup>36</sup> For any such beneficial use, however, it would be of critical concern to ensure the use is safe and not conducive to allowing migration of harmful constituents into waterways.

**V. EPA Must Not Weaken the 2015 CCR Rule**

CBF supports the addition of boron as an Appendix IV constituent because of its widespread presence in groundwater and surface waters surrounding CCR impoundments and its environmental and human health risks as demonstrated in EPA's 2014 risk assessment.<sup>37</sup> CBF also supports the expanded provisions designed to ensure slope protection for CCR impoundments. The balance of the proposed changes, however, seek to weaken the requirements of the 2015 CCR Rule, to the potential endangerment of the Chesapeake Bay, its tributary streams and its human and ecosystem health. The 2015 Rule was enacted after major catastrophes, after exhaustive rulemaking proceedings that included Agency research and extensive input from all stakeholders. Backtracking from this Rule would offer increased risks to waterways in exchange for dubious administrative "flexibility." We strongly urge the agency to reject these proposals.

Sincerely,



Alison Prost  
Maryland Executive Director  
Interim Vice President of Environmental Protection and Restoration  
Chesapeake Bay Foundation

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<sup>36</sup> Virginia 2018 Acts of Assembly, Chapter 0632.

<sup>37</sup> See, e.g., Harkness, et al., *Coal Ash Ponds Leaking* (2016) (finding boron isotopes in surface waters adjacent to CCR units in the Southeast; see also USEPA, "Human and Ecological Risk Assessment of Coal Combustion Residuals," December 2014; docket number EPA-HQ-RCRA-2009-0640-11993.