



Institute for
Policy Integrity

NEW YORK UNIVERSITY SCHOOL OF LAW

October 15, 2019

Attn: Jesse Miller, Materials Recovery and Waste Management Division, Office of Resource Conservation and Recovery, EPA

Re: Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Enhancing Public Access to Information; Reconsideration of Beneficial Use Criteria and Piles, 84 Fed. Reg. 40,353 (proposed on Aug. 14, 2019)

Docket ID: EPA-HQ-OLEM-2018-0524

The Institute for Policy Integrity (“Policy Integrity”) at New York University School of Law¹ respectfully submits the following comments to the Environmental Protection Agency (“EPA”) regarding the proposed amendments (“Proposed Rule”) to the regulation of beneficial uses of coal combustion residuals (“CCR”).² Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy.

These comments focus on inadequacies in EPA’s assessment of the Proposed Rule’s costs and benefits. Regarding the removal of the tonnage-based trigger for environmental demonstrations:

- EPA fails to provide a reasoned explanation for removing the tonnage-based trigger, and
- EPA fails to analyze the costs—in the form of forgone environmental benefits—of removing the tonnage-based trigger.

EPA has not shown that removing the tonnage-based trigger will increase net social benefits, and so the agency should not remove that trigger as proposed. To further address the shortcomings in the Proposed Rule’s environmental demonstration requirement, EPA should:

- Evaluate reasonable regulatory alternatives—such as banning beneficial uses of unencapsulated CCR at sites meeting the location-based criteria, or requiring environmental demonstrations for all beneficial uses of unencapsulated CCR—and adopt the combination of regulatory options that will maximize net social welfare.
- Require all environmental demonstrations to be publicly available online, as the benefits of transparency most likely outweigh the minimal costs of digitizing the demonstrations.

¹ This document does not purport to present New York University School of Law’s views, if any.

² See EPA, Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Enhancing Public Access to Information; Reconsideration of Beneficial Use Criteria and Piles, 84 Fed. Reg. 40,353 (proposed on Aug. 14, 2019) [hereinafter Proposed Rule].

Finally, regarding EPA's proposed definition of "CCR storage piles":

- EPA fails to provide a reasoned explanation for relieving on-site, non-containerized CCR piles from complying with CCR landfill requirements;
- EPA fails to analyze the costs—in the form of forgone environmental benefits—of subjecting on-site, non-containerized CCR piles to less stringent regulation; and
- EPA fails to analyze the costs of permitting CCR storage piles to operate as temporary landfills not subject to CCR landfill requirements.

I. PROBLEMS WITH THE REMOVAL OF THE TONNAGE-BASED TRIGGER FOR ENVIRONMENTAL DEMONSTRATIONS

A. EPA fails to provide a reasoned explanation for why large quantities of unencapsulated CCR no longer require monitoring for negative health and environmental impacts.

In 2015, EPA added a fourth criterion to the definition of permissible beneficial-use projects specifically to address the risks posed by beneficial use sites containing large quantities of unencapsulated CCR. Consequently, EPA may not now remove the tonnage-based trigger without providing a reasoned explanation for its policy change.

In response to EPA's proposed rulemaking in 2010, commenters raised concerns about CCR releases from structural fill approved as a beneficial use of CCR.³ Public concern primarily focused on the risk that "large scale fills were effectively operating as landfills" and might merit regulation as such.⁴ After evaluating this risk, EPA determined in 2015 that because "structural fills can be similar to the landfills regulated in the final disposal rule,"⁵ such large-scale beneficial use sites merit additional regulation. EPA further supported this determination by investigating the relationship between disposal volume and release risks in a 2014 Risk Analysis Assessment,⁶ and concluded that "the risks from use of CCR are more likely to be associated with large volumes, particularly for unencapsulated uses."⁷ To address these risks, EPA added Criterion Four to require that beneficial use activities using over 12,400 tons of unencapsulated CCR "demonstrate that environmental and health related standards have been met."⁸ EPA expressly stated that "the fourth criterion is . . . tied to the Agency's general approach to large scale fill."⁹

Because EPA included the fourth criterion not only to address the general environmental and health risks of CCR releases, but specifically to address the risks associated with "[t]he placement of large quantities of CCR in a single concentrated location,"¹⁰ EPA must explain why it no longer believes that the risks from large beneficial use sites are of "such significance to

³ See EPA, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities, 80 Fed. Reg. 21,302, 21,351 (Apr. 17, 2015) (codified at 40 C.F.R. pts. 257 & 261) [hereinafter 2015 CCR Rule].

⁴ *Id.* at 21,352.

⁵ *Id.* at 21,353.

⁶ See EPA, HUMAN AND ECOLOGICAL RISK ASSESSMENT OF COAL COMBUSTION RESIDUALS (Dec. 2014) (ID: EPA-HQ-RCRA-2009-0640-11993).

⁷ 2015 CCR Rule, 80 Fed. Reg. at 21,350.

⁸ *Id.*

⁹ *Id.* at 21,351.

¹⁰ *Id.*

warrant regulation.”¹¹ When amending a rule, an agency must provide “a reasoned explanation . . . for disregarding facts and circumstances that underlay or were engendered by the prior policy.”¹² EPA’s failure to do so renders the policy change arbitrary and capricious in violation of the Administration Procedure Act.

Far from disavowing its earlier conclusions, EPA now continues to acknowledge in the preamble to the Proposed Rule that the 2014 Risk Assessment “demonstrates that potential risks will tend to decrease as the mass of CCR decreases.”¹³ EPA criticizes both the imprecision with which the model established this relationship¹⁴ and the tonnage limit selected to trigger environmental demonstrations,¹⁵ but EPA does not challenge its prior determination that beneficial uses of greater CCR quantities pose greater risks to health and the environment than beneficial uses of lower CCR quantities.

Even if EPA now prefers location-based criteria as a predictor of the risk posed by beneficial uses of CCR,¹⁶ EPA may not remove existing tonnage-based triggers without explaining why it no longer believes that the risks from large-scale beneficial uses, particularly for structural fill, merit regulation. The risks posed by large-scale uses of CCR may sometimes coincide with, but may other times be wholly independent from, the risks posed by use of CCR in sensitive locations like flood plains.¹⁷ Regulation of one category of risks does not necessarily excuse the agency from regulating a separate category of risks. EPA has not adequately explained its proposal to abandon the regulation of the unique risks posed by large-scale CCR use, nor has the agency adequately analyzed the forgone benefits of that proposal, as discussed further in the next section.

B. EPA must analyze the forgone benefits of CCR releases from projects avoided, mitigated, or blocked under the tonnage-based trigger for environmental demonstrations.

The 2015 Rule required proposed beneficial uses of over 12,400 tons of unencapsulated CCR to conduct environmental demonstrations, but the Proposed Rule replaces this tonnage-based trigger with a location-based trigger. EPA must address the forgone benefits of preventing harmful CCR releases from projects that would have been avoided, mitigated, or blocked under the 2015 Rule.

Environmental demonstrations are the only regulatory mechanism now in place to check the environmental and health risks posed by otherwise allowed uses of unencapsulated CCR. In an environmental demonstration, proponents of beneficial use sites must show “that releases to environmental media . . . are comparable to or lower than those from analogous products made without CCR,” or will be “at or below relevant regulatory and health-based benchmarks for

¹¹ *Id.* at 21,352.

¹² *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 516 (2009).

¹³ Proposed Rule, 84 Fed. Reg. at 40,360.

¹⁴ EPA faulted the analysis for its inability to “define an exact relationship between risk and small changes in mass for prospective uses.” *Id.*

¹⁵ *See id.* at 40,356.

¹⁶ *See id.* at 40,360.

¹⁷ To offer an analogy that EPA will be familiar with, the agency sets ambient air quality standards for particulate matter both based on annual average concentrations and also based on concentrations over 24 hours, because the same pollutant presents different risks from both acute and chronic exposures, and both risks require separate but related regulatory standards. One type of standard would not substitute for the other.

human and ecological receptors during use.”¹⁸ If the operator cannot make this demonstration, the “beneficial user will need to use virgin materials in place of CCR”¹⁹ or else be regulated as a disposal site.

By applying this requirement to large-scale beneficial use sites, the 2015 Rule created several mechanisms for influencing the management of beneficial use sites. First, the existence of the tonnage trigger for environmental demonstrations may prompt certain operators to abandon plans to use CRR at their sites upon recognizing that releases will neither be comparable to those of analogous projects nor in compliance with applicable standards, as required by the beneficial use definition. Second, some operators may mitigate the risk of their large-scale beneficial use sites either preemptively to pass their environmental demonstration, or else after an environmental demonstration reveals an addressable weakness of the proposed site’s ability to control releases. As the agency noted in 2015, “As a consequence of [the 12,400 ton trigger], EPA expects that significant changes may need to be made in order to proceed with a proposed use; for example, conducting the required assessment[] may demonstrate that the only way to achieve the performance standard is to install engineering features, such [as] a liner, as part of the proposed project.”²⁰ Third, some large-scale projects may be blocked altogether by an operator’s inability to make the required environmental demonstration. Therefore, in 2015, EPA recognized that the tonnage-based trigger for conducting environmental demonstrations would cause mitigation at some large-scale CCR projects and cause other projects to be subject to the disposal regulations.²¹ Because such responses would reduce “releases of concern” from beneficial use sites, EPA expected the environmental demonstration requirement for large scale CCR sites to achieve environmental and health benefits by allowing only “comparable . . . or lower” risks to groundwater, surface water, soil, and air.²²

EPA now fails to address how withdrawing the tonnage-based trigger removes these checks on large-scale CCR sites and may result in greater CCR releases, thus forgoing the 2015 rule’s benefits to groundwater, surface water, soil, and air. In particular, EPA does not discuss the forgone benefits if large-scale sites not otherwise covered by the proposed location-based criteria no longer preemptively mitigate against releases through the installation of liners or other engineering or design features. Nor does EPA discuss the forgone benefits if such sites no longer reduce the quantities of CRR applied or become subject to disposal regulations for failure to make an environmental demonstration. In the Economic Analysis for the Proposed Rule, EPA recognizes that the “changes in the cost of management at beneficial use sites may change the *quantities* of CCR managed on site at power plants,”²³ but EPA does not elaborate what elements of the proposed rule may spur such changes or how significantly EPA expects the quantity of CCR used to change. Nor does EPA address how removing the tonnage-based trigger may

¹⁸ Proposed Rule, 84 Fed. Reg. at 40,358.

¹⁹ EPA, ECONOMIC ANALYSIS: HAZARDOUS AND SOLID WASTE MANAGEMENT SYSTEM: DISPOSAL OF COAL COMBUSTION RESIDUALS FROM ELECTRIC UTILITIES; ENHANCING PUBLIC ACCESS TO INFORMATION; RECONSIDERATION OF BENEFICIAL USE CRITERIA AND PILES, at 3-6 (2019) [hereinafter PROPOSED RULE EA].

²⁰ 2015 CCR Rule, 80 Fed. Reg. at 21,352. *See also id.* (“[T]he burden then shifts to the potential user to demonstrate that these potential risks do not exist at the particular site *or have been adequately mitigated.*”) (emphasis added).

²¹ *See id.*

²² *Id.*

²³ PROPOSED RULE EA at 1-3 (emphasis in original).

encourage more large-scale CCR beneficial use sites, particularly the structural fill sites that EPA targeted with Criterion Four.

By removing regulatory barriers and risk mitigation requirements, EPA's proposed rule both encourages more large-scale CCR beneficial use sites and increases the risk of CCR releases from these sites. EPA must assess the forgone benefits of removing the tonnage-based trigger, and should proceed with the proposed repeal of that trigger only upon a showing that the forgone environmental and health benefits can be justified.²⁴ The Proposed Rule fails to justify the forgone benefits of repealing the tonnage-based trigger, and so the Proposed Rule is unreasonable.

II. EPA MUST ASSESS THE COSTS AND BENEFITS OF REASONABLE REGULATORY ALTERNATIVES

Executive Order 12,866 requires all agencies to “assess all costs and benefits of available regulatory alternatives” and then select the alternative that “maximize[s] net benefits.”²⁵ In the Proposed Rule, EPA fails to consider reasonable alternatives for certain proposals or to conduct cost-benefit analyses for the alternatives that it does suggest. To comply with the requirements of Executive Order 12,866, EPA must conduct cost-benefit analyses for the following reasonable regulatory alternatives and adopt the combination of regulatory options that will maximize net social welfare.

A. EPA should evaluate whether it would be net-beneficial to ban beneficial uses of unencapsulated CCR at sites meeting the proposed location-based criteria.

In the Proposed Rule, EPA discusses how some locations, such as locations close to water resources or seismic zones, present either special environmental sensitivities, special risks to the structural integrity of the beneficial use project, or both.²⁶ These locations, therefore, “increase the risks to human health or the environment.”²⁷ In response, EPA proposes requiring projects in these locations only to conduct environmental demonstrations. However, even after acknowledging that “[s]everal states” have elected to protect such “sensitive areas” by instead outright “prohibiting CCR from being placed” in those locations,²⁸ EPA fails to meaningfully consider adopting that same reasonable alternative. EPA does ask for comments on prohibiting CCR placement in such sensitive areas,²⁹ but attempts no comparison of the costs and benefits, or any other meaningful analysis, of such prohibition. Tellingly, the Economic Analysis discusses neither prohibitions nor bans, nor any other regulatory alternatives,³⁰ despite the Executive Order requirement that all agencies “assess all costs and benefits of available regulatory alternatives” and then select the alternative that “maximize[s] net benefits.”³¹

²⁴ For methods to quantify and monetize the environmental and health effects associated with CCR releases, *see generally* EPA, REGULATORY IMPACT ANALYSIS: EPA'S 2015 RCRA FINAL RULE REGULATING COAL COMBUSTION RESIDUAL (CCR) LANDFILLS AND SURFACE IMPOUNDMENTS AT COAL-FIRED ELECTRIC UTILITY POWER PLANTS at ch. 5 & 6 (Dec. 2014) (ID: EPA-HQ-RCRA-2009-0640-12034) [hereinafter RIA FOR 2015 CCR FINAL RULE].

²⁵ Exec. Order No. 12,866 § 1(a) (Oct. 4, 1993).

²⁶ *See* Proposed Rule, 84 Fed. Reg. at 40,358.

²⁷ *Id.*

²⁸ *Id.*

²⁹ *E.g. id.* at 40,360.

³⁰ *See generally* Proposed Rule EA (a search for “prohibit” or “ban” turn up no results, and “alternative” is mentioned only in connection with the standard for Boron).

³¹ Exec. Order No. 12,866 § 1(a) (Oct. 4, 1993).

To reduce environmental and health risks, EPA should consider prohibiting the use of CCR in areas meeting one or more of the location-based criteria, instead of merely requiring such entities to conduct environmental assessments for proposed placements in these high-risk locations. In particular, EPA should consider whether prohibitions based on location-based criteria are cost-benefit justified after comparing the environmental and health gains from expected release reductions and administrative savings against any forgone benefits of lower beneficial recycling rates.

B. EPA should evaluate whether it would be net-beneficial to require all beneficial uses of unencapsulated CCR to conduct environmental demonstrations.

Because of the low cost of environmental demonstrations, EPA should analyze whether it is cost-benefit justified to require all unencapsulated beneficial uses to produce environmental demonstrations.

The Proposed Rule's Economic Analysis estimates that that each environmental demonstration costs only \$2,773.15 to conduct.³² EPA also believes that requiring the 16 to 43 projects per year that would trigger the proposed location-based criteria to conduct these environmental demonstrations will "eliminat[e] releases of CCR" and so "improve ecological and human health by reducing the risk of exposures to arsenic and other toxic metals."³³ Implicitly, EPA believes that the environmental and health benefits that result from conducting these environmental demonstrations justify the \$2,773-per-project cost.

However, given this low per-project cost and the fact that the total benefits of the environmental demonstrations justify the costs, EPA must also consider as a reasonable alternative the option of requiring *all* 359 to 585 beneficial use projects per year to conduct an environmental demonstration. Given the low costs and likely benefits of the environmental demonstrations, requiring all or nearly all beneficial use projects to conduct the demonstrations may even further maximize net benefits. A more universally applicable requirement would also relieve facilities of the initial burden of screening for the location based-criteria (estimated at \$596.33 per project to review all five criteria³⁴) and may also relieve some administrative burdens on EPA. Based on EPA's own assessment of low costs versus likely benefits, the agency must strongly consider whether a more universally applicable requirement would better maximize net benefits.

C. EPA should evaluate whether it would be net-beneficial to add a notice requirement mandating that all environmental demonstrations be publicly available online.

The CCR Rule and Proposed Rule both lack public notice requirements for the environmental demonstrations. Because of the benefits of increasing public access to this information, EPA should evaluate whether it would be net-beneficial to require all environmental demonstrations to be posted online.

Public dissemination of environmental risks creates an array of societal benefits. Members of the public can mitigate their own risk exposure or pressure beneficial use operators to resolve issues raised in the environmental demonstration. Information disclosure also memorializes the existence of a beneficial use within a community and reduces uncertainty for future planning. In

³² PROPOSED RULE EA at 3-5.

³³ Proposed Rule, 84 Fed. Reg. at 40,368.

³⁴ PROPOSED RULE EA at 3-4. EPA notes that this is "likely to be an overestimate," because a finding of any one of the location-based standards would trigger the environmental demonstration. *Id.*

2015, EPA noted the value of disclosure about related types of CCR risks, in particular the value of the information to nearby “households and communities” about their potential risks, and how “transparency will facilitate citizen and state government oversight and overall enforcement.”³⁵ In contrast, the costs of disclosure most likely include only the small cost of digitizing and publishing the files. As an analogous example of the low costs of reporting, in the Proposed Rule’s Economic Analysis, EPA estimates that requiring facilities to amend and post their annual groundwater monitoring and corrective action reports would cost just \$174 per facility.³⁶

Because of the likely benefits and projected minimal costs, EPA should consider requiring beneficial use operators to publish environmental demonstrations online. Absent the discovery of any substantial costs, EPA should adopt a public disclosure requirement upon determining that the benefits outweigh the costs.

III. PROBLEMS WITH THE PROPOSED CHANGES TO THE REGULATION OF ON-SITE CCR PILES

A. EPA may not change its rule mandating that on-site CCR piles fulfill the requirements for CCR landfills without acknowledging and providing a reasoned explanation for its policy change.

The 2015 Rule regulates non-containerized, on-site CCR piles as landfills, but the Proposed Rule regulates these piles under a newly defined “CCR storage pile” category, subject to less stringent conditions. EPA’s failure to justify this change is arbitrary and capricious, because EPA does not provide “a reasoned explanation . . . for disregarding facts and circumstances that underlay or were engendered by the prior policy.”³⁷ At a minimum, case law indicates that a reasoned explanation requires an agency to acknowledge when it is changing its policy.³⁸ EPA states that, under the Proposed Rule, on-site CCR piles will not be subject to CCR landfill requirements, but EPA does not explain that this policy departs from past practice. Accordingly, EPA unreasonably fails to acknowledge a policy change under the Proposed Rule.

In 2015, EPA developed a strong record to support subjecting on-site CCR piles to landfill requirements. In the preamble, EPA found “no reason to treat [on-site] piles and landfills differently” based on whether the piles were eventually intended for beneficial use.³⁹ EPA’s determination was “strongly influenced by the similarities in the potential risks posed by both waste piles and CCR landfills to human health, groundwater resources, or the air if improperly managed.”⁴⁰ Further, EPA recognized that “[g]iven that landfills and surface impoundments can be periodically dredged to provide material for beneficial use,” any distinction based on beneficial use “would be impracticable, and would exclude from regulation many of the greatest sources of risk.”⁴¹

EPA departs from this policy in the Proposed Rule. Under the Proposed Rule, on-site CCR piles can comply with the requirements for “CCR storage piles” to evade regulation as disposal units

³⁵ RIA FOR 2015 CCR FINAL RULE, at 6-4 to 6-5.

³⁶ PROPOSED RULE EA at 3-7.

³⁷ *Fox*, 556 U.S. at 516.

³⁸ *See id.* at 515.

³⁹ 2015 CCR Rule, 80 Fed. Reg. at 21,356.

⁴⁰ *Id.*

⁴¹ *Id.*

and no longer must comply with CCR landfill requirements.⁴² EPA fails to directly acknowledge, let alone explain, its change in policy. EPA states its belief that on-site storage piles do not require regulation as CCR landfills,⁴³ but EPA never addresses the similarities between the risks posed by on-site storage piles and regulated landfills that underlay EPA's 2015 decision. Further, EPA never directly states that the Proposed Rule releases non-containerized, on-site CCR piles from the obligation to comply with CCR landfill requirements.

By failing to address the specific concerns raised in the 2015 rule or to even acknowledge the change, EPA's proposal of the new rule falls far short of its obligations under the Administrative Procedure Act.

B. Because the Proposed Rule does not regulate on-site CCR piles as stringently as the 2015 Rule, EPA must analyze the forgone environmental and health benefits of the 2015 Rule.

In the preamble, EPA states that the new CCR storage pile definition "would result in no reasonable probability of adverse effects on human health and the environment from the management of CCR on-site or off-site."⁴⁴ The record does not support this assertion. Because the proposed regulation of CCR storage piles is less stringent than the regulation of CCR landfills, EPA must analyze the costs of re-categorizing on-site piles of non-containerized CCR.

The 2015 Rule established national minimum criteria for CCR landfills and applied these requirements to on-site piles of non-containerized CCR.⁴⁵ These rules establish a comprehensive regulatory structure for CCR landfills:

- The 2015 Rule's Location Restrictions: The location restrictions require new CCR landfills to demonstrate environmental safety when placed close to the uppermost aquifer, in wetlands, within fault areas, in seismic impact zones, and in unstable areas; existing CCR landfills are subject only to the location restriction for unstable areas.⁴⁶
- The 2015 Rule's Design Criteria: All new CCR landfills must be lined with a composite liner containing two components, or an equally effective alternative, and also "operate with a leachate collection and removal system;" existing CCR units are not required to retrofit with these features.⁴⁷
- The 2015 Rule's Operating Criteria: CCR landfills must comply with air criteria, run-on and run-off controls, and periodic inspection requirements.⁴⁸
- The 2015 Rule's Groundwater Monitoring and Corrective Action: Operators of CCR landfills must also install monitoring wells and participate in a groundwater monitoring

⁴² Proposed Rule, 84 Fed. Reg. at 40,363.

⁴³ EPA insists that "it is not necessary to impose on CCR storage piles the same set of technical requirements as for CCR landfills." *Id.* EPA's language obscures the fact that the agency is *removing* the requirement for on-site piles of non-containerized CCR to meet landfill requirements

⁴⁴ *Id.*

⁴⁵ See 2015 CCR Rule, 80 Fed. Reg. at 21,355-56.

⁴⁶ See *id.* at 21,304.

⁴⁷ *Id.*

⁴⁸ See *id.*

program.⁴⁹ Where monitoring indicates an exceedance of a groundwater protection standard, operators must take corrective action.⁵⁰

- The 2015 Rule’s Closure Requirements: Operators must comply with all closure and post-closure care criteria.⁵¹
- The 2015 Rule’s Recordkeeping, Notification and Internet Posting Requirements: Finally, operators must comply with all recordkeeping, notification, and internet posting requirements.⁵²

The proposed regulations for the new category of CCR storage piles, which can include on-site CCR piles, are not as stringent as the CCR landfill requirements. To distinguish between CCR piles considered storage and those considered disposal, EPA is proposing to define a CCR storage pile as “any temporary accumulation of solid, non-flowing CCR placed on the land that is designed and managed to control releases of CCR to the environment.”⁵³ EPA proposes to define a temporary accumulation as “an accumulation on the land that is neither permanent nor indefinite.”⁵⁴ To be temporary, all the CCR must be removed from the site “at some point.”⁵⁵ For the accumulation to be identifiable, the entity must have a record documenting the specific timeline by which all CCR in the pile will be completely removed.⁵⁶ The requirement to control releases is less defined. Instead of prescribing control measures, EPA proposes to permit entities “to determine the control measures most appropriate to meet the requirement to control releases at a given site.”⁵⁷ As one option, EPA proposes that entities may meet their requirement to control releases “by designing and managing piles such that the releases are consistent with the terms of federal, state or local regulations for surface water, groundwater, soil or air protection.”⁵⁸

Because the Proposed Rule lacks the control requirements, location restrictions, or monitoring requirements of the 2015 Rule, the risk of releases from on-site CCR piles will increase:

- Existing regulations require new CCR landfills to install composite liners, or a comparable alternative, along with a leachate collection and removal system.⁵⁹ Under the Proposed Rule, CCR storage piles must use control measures, but EPA provides no guidance on what such controls must be. EPA proposes possible control measures, such as “periodic wetting,” that do not address groundwater contamination concerns.⁶⁰ EPA must evaluate the risk that alternative control measures will not control releases at the level of the CCR landfill requirements.

⁴⁹ *See id.* at 21,304-05.

⁵⁰ *See id.* at 21,305.

⁵¹ *See id.*

⁵² *See id.*

⁵³ Proposed Rule, 84 Fed. Reg. at 40,362.

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *See id.*

⁵⁷ *Id.* at 40,363.

⁵⁸ *Id.*

⁵⁹ *See* 2015 CCR Rule, 80 Fed. Reg. at 21,304.

⁶⁰ Proposed Rule, 84 Fed. Reg. at 40,363.

- CCR landfills must make a demonstration to be sited in vulnerable locations,⁶¹ whereas on-site CCR storage piles have no location-based restrictions. When proposing to replace the tonnage-based trigger for environmental demonstrations, the Proposed Rule emphasizes the risk of CCR releases from beneficial uses at geographically vulnerable locations, but the same rule would now permit facilities to operate on-site CCR piles in such locations. Accordingly, EPA’s own analysis suggests that the risk of CCR releases will increase if more piles are sited in areas fitting the location-based criteria.
- Finally, CCR landfills are subject to periodic inspection and groundwater monitoring requirements, but EPA fails to propose an enforcement mechanism to systematically identify and remedy inadequate CCR controls among on-site piles. Without a monitoring requirement for CCR storage piles, fewer improper releases will be identified than under CCR landfill requirements. At a basic level, releases will increase, because fewer activities generating improper CCR releases will be identified and remedied. But releases will also increase if an absence of monitoring reduces the incentives for facilities to control CCR releases. Facilities that do not believe improper CCR releases will be detected are less likely to take steps to control them.

Because the Proposed Rule will regulate on-site CCR piles with less stringency than the 2015 Rule, EPA must assess the forgone benefits of the proposed changes, and should proceed with the proposed changes only upon a showing that the forgone environmental and health benefits can be justified.⁶² The Proposed Rule fails to assess or justify the forgone benefits and so is unreasonable.

C. Because the Proposed Rule will permit users to operate off-site CCR piles at non-beneficial use sites, EPA must analyze the environmental and health risks of geographically dispersed CCR piles that will operate similarly to temporary landfills but without CCR landfill regulations.

Under the 2015 Rule, all non-containerized CCR piles located outside of beneficial use sites were regulated as CCR landfills,⁶³ but the proposed CCR storage pile regulation lacks any geographic limitations for off-site piles of CCR.⁶⁴ Under the Proposed Rule, CCR piles will now be permitted at any location, not only at facility properties or beneficial use sites, where the user can comply with the CCR storage pile regulations. Because the Proposed Rule will permit operators to maintain CCR piles at any location subject to minimum regulation, EPA must address the environmental and health risks associated with expanded temporary landfills not subject to CCR landfill requirements.

In addition to geographic flexibility, the CCR Storage Pile requirements can accommodate users planning to maintain large quantities of CCR for long periods of time. The Proposed Rule permits entities to maintain CCR storage piles for any time length, as long as the operator sets a

⁶¹ See 2015 CCR Rule, 80 Fed. Reg. at 21,304.

⁶² For methods to quantify and monetize the environmental and health effects associated with CCR releases, see generally RIA FOR 2015 CCR FINAL RULE at ch. 5 & 6.

⁶³ Under the 2015 Rule, “CCR that is beneficially used off-site is not a CCR pile.” 40 C.F.R § 257.53. Because the term “CCR pile” identifies the piles of CCR “subject to the disposal requirements” under the 2015 Rule, only non-containerized piles of CCR located at beneficial use sites avoid regulation as CCR landfills. 2015 CCR Rule, 80 Fed. Reg. at 21,356.

⁶⁴ See Proposed Rule, 84 Fed. Reg. at 40,370.

maximum time limit on the pile's existence, and maintains a record documenting when the CCR will be removed.⁶⁵ Further, the regulations set no maximum volume of CCR permitted to be used in CCR storage piles; again, the maximum volume stored on-site must simply be noted in the facility's records.⁶⁶ Because EPA establishes no outer limits for the longevity or size of CCR storage piles, facilities can record the maximum time frame during which they expect to maintain the CCR pile and the maximum size that the site can accommodate. EPA must address the risk that operators will maintain piles akin to landfills that evade stricter regulations by recording maximum sizes and timeframes for removal.

Because these regulations will permit more accumulations of CCR to avoid CCR landfill requirements, EPA must evaluate the impacts that the Proposed Rule will have on human health and the environment. EPA must now assess these forgone benefits as the costs of increasing CCR releases under the Proposed Rule. Given the EPA's past consideration of these issues, the agency's failure to do for the Proposed Rule is unreasonable.

Sincerely,

Isabel Carey
Jason A. Schwartz

Institute for Policy Integrity
New York University School of Law
isabel.carey@nyu.edu

⁶⁵ See *id.* at 40,362.

⁶⁶ See *id.*