



6560-50-P

## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Part 257**

**[EPA–HQ–OLEM–2018–0524; FRL–9997-74-OLEM]**

**RIN 2050-AG98**

### **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**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** In this action, EPA is proposing the following targeted changes to the April 17, 2015 Coal Combustion Residuals Final Rule based on stakeholder input: revisions to the annual groundwater monitoring and corrective action report requirements, establishing an alternate risk-based groundwater protection standard for boron, and revisions to the publicly accessible CCR website requirements. The Agency is also proposing to address two provisions of the final rule that were remanded back to EPA on August 21, 2018 by the U.S. Court of Appeals for the D.C. Circuit. First, EPA is proposing to revise the CCR beneficial use definition by replacing the mass-based numerical threshold with specific location-based criteria as the trigger for an environmental demonstration. Second, EPA is proposing to introduce a single approach to consistently address the potential environmental and human health issues associated with piles of CCR, regardless of the location of the pile and whether the CCR is destined for disposal or beneficial use.

**DATES:** *Comments.* Comments must be received on or before **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. *Public Hearing.* The

EPA will hold a public hearing on October 2, 2019, in the Washington, DC metropolitan area.

**ADDRESSES:** You may send comments, identified by Docket ID No. EPA-HQ-OLEM-2018-0524, by any of the following methods:

- Federal eRulemaking Portal: <https://www.regulations.gov/> (our preferred method).  
Follow the online instructions for submitting comments.
- Mail: U.S. Environmental Protection Agency, EPA Docket Center, Office of Land and Emergency Management Docket, Mail Code 28221T, 1200 Pennsylvania Avenue NW, Washington, DC 20460.
- Hand Delivery / Courier: EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue, NW, Washington, DC 20004. The Docket Center's hours of operations are 8:30 a.m. – 4:30 p.m., Monday – Friday (except Federal Holidays).

*Instructions:* All submissions received must include the Docket ID No. for this rulemaking. Comments received may be posted without change to <https://www.regulations.gov/>, including any personal information provided. For detailed instructions on sending comments and additional information on the rulemaking process, see the “Public Participation” heading of the **SUPPLEMENTARY INFORMATION** section of this document.

The hearing will be held in the Washington, DC metropolitan area. The exact location of the hearing will be posted in the docket for this proposal and on EPA's CCR website (<https://www.epa.gov/coalash>) in advance of the hearing. The hearing will convene at 9:00 a.m. (local time) and will conclude at 8:00 p.m. (local time).

Please note that if this hearing is held at a U.S. government facility, individuals planning to attend the hearing should be prepared to show valid picture identification to the security staff in order to gain access to the meeting room. Please note that the REAL ID Act, passed by Congress in 2005, established new requirements for entering federal facilities. For purposes of the REAL ID Act, EPA will accept government-issued IDs, including driver's licenses, from the District of Columbia and all states and territories except from American Samoa. If your identification is issued by American Samoa, you must present an additional form of identification to enter the federal building where the public hearing will be held. Acceptable alternative forms of identification include: federal employee badges, passports, enhanced driver's licenses, and military identification cards. For additional information for the status of your state regarding REAL ID, go to: <https://www.dhs.gov/real-id-enforcement-brief>frequently-asked-questions. Any objects brought into the building need to fit through the security screening system, such as a purse, laptop bag, or small backpack. Demonstrations will not be allowed on federal property for security reasons.

**FOR FURTHER INFORMATION CONTACT:** Jesse Miller, Materials Recovery and Waste Management Division, Office of Resource Conservation and Recovery (5304-P), Environmental Protection Agency, 1200 Pennsylvania Avenue NW, Washington DC 20460; telephone number: (703) 308-1180; email address: [miller.jesse@epa.gov](mailto:miller.jesse@epa.gov). For more information on this rulemaking please visit <https://www.epa.gov/coalash>.

**SUPPLEMENTARY INFORMATION:**

## **I. Public Participation**

### *A. Written Comments*

Submit your comments, identified by Docket ID No. EPA–HQ–OLEM-2018-0524, at <https://www.regulations.gov> (our preferred method), or the other methods identified in the **ADDRESSES** section. Once submitted, comments cannot be edited or removed from the docket. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>.

### *B. Participation in Public Hearing*

The EPA will begin pre-registering speakers for the hearing upon publication of this document in the **Federal Register**. To register to speak at the hearing, please use the online registration form available on EPA's CCR website (<https://www.epa.gov/coalash>) or contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to register to speak at the hearing. The last day to pre-register to speak at the hearing will be September 26, 2019. On September 30, 2019, the EPA will post a general agenda for the hearing on EPA's CCR website (<https://www.epa.gov/coalash>).

The EPA will make every effort to follow the schedule as closely as possible on the day of the hearing; however, please plan for the hearings to run either ahead of schedule or behind schedule. Additionally, requests to speak will be taken the day of the hearing at the hearing registration desk. The EPA will make every effort to accommodate all speakers who arrive and register, although preferences on speaking times may not be able to be fulfilled.

Each commenter will have 5 minutes to provide oral testimony. The EPA encourages commenters to provide the EPA with a copy of their oral testimony electronically (via email) or in hard copy form. If EPA is anticipating a high attendance, the time allotment per testimony may be shortened to no shorter than 3 minutes to accommodate all those wishing to provide testimony and have pre-registered. All comments and materials received at the public hearing will be placed in the docket for this rule, as well as a transcript from this hearing. While EPA will make every effort to accommodate all speakers who arrive and register the day of the hearing, opportunities to speak may be limited based upon the number of preregistered speakers. Therefore, EPA strongly encourages anyone wishing to speak to preregister.

The EPA may ask clarifying questions during the oral presentations but will not respond to the presentations at that time. Written statements and supporting information submitted during the comment period will be considered with the same weight as oral comments and supporting information presented at the public hearing. Commenters should notify the person listed in the **FOR FURTHER INFORMATION CONTACT** section if they will need specific equipment or if there are other special needs related to providing comments at the hearings. Verbatim transcripts of the hearings and written statements will be included in the docket for the rulemaking.

Please note that any updates made to any aspect of the hearing is posted online at <https://www.epa.gov/coalash>. While the EPA expects the hearing to go forward as set forth above, please monitor our website or contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to determine if there are any updates. The EPA does not intend to publish a document in the **Federal Register** announcing updates.

The EPA will not provide audiovisual equipment for presentations unless we receive special requests in advance. Commenters should notify the person listed in the **FOR FURTHER INFORMATION CONTACT** section when they pre-register to speak that they will need specific equipment. If you require the service of a translator or special accommodations, such as audio description, please pre-register for the hearing and describe your needs by September 26, 2019. We may not be able to arrange accommodations without advanced notice.

### *C. Submitting CBI*

Do not submit information that you consider to be CBI electronically through <https://www.regulations.gov> or email. Send or deliver information identified as CBI to only the following address: ORCR Document Control Officer, Mail Code 5305-P, Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460; Attn: Docket ID No. EPA-HQ-OLEM-2018-0524.

Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or DC-ROM that you mail to the EPA, mark the outside of the disk or CD-ROM as CBI and then identify electronically within the disk or CD-ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. If you submit a

CD-ROM or disk that does not contain CBI, mark the outside of the disk or CD-ROM clearly that it does not contain CBI. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 Code of Federal Regulations (CFR) part 2.

#### *D. Docket*

The EPA has established a docket for this action under Docket ID No. EPA-HQ-OLEM-2018-0524. The EPA has previously established a docket for the April 17, 2015, CCR final rule under Docket ID No. EPA-HQ-RCRA-2009-0640, and the docket number supporting the March 15, 2018 proposed rule is EPA-HQ-OLEM-2017-0286. All documents in the docket are listed in the <https://www.regulations.gov> index. Although listed in the index, some information is not publicly available, *e.g.*, CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy form. Publicly available docket materials are available either electronically at <https://www.regulations.gov> or in hard copy at the EPA Docket Center (EPA/DC), EPA WJC West Building, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the EPA Docket Center is (202) 566-1742.

## **II. General Information**

### *A. Does this action apply to me?*

This rule applies to the disposal and beneficial use of CCR generated by electric utilities and independent power producers that fall within the North American Industry Classification System (NAICS) code 221112 and may affect the following entities: electric utility facilities and independent power producers that fall under the NAICS code 221112. This discussion is not

intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This discussion lists the types of entities that EPA is now aware could potentially be regulated by this action. Other types of entities could also be regulated. To determine whether your entity is regulated by this action, you should carefully examine this proposal, as well as the applicability criteria found in § 257.50 of title 40 of the Code of Federal Regulations. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

*B. What Action is the agency taking?*

The EPA is proposing to amend the regulations governing the disposal of CCR in landfills and surface impoundments in order to address certain issues raised by stakeholders that have arisen since the April 15, 2015 publication of the CCR rule and which were not addressed in the March 15, 2018 proposal (83 FR 11584) or the July 30, 2018 final rule (83 FR 36435). These issues are presented in Units IV through VIII of this proposal.

In this proposal, EPA is not reconsidering, proposing to reopen, or otherwise soliciting comment on any other provisions of the final CCR rule beyond those specifically identified in this proposal. The EPA will not respond to comments submitted on any issues other than those specifically identified in this proposal and they will not be considered part of the rulemaking record.

*C. What is the agency's authority for taking this action?*

These regulations are established under the authority of sections 1008(a), 2002(a), 4004, 4005 and 7004(b) of the Solid Waste Disposal Act of 1970, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA), as amended by the Hazardous and Solid

Waste Amendments of 1984 (HSWA) and the Water Infrastructure Improvements for the Nation (WIIN) Act of 2016, 42 U.S.C. 6907(a), 6912(a), 6944, 6945 and 6974(b).

*D. What are the incremental costs and benefits of this action?*

This action is expected to result in net costs amounting to between \$0.43 million and \$3.8 million per year. Further information on the economic effects of this action can be found in Unit IX of this preamble.

### **III. Background**

On April 17, 2015, EPA finalized national regulations to regulate the disposal of CCR as solid waste under subtitle D of the Resource Conservation and Recovery Act (RCRA) titled, “Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities,” (80 FR 21302) (2015 CCR rule or CCR rule). The CCR rule established national minimum criteria for existing and new CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of these types of CCR units that are codified in Subpart D of Part 257 of Title 40 of the Code of Federal Regulations (CFR).<sup>1</sup> The criteria consist of location restrictions, design and operating criteria, groundwater monitoring and corrective action, closure requirements and post-closure care, and recordkeeping, notification and internet posting requirements. The rule also required any existing unlined CCR surface impoundment that is contaminating groundwater above a regulated constituent’s groundwater protection standard to stop receiving CCR and either retrofit or close, except in limited circumstances.

The 2015 CCR rule was challenged by several different parties, including a coalition of regulated entities and a coalition of environmental organizations. See *USWAG et al v EPA*, No. 15-1219 (DC Cir.). Four of the claims, a subset of the provisions challenged by the industry and

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<sup>1</sup> Unless otherwise noted, all part and section references in this preamble are to Title 40 of the CFR.

environmental Petitioners, were settled. As part of that settlement, on April 18, 2016, EPA requested the Court to remand the four claims back to the Agency. On June 14, 2016, the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit Court of Appeals) granted EPA's motion.

On September 13, 2017, EPA granted petitions from the Utility Solid Waste Activities Group (USWAG) and AES Puerto Rico LLP, requesting the Agency initiate rulemaking to reconsider certain provisions of the 2015 final rule.<sup>2</sup> The EPA determined that it was appropriate and in the public interest to reconsider certain provisions of the 2015 CCR rule, in light of the issues raised in the petitions and the new authorities in the WIIN Act. In light of that decision, EPA requested that the D.C. Circuit Court of Appeals hold the case in abeyance until the Agency had completed its reconsideration. The EPA subsequently requested that the Court remand certain provisions of the 2015 CCR rule on the ground that the Agency is reconsidering the provisions. Included in that request were two sets of provisions related to the beneficial use of CCR: 1) the 12,400-ton threshold in the beneficial use definition, and 2) the requirements for "piles" of CCR located on-site of a utility and those that are located off-site but destined for beneficial use. In October 2017, the D.C. Circuit Court of Appeals directed EPA to file a status report with the Court indicating its schedule for addressing issues contained in the petitions for reconsideration. In the status report filed in November 2017, EPA stated that it anticipated it would complete its reconsideration of all provisions in two phases. The first phase would be proposed in March 2018 and finalized no later than June 2019 and the second phase would be proposed no later than September 30, 2018 and finalized no later than December 2019. The EPA proposed the Phase One rule on March 15, 2018 (83 FR 11584) and on July 30, 2018, finalized

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<sup>2</sup> The USWAG and AES Puerto Rico rulemaking petitions are available in the docket to this rulemaking.

several revisions included in the Phase One proposal (83 FR 36435). In the July 30, 2018, final rule, EPA adopted two alternative performance standards that either Participating State Directors in states with approved CCR permit programs (participating states) or EPA where EPA is the permitting authority to (1) suspend groundwater monitoring requirements if there is evidence that there is no potential for migration of hazardous constituents to the uppermost aquifer during the active life and post-closure care of the CCR unit; and (2) issue technical certifications in lieu of the current requirements to have professional engineers issue certifications. The Agency also established health-based groundwater protection standards (GWPS) for four constituents (cobalt, lead, lithium and molybdenum) that do not have established Maximum Contaminant Levels. Finally, the Agency extended the deadline by which facilities must cease the placement of waste in CCR units closing for cause in two situations: where the facility has detected a statistically significant increase above a GWPS from an unlined surface impoundment; and where the unit is unable to comply with the aquifer location restriction. In both of these situations, the deadline for waste placement was revised to October 31, 2020. Provisions included in the March 15, 2018 proposal that were not included in July 30, 2018 final rule will be addressed in a subsequent action.

On August 21, 2018, the D.C. Circuit Court of Appeals issued its decision. Of greatest relevance to this proposed rule, the Court granted EPA's request to remand the challenged beneficial use provisions back to EPA in order to allow the Agency to complete its administrative reconsideration.

#### **IV. Proposal to Revise the Beneficial Use Criteria**

In the 2015 CCR rule, EPA established a Beneficial Use definition to distinguish between legitimate beneficial uses of CCR and the disposal of CCR. The Beneficial Use definition is

comprised of four criteria: (1) the CCR must provide a functional benefit; (2) the CCR must substitute for the use of a virgin materials, conserving natural resources that would otherwise need to be obtained through practices such as extraction; (3) the use of the CCR must meet relevant product specifications, regulatory standards, or design standards, when available, and where such specifications or standards have not been established, CCR may not be used in excess quantities; and (4) when unencapsulated use of CCR involves placement on the land of 12,400 tons or more in non-roadway applications, the user must demonstrate and keep records, and provide such documentation upon request, that environmental releases to groundwater, surface water, soil, and air are comparable to or lower than those from analogous products made without CCR, or that environmental releases to groundwater, surface water, soil, and air will be at or below relevant regulatory and health-based benchmarks for human and ecological receptors during use. See, § 257.53 and 80 FR 21349-54 (April 15, 2015). Criteria one through three of the Beneficial Use definition still remain as finalized in the 2015 CCR rule. In this action, EPA is proposing to eliminate the mass-based numerical threshold used to trigger an environmental demonstration, and replace it with specific location-based criteria derived from the existing location criteria for CCR disposal units. The EPA is also soliciting comments and information that could be used to select a new mass-based numerical threshold.

The EPA's current regulations at § 257.53 require that to be considered a "beneficial use," when unencapsulated CCR is placed on the land in amounts greater than 12,400 tons, in non-roadway applications, the user must demonstrate that releases to environmental media (*i.e.*, groundwater, surface water, soil, air) are comparable to or lower than those from analogous products made without CCR or that releases to environmental media will be at or below relevant regulatory and health-based benchmarks for human and ecological receptors during use. The

Agency established this environmental criterion to ensure that unencapsulated uses of CCR would be conducted in an environmentally protective manner. This fourth criterion was designed to address both the concern that large-scale fills were effectively operating as landfills and the documented risks associated with the placement of unencapsulated CCR in or near water sources. See 80 FR 21351-52 (April 15, 2015). A numerical threshold was established to determine when further analysis was warranted. The 12,400-ton threshold criterion was based on data collected in response to the 2010 Steam Electric Power Generating Effluent Guidelines Questionnaire (“the Effluent Guidelines Questionnaire”),<sup>3</sup> representing the smallest size CCR landfill. The EPA selected this threshold largely because the 2014 risk assessment demonstrated that at these volumes the potential risks warrant regulation. See 80 FR 21352 (April 15, 2015). In addition, EPA noted that the threshold of 12,400 tons was generally consistent with three state regulations identified in a 2013 Notice of Data Availability<sup>4</sup>: North Carolina and Wisconsin, which had established 5,000 cubic yards of CCR as a threshold, and West Virginia which had a threshold of 10,000 cubic yards (which equates to about 6,000-12,000 tons). See 80 FR 21351 (April 15, 2015).

After the final rule was issued, EPA received a letter<sup>5</sup> alleging that the 12,400-ton criterion was based on erroneous data that had been submitted to the Agency (available in the docket for the 2015 CCR rule). The letter concluded that the facility had incorrectly reported data in cubic yards rather than in cubic feet as requested in the survey questionnaire form. Based on their calculations, the letter claimed that the smallest landfill in the survey questionnaire data is

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<sup>3</sup> Additional information on this questionnaire can be found on EPA’s website: <https://www.epa.gov/eg/steam-electric-power-generating-effluent-guidelines-questionnaire>

<sup>4</sup> 78 FR 46943-44 (August 2, 2013).

<sup>5</sup> See letter from Kenneth Kastner, Hogan Lovells US LLP, on behalf of Headwaters Resources, Inc., to U.S. Environmental Protection Agency, dated April 1, 2015; available in the docket to this rulemaking.

approximately 74,800 tons and requested that EPA update the fourth beneficial use criterion to reflect this higher value.

The petition for rulemaking<sup>6</sup> submitted by USWAG included a request to correct the numerical threshold for the beneficial use definition (based on the letter previously discussed). Considering the numerical threshold issue raised by the petitioner, EPA has preliminarily determined that it is appropriate and in the public interest to reconsider the numerical threshold criterion in the final rule.

As part of this reconsideration, EPA conducted a focused review of currently available data from three sources: (1) data collected in response to the Effluent Guidelines Questionnaire; (2) available risk information from the risk assessment for the 2015 rule; and (3) information from state beneficial use programs.<sup>7</sup>

**Effluent Guidelines Questionnaire Data.** The Agency first reviewed the reported landfill data received in response to the Effluent Guidelines Questionnaire. After reviewing this data, EPA identified several additional data points in which some facilities mistakenly reported data in cubic yards rather than cubic feet. While this dataset can still provide useful information on typical landfill sizes, EPA was not able to independently confirm the accuracy of every individual value. A review of the full database would not be practicable; at a minimum it would require EPA to contact each facility that provided information to confirm whether the facility had made any errors in reporting its data. No member of the public or stakeholders provided additional data to support the contention that the smallest CCR landfill is approximately 74,800 tons, or information that would allow EPA to independently confirm that value.

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<sup>6</sup> USWAG's petition for rulemaking is available in the docket to this rulemaking.

<sup>7</sup> Many state environmental agencies have requirements and programs to manage the beneficial use of non-hazardous solid waste including coal combustion residuals.

**Available Risk Information.** The Agency next reviewed the results of the 2014 Human and Ecological Risk Assessment of Coal Combustion Residuals (“the 2014 Risk Assessment”) to determine whether the model results for landfills could be used to draw conclusions about structural fill and other unencapsulated uses of CCR.<sup>8</sup> The EPA focused on the model runs for arsenic (III), which was found to be the primary risk driver associated with unlined landfills in the 2014 Risk Assessment. To identify the relevant subset of model runs, EPA queried the risk assessment results for unlined landfills with no surface water interception and plumes that reached the receptor within the 10,000-year evaluation window (i.e., non-zero risk). These limits were placed to eliminate confounding factors that could obscure trends.

The EPA plotted the queried data to visualize any relationships that exist between risk and distance to receptor (meters), total mass disposed (tons), or mass disposed per area (tons/acre). Significant relationships were identified for distance to receptor and total mass disposed, but not for mass disposed per area. Although the identified relationships are relevant to unencapsulated beneficial uses, the data used to identify these relationships are based on the characteristics of existing landfills. However, unencapsulated beneficial uses are not subject to the same siting and construction requirements as the landfills modeled in the 2014 Risk Assessment. As a result, unencapsulated beneficial uses of an equivalent size have the potential to be placed closer to receptors, in more permeable soils or in other areas that will tend to increase risk. Therefore, the potential high-end risks associated with unencapsulated uses will tend to be higher than those modeled for landfills. This makes it difficult to extrapolate the landfill data to unencapsulated uses and to identify a numerical cutoff for proximity or size at

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<sup>8</sup> The Agency’s review is documented in the *Analysis of Model Results from 2014 Risk Assessment of Coal Combustion Residuals: Impacts of Total Mass Disposed and Distance to Receptor on Risk*, which is available in the docket for this rulemaking.

which these uses will start to pose concern. Therefore, EPA concluded these data cannot be used directly to select national beneficial use criteria.

**State Beneficial Use Programs.** From the sources discussed above, EPA identified relationships between risk and both the tonnage of CCR placed in the environment and the distance from the CCR to receptors, but the Agency was unable to use these data as the basis for national-scale beneficial use criteria. Therefore, the Agency reviewed existing state beneficial use programs to understand the basis for similar state criteria. The Agency reviewed the 2012 ASTSWMO Beneficial Use Coal Combustion Residuals Survey Report (“the 2012 ASTSWMO Report”).<sup>9</sup> The 2012 ASTSWMO Report summarizes the results from a survey conducted in October 2011 through March 2012 to which 46 states responded and includes information from their 2006 Beneficial Use Survey Report. The 2012 ASTSWMO Report states that 35 out of 46 States restrict the beneficial use of CCR by statute, regulation, policy, or local ordinance. The Agency initially focused on six states (i.e., Alaska, Illinois, North Carolina, South Carolina, Wisconsin, and West Virginia) that reported the use of numerical criteria to distinguish between small- and large-scale fills in the 2012 ASTSWMO Report. The EPA also gathered additional information on state beneficial use regulations through state websites and follow-up telephone calls with some states. Specifically, the Agency reviewed six additional state beneficial use programs that either were mentioned in submitted comments on the June 2010 proposed rule or were recommended for consideration by one of the other states reviewed (i.e., Kentucky, Maryland, New York, Pennsylvania, Virginia, and Wyoming).

Of the six states (Alaska, North Carolina, South Carolina, Illinois, Wisconsin, and West Virginia) identified in the 2012 ASTSWMO Report, four have requirements based on the amount

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<sup>9</sup> ASTSWMO, “Beneficial Use of Coal Combustion Residuals Survey Report”, September 2012, which is available in the docket to this rulemaking.

of CCR applied in a fill project by total mass (Illinois-10,000; and North Carolina-80,000 tons), mass per area (North Carolina-8,000 tons/acre) or volume (Wisconsin-5,000 and West Virginia-10,000 cubic yards).<sup>10</sup> Of the other six states (Kentucky, Maryland, New York, Pennsylvania, Virginia, and Wyoming) reviewed that were not from the 2012 ASTSWMO Report, only one additional state (Pennsylvania) has requirements based by total mass (100,000 tons) and mass per area (10,000 tons/acre). Uses at or greater than these amounts trigger some form of design, operation, construction and/or maintenance requirements or some form of notification to the state, landowner, deed record office and/or the public. Only one state (West Virginia) prohibited all fill uses above the established criteria (10,000 cubic yards). Based on EPA's review of these specific state beneficial use programs, none of the identified size criteria are based on an analysis of the potential risks associated with the specified mass or volume. Instead, these values are based on considerations such as the size of previously completed fill projects or consensus values agreed upon by state, industry and citizen groups. However, many of these states have additional criteria in place for fill applications that either directly or indirectly address potential risks. Under these state programs, the proposed use of CCR is prohibited if the placement of CCR does not meet these additional criteria, regardless of the amount of CCR used. In describing state programs in this section, the Agency uses the state terminology for clarity. These additional criteria include:

- Three states (Wisconsin, North Carolina, and Pennsylvania) require placement of the CCR to be a minimum distance above the groundwater table. One state (Wisconsin) requires placement to be 5 feet above the groundwater table and another

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<sup>10</sup> With a typical compacted density for fly ash between 1,120 to 1,500 kg/m<sup>3</sup>, the reported volumetric limits correspond to an upper bound somewhere between 4,700 and 12,600 tons. This range is similar to the lower end of mass limits reported by other states.

(Pennsylvania) requires it to be 8 feet above the groundwater table. The third state (North Carolina) prohibits placement within 4 feet of the seasonal high groundwater table.

- Three states (Wisconsin, Illinois, and Pennsylvania) require chemical analysis of either the CCR bulk content or leachate to demonstrate that concentrations either present in or released from the ash are below specified levels.
- Two states (North Carolina and Pennsylvania) require a minimum setback distance from wetlands—one of 50 feet and another of 100 feet. One of the states (Pennsylvania) also has a limit of 300 feet from an “exceptional value wetland.”
- Two states (North Carolina and Pennsylvania) prohibit placement within the 100-year flood plain.
- Two states (North Carolina and Pennsylvania) limit placement near water bodies, requiring a setback distance of 50 and 100 feet (respectively) from any surface water body. One of the states (Pennsylvania) also has a limit of 300 feet from any exceptional quality water body.
- Two states (North Carolina and Wisconsin) impose restrictions on proximity to residences. One state (North Carolina) required a minimum setback distance of 300 feet from any private dwelling or 50 feet from any property boundary. The other (Wisconsin) prohibited placement of CCR in any area zoned for residential use.
- Two states (Wisconsin and Pennsylvania) require a minimum setback distance, one of 200 feet and another of 300 feet from water supply wells.
- One state (Pennsylvania) requires a setback of 100 feet from sinkholes or any area draining to a sinkhole.

- One state (Pennsylvania) requires a setback of 25 feet from bedrock outcrops.

Several of the remaining states evaluate all uses including fill uses on a case-by-case basis, regardless of size, typically requiring a site-specific assessment that considers potential risks before approving the placement of unencapsulated CCR in fill applications. Based on the 2012 and 2006 ASTSWMO reports, and additional state beneficial use programs looked at by EPA, factors that these states consider in their review include: test data on the chemical and physical characteristics of the wastes; benefit assessment based on suitable physical, chemical, or agronomic properties of the wastes; special conditions that limit use; and evaluations of potential risks to human health.

The EPA solicits comments and information on specific state criteria that would represent an appropriate trigger for an environmental demonstration such as, numerical limits, setbacks (to wetlands, private residences), proximity to water (water body, water supply well), specific criteria for CCR use, and any other requirements that state beneficial use programs have in place (e.g., specific areas prohibited from CCR use) to supplement the information on the group of 12 states reviewed by the Agency.

Based on the Agency's review of these sources of information, EPA is proposing to eliminate the mass-based numerical threshold and replace it with specific location-based criteria, derived from the existing location criteria for CCR disposal units, to trigger an environmental demonstration. As discussed further below, the available information does not appear to provide strong support for a single numerical mass-based threshold as a general matter; however, EPA solicits comments on whether to retain a mass-based threshold. Assuming EPA determines a threshold to be appropriate, EPA also solicits comments on whether an appropriate value for a mass threshold to trigger an environmental demonstration should be based on the state beneficial

use programs' lower tonnage thresholds, discussed above, or to retain the current 12,400-ton numerical criterion. The EPA also requests comment on whether a combination of the mass-based threshold and location-based criteria would be an appropriate trigger to require an environmental demonstration for unencapsulated uses. Generally, having some type of threshold is a reasonable approach since there may potentially be some relatively small volume uses or dry locations where an environmental demonstration is not necessary. The Agency notes that two of the four proposed approaches discussed in this preamble would be of particular interest to those entities that use small volumes of CCR. Both of these approaches include a numerical threshold where unencapsulated uses involving an amount of CCR less than the threshold would not trigger the need for an environmental demonstration. Nevertheless, EPA also solicits comment on whether the environmental demonstration required under the beneficial use definition's fourth criterion should be conducted for all unencapsulated CCR uses. All four of these approaches are discussed below.

*A. Location-Based Criteria Instead of a Mass-Based Numerical Value*

Based on the above considerations, EPA is proposing to eliminate the mass-based numerical threshold and instead replacing it with specific location-based criteria, which are largely derived from the current location criteria for CCR disposal units, to trigger an environmental demonstration. The specific location-based criteria EPA is proposing in this action are: distance from the uppermost aquifer; placement in a wetland; placement in an unstable area; placement in a flood plain; distance from a fault area; and placement in a seismic zone. The EPA considered information developed for the 2015 CCR rule and the state beneficial use programs discussed above. As mentioned previously, modeled risks in the 2014 Risk Assessment show that where the CCR is placed in the environment can be a sensitive variable. In

addition, the conditions in certain areas, such as wetlands or other areas addressed by the current CCR location criteria for disposal units, are generally recognized as having the potential to impact the structural integrity of a disposal unit negatively and as such, increase the risks to human health or the environment, e.g., through leaching of contaminants into groundwater. Several states have established requirements to protect specific sensitive areas found in each state, by prohibiting CCR from being placed for fill uses. Some of these requirements are also similar to the existing location restrictions for CCR units, e.g., address the same site conditions. Based on these considerations, EPA is proposing to revise the fourth criterion of the Beneficial Use definition by adopting certain location criteria (based on the location criteria for CCR disposal units) as triggers for the environmental demonstration. Before the placement of any amount of unencapsulated CCR in areas meeting the location-based criteria can occur for a proposed use, an affirmative demonstration that releases to environmental media (i.e., groundwater, surface water, soil and air) 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 human and ecological receptors during use, is necessary in order to be considered a “beneficial use.” The EPA is proposing the following location-based criteria: distance from the uppermost aquifer; placement in a wetland; placement in an unstable area; placement in a flood plain; distance from a fault area; and placement in a seismic zone. The EPA solicits comment on additional location criteria based on state beneficial use programs for distance from a water body and distance from a water supply well.

1. Distance from the Uppermost Aquifer

The current CCR regulations restrict placement of CCR units within 1.52 meters (five feet) of the upper limit of the uppermost aquifer or to demonstrate that there will not be an

intermittent, recurring, or sustained direct hydraulic connection between any portion of the base of the CCR unit and the uppermost aquifer due to normal fluctuations in groundwater elevations (including groundwater elevations during the wet season). See § 257.60(a). For placement of CCR in fill applications, state programs have similar requirements, but they are specific to groundwater. Two states (Wisconsin and Pennsylvania) prohibit placement of CCR within 5 and 8 feet (respectively) of the groundwater table, while a third state (North Carolina) prohibits placement within 4 feet of the seasonal high groundwater table. The EPA is proposing a location-based criterion that when unencapsulated CCR is placed at a site for beneficial use within 5 feet of the upper limit of the uppermost aquifer that the environmental demonstration under the existing regulation would be triggered to assess the potential environmental releases from the CCR use under consideration. The EPA chose this value to be consistent with the current federal location criteria for CCR disposal units. The EPA solicits comments on (i) adopting a location criterion based on the distance to the uppermost aquifer and whether North Carolina's 4 feet of the seasonal groundwater table, the 8-foot value in Pennsylvania's requirements or Wisconsin's criterion of 5-feet from the groundwater table is more appropriate; and (ii) whether there are other existing state restrictions that are appropriate for EPA to consider in establishing a criterion for distance to the groundwater table to trigger an environmental demonstration.

## 2. Placement in a Wetland

The current regulations restrict placement of CCR units in wetlands except if the owner or operator makes specific demonstrations that the CCR unit will not degrade sensitive wetland ecosystems. See in § 257.61. The current regulations define a wetland by reference to the definition in § 232.2. For placement of CCR in fill applications, two states (North Carolina and Pennsylvania) require a minimum setback distance from wetlands of 50 and 100 feet

(respectively), and 300 feet from an exceptional value wetland. The EPA is proposing to adopt a provision that when unencapsulated CCR is placed at a site for beneficial use in a wetland that the environmental demonstration would be triggered to assess potential environmental releases from the proposed CCR use. This means that an environmental demonstration is required before the placement of any amount of unencapsulated CCR can occur for a proposed use in a wetland. The EPA considered this criterion to ensure consistency with the location criteria for CCR disposal units. However, EPA requests comment on whether a different definition of a wetland is more appropriate in this context. The EPA also solicits comments on (i) adopting a location criterion based on a distance to wetlands; (ii) whether the 50-foot value in North Carolina, the 100-foot value in Pennsylvania's requirements or the criterion of 300 feet from an exceptional value wetland is a more appropriate distance; (iii) whether prohibiting the placement of CCR for beneficial use in wetlands is more consistent with the CCR disposal regulations; and (iv) whether other state restrictions exist that are appropriate for EPA to consider in establishing a criterion for distance to wetland in triggering an environmental demonstration.

### 3. Placement in an Unstable Area

The current CCR disposal regulations restrict the placement of CCR in sites classified as unstable areas unless the owner or operator demonstrates that engineering measures have been incorporated into the unit's design to ensure the structural components will not be disrupted. See § 257.64. In the current rule, unstable areas are locations that are susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the structural component responsible for preventing releases from a CCR unit. See § 257.53. For CCR fill applications, one state (Pennsylvania) prohibits placement within 100 feet of a sinkhole or any area draining to a sinkhole. Sinkholes are commonly found in unstable areas, such as karst

terrains, where the types of rock below the land surface can naturally be dissolved by groundwater circulating through the rock<sup>11</sup> that can result in a collapse of the land surface. The EPA is proposing to adopt a provision that when unencapsulated CCR is placed for beneficial use in an unstable area, the environmental demonstration would be triggered. This means that an environmental demonstration is required before the placement of any amount of unencapsulated CCR can occur for a proposed use in an unstable area. The environmental demonstration is reasonable in order to assess any environmental releases that may result from the shifting of the placed CCR and potential structural failure of any engineering controls (e.g., tears in liners), if employed, that could cause contaminants to leach into groundwater from the movement of the unstable area. The EPA solicits comments on (i) adopting a location criterion based on placement in an unstable area; (ii) whether prohibiting the placement of CCR for beneficial use in unstable areas is more consistent with the CCR disposal regulations and the Pennsylvania requirement; and (iii) whether other state provisions are appropriate for EPA to consider in establishing a criterion for placement of unencapsulated CCR for beneficial use in sites classified as unstable areas.

#### 4. Placement in a Flood Plain

In the current CCR rule (as well as part 258 requirements for municipal solid waste landfills), EPA restricts siting of disposal units in the 100-year flood plain. See §§ 257.3-1 and 258.11. For CCR fill applications, two states (North Carolina and Pennsylvania) prohibit the placement of CCR within a 100-year flood plain. The EPA is proposing to incorporate a similar provision when unencapsulated CCR is placed at a site for beneficial use in the 100-year flood plain that the environmental demonstration would be triggered due to the potential environmental

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<sup>11</sup> U.S. Geological Survey. "What is a sinkhole?" A copy of the USGS web page is available in the docket to this rulemaking.

releases posed by flooding in these areas. The EPA solicits comments on (i) adopting a location criterion based on placement of CCR in a flood plain; and (ii) whether prohibiting the placement of unencapsulated CCR for beneficial use within a 100-year flood plain is more consistent the current CCR rule (as well as part 258 requirements for municipal solid waste landfills) and with some state restrictions.

#### 5. Distance from a Fault Area

In addition to these location criteria, the current regulations prohibit the location of CCR units within 60 meters (200 feet) of a fault that has had displacement in Holocene time, unless the owner or operator demonstrates that an alternate setback distance of less than 200 feet will prevent damage to the structural integrity of the unit. See § 257.62. None of the reviewed states included a similar location restriction. However, a few of the reviewed states are located in areas with significant seismic activity. The EPA is proposing to adopt a provision that when unencapsulated CCR is placed for beneficial use within 200 feet of a fault and within a seismic impact zone that the environmental demonstration would be triggered. The environmental demonstration is reasonable in order to assess any environmental releases resulting from the shifting of the placed CCR and potential failure of any engineering controls (e.g., tears in the liners), if employed, that could cause contaminants to leach into the groundwater from the seismic activity. Therefore, while this consideration may not be of significance for the other individual states that EPA reviewed, the Agency considers this to be relevant and appropriate on a national scale because many states across the nation have these types of areas. The EPA solicits comments on (i) adopting a location criterion based on a distance of within 200 feet from a fault area to trigger an environmental demonstration; and (ii) whether prohibiting the placement of CCR for beneficial use within fault areas is more consistent with the CCR disposal regulations.

## 6. Placement in a Seismic Zone

The current CCR disposal rule also prohibits the location of CCR units within seismic impact zones unless the owner or operator makes a demonstration that all containment structures are designed to resist the maximum horizontal acceleration in lithified earth materials from a probable earthquake. See § 257.63. None of the reviewed states included a similar location restriction. However, a few of the reviewed states are located in areas with significant seismic activity. The EPA is proposing to adopt a provision that when unencapsulated CCR is placed for beneficial use within a seismic impact zone that the environmental demonstration would be triggered. Fill applications typically involve the placement of large amounts of CCR and in some situations may require the use of engineering controls, such as liners. As with landfills, large-scale fill applications located in seismic areas can encounter structural stability issues (i.e., the placed CCR shifts and engineering controls fail), (e.g., tears in the liner). The environmental demonstration is reasonable in order to assess any environmental releases resulting from a probable earthquake that may cause the placed CCR to shift and potential failure of any engineering controls (e.g., tears in the liners), if employed, that could cause contaminants to leach into the groundwater from the seismic activity. Therefore, while this consideration may not be of significance for the other individual states that EPA reviewed, the Agency considers this to be relevant and appropriate on a national scale because many states across the nation have these types of areas. The EPA solicits comments on (i) adopting a location criterion based on placement of CCR in a seismic zone to trigger an environmental demonstration; and (ii) whether prohibiting the placement of CCR for beneficial use within seismic impacts zones is more consistent with the CCR disposal regulations.

The EPA also considered adopting the following additional location criteria, largely-based on state beneficial use program provisions: distance from a water body and distance from a water supply well.

#### 7. Distance from a Water Body

For placement of CCR in fill applications, two states (North Carolina and Pennsylvania) require a minimum setback distance within 50 and 100 feet from a water body; and within 300 feet of an exceptional value or high-quality water body. The modeled risks in the 2014 Risk Assessment show that distance to receptor is a sensitive variable. Therefore, EPA solicits comment on adopting a provision that when unencapsulated CCR is placed at a site for beneficial use within 50 feet from a water body the environmental demonstration under the existing regulation would be triggered to assess environmental releases. The EPA intends the term “water body” to mean perennial and intermittent streams and rivers. This criterion generally would be consistent with the approach taken by North Carolina and Pennsylvania. This value, which represents the least restrictive state requirement, will ensure that the federal provision is not inconsistent with existing state programs, as a regulated entity could always comply with both the EPA and the state provision, including any more stringent state requirement. The EPA solicits comments on (i) adopting a location criterion based on a distance from a water body; (ii) whether the 50-foot criterion in North Carolina, the 100-foot criterion in Pennsylvania’s requirements or the criterion prohibiting placement within 300 feet of an exceptional value or high-quality water body (also in Pennsylvania’s requirements) is more appropriate; and (iii) whether other state restrictions exist that are appropriate for EPA to consider in establishing a criterion for distance to water bodies to trigger an environmental demonstration. The EPA is considering such a provision and could finalize it without a subsequent proposal.

## 8. Distance from a Water Supply Well

For placement of CCR in fill applications, three states (Wisconsin, North Carolina and Pennsylvania) require a minimum setback of 200 and 300 feet from water supply wells. Modeled risks in the 2014 Risk Assessment show that distance to receptor is a sensitive variable. Therefore, EPA solicits comments on adopting a provision that when unencapsulated CCR is placed at a site for beneficial use within 200 feet from a water supply well the environmental demonstration would be triggered to assess the risks to potential receptors. The EPA considered this criterion to ensure consistency with existing state programs. This value, which represents the least restrictive state requirement, will ensure that the federal provision is not inconsistent with existing State programs, as a regulated entity could always comply with both the EPA and the State provision, including any more stringent state requirement. The EPA solicits comments on (i) adopting a location standard based on a distance from a water supply well; (ii) whether either the 200-foot distance in North Carolina or 300-foot distance in both North Carolina's and Pennsylvania's requirements is more appropriate; and (iii) whether other state restrictions exist that are appropriate for EPA to consider in establishing a criterion for distance to water supply well to trigger an environmental demonstration. The EPA is considering such a provision and could finalize it without a subsequent proposal.

The EPA solicits comments on (i) revising the fourth criterion's trigger for an environmental demonstration from a mass-based threshold amount to any or all of the above location criteria; (ii) information on other state beneficial use programs with location-based provisions; (iii) the potential impacts to state beneficial use programs in setting location criteria based on the location criteria for CCR disposal units in the 2015 CCR Rule; and (iv) whether prohibiting the placement of CCR for beneficial use within wetlands, seismic impacts zones,

unstable areas, and flood plains is more consistent with the CCR disposal regulations. In response to concerns from commenters that there may be some situations where the location-based criteria prevent placement of CCR in appropriate uses, the Agency also solicits comment and information on these specific situations where EPA should consider exemptions for any of the proposed location-based criteria.

#### *B. Mass-Based Numerical Value*

As discussed previously, EPA also considered selecting a new value to replace the existing 12,400-ton numerical threshold based on the numerical values that state beneficial use programs have in place and the available risk information. Of the state programs EPA looked at, several state programs have values lower than the existing 12,400-ton threshold based on mass (Illinois 10,000 tons); or by volume (Wisconsin 5,000 cubic yards; West Virginia 10,000 cubic yards). North Carolina and Pennsylvania have both lower and upper values based on mass per unit area (8,000 tons per acre; 10,000 tons per acre); and mass of total CCR used in a fill project (80,000 tons; 100,000 tons). As discussed earlier, none of the numerical criteria in the identified State programs were based on an analysis of the potential risks associated with the specified mass or volume. Instead, the States based the values on considerations such as the size of previously completed fill projects or consensus values agreed upon by state, industry and citizen groups.

The current mass-based criteria of 12,400 tons is similar to the lower end of identified state limits. Although the analysis of model runs from the 2014 Risk Assessment demonstrates that potential risks will tend to decrease as the mass of CCR decreases, the Agency cannot define an exact relationship between risk and small changes in mass for prospective uses. The EPA identified individual model runs with risks above  $1 \times 10^{-5}$  for the smallest modeled landfill of

8,023 tons; however, it is not possible to estimate the likelihood that such risks will occur at these lower tonnages based on the limited number of model runs for small landfills. As EPA acknowledged in the 2015 CCR rule, the following factors are more critical than the volumes of CCR in whether the use may present a risk of concern: “the characteristics of the CCR, the amount of material and the manner in which it is placed, and (perhaps most important) the site conditions.” See 80 FR 21348 (April 15, 2015). Thus, for these smaller uses, EPA explained that the Agency “...expects potential users of unencapsulated CCR below this threshold to work with the states to determine the potential risks of the proposed use at the site and to adopt the appropriate controls necessary to address risks” See 80 FR 21352 (April 15, 2015).

The EPA also is aware that Alaska and Virginia have already taken steps to adopt the 12,400-ton threshold into their state regulations. Because EPA anticipates that there will likely be little practical difference between the current threshold of 12,400 tons and the lower end of the state limits in terms of the number of fill applications that would be affected, EPA considered retaining the existing value in the interest of minimizing disruption to the states and industry. However, EPA solicits comment on whether that preliminary conclusion is accurate, as well as the potential impact of this consideration on state programs (e.g., whether other states have not incorporated the current requirement).

The available information does not appear to provide strong support for a new numerical value to replace the existing 12,400-ton mass-based threshold. Nevertheless, EPA is still considering whether to adopt a new numerical value for the existing mass-based threshold. The EPA, therefore, solicits comments on whether (i) the state beneficial use programs’ tonnage thresholds discussed above are appropriate for revising the numerical criterion to trigger an environmental demonstration; (ii) the existing 12,400 ton-numerical threshold is appropriate and

reasonable; (iii) the Agency's preliminary conclusion that retaining the existing numerical value minimizes disruption; and (iv) whether there are potential impacts to state beneficial use programs. The EPA is also requesting (i) information on other numerical criterion that states use to trigger other requirements, either those listed in this proposal or other state beneficial use programs that EPA did not review, that would also represent an appropriate trigger for further analysis of unencapsulated uses; and (ii) other state criteria, either those listed in this proposal or incorporated in other state beneficial use programs, that would also form an appropriate basis for national criteria to trigger an environmental demonstration.

#### *C. Use Both Mass- and Location-Based Criteria*

The EPA also requests comment on whether to adopt a combination of the mass-based threshold and location-based criteria to trigger an environmental demonstration for unencapsulated uses. Under such an approach, the environmental demonstration for unencapsulated uses would be triggered by either a mass-based threshold or any of the location-based criteria. Under such an approach, uses that exceed a mass-based threshold would need to conduct an environmental demonstration, even if they did not involve placement in areas that meet the location criterion. The EPA, therefore, requests comment on whether the thresholds from the state beneficial use programs listed above or other states not listed above would represent an appropriate basis on which to trigger the environmental demonstration.

The EPA also solicits comment on any alternative approaches to combining the mass- and location-based criteria to ensure that both the largest uses and those with the greatest potential for risk would conduct an environmental demonstration

#### *D. All Unencapsulated Uses Demonstrate Environmental Analysis*

In general, having some type of threshold is a reasonable approach since there may potentially be some relatively small volume uses or dry locations where an environmental demonstration is not necessary. Nevertheless, EPA also solicits comment on whether the environmental analysis of the beneficial use definition's fourth criterion should be demonstrated in all cases rather than limiting the fourth criterion to only the largest or most environmentally concerning beneficial use circumstances. Under such an approach, every unencapsulated beneficial use of CCR in non-roadway applications would have to make an appropriate environmental demonstration of whether releases to environmental media from the beneficial use are likely to be of concern. Under this approach, it is possible that the Agency could also develop additional guidance<sup>12</sup> and offer technical direction regarding the nature and extent of the environmental demonstration that would be needed depending on the site-specific considerations related to the particular proposed beneficial use of CCR in question. The EPA also solicits comment on the use of guidance to determine what an appropriate environmental demonstration would be in particular site-specific circumstances. The EPA is considering all such approaches or provisions and could finalize it without a subsequent proposal.

The EPA also solicits comment on whether the regulations should impose a notification requirement upon a person placing unencapsulated CCR on the land in accord with the regulatory criteria. Many state programs require notice to the state, landowner, deed record office and/or the public. The EPA is considering such a provision and could finalize it without a subsequent proposal.

#### *E. Applicability of the Revised BU Definition*

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<sup>12</sup> In 2016, EPA released the "Methodology for Evaluating Beneficial Uses (BU) of Industrial Non-Hazardous Waste Secondary Materials" and the "Beneficial Use Compendium: A Collection of Resources and Tools to Support Beneficial Use Evaluations" to help the beneficial use community evaluate the potential for adverse impacts to human health and the environment associated with the beneficial use of secondary materials, including CCR.

The EPA proposes that all beneficial use applications or projects not completed before the effective date of a final rule would be subject to the revised beneficial use criteria. This is consistent with what the Agency required in the 2015 final rule in terms of applicability of the new beneficial use definition. The EPA solicits comment on whether this approach is reasonable and whether there are other factors, such as a project's completion timeframe, that should also be considered into the Agency's applicability approach.

#### **V. Proposal to Revise Requirements Applicable to Piles**

Under the current regulation, CCR piles are defined as any “non-containerized accumulation of solid, non-flowing CCR that is placed on the land.” See § 257.53. This definition closely mirrors the RCRA definition of disposal, which is defined in part as the “placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.” See 42 U.S.C. §6903(3). Under this regulation, CCR piles constitute disposal and are consequently subject to all regulatory criteria applicable to CCR landfills. In contrast, activities that meet the definition of a beneficial use are not considered disposal, even if they involve the direct placement on the land of “non-containerized” CCR. See §§ 257.50(g) and 257.53 (definitions of CCR landfill and CCR pile); 80 FR 21327-30 (April 17, 2015). Since promulgation of the 2015 CCR rule, questions have been raised about the requirements that apply to piles of unencapsulated CCR placed on the land prior to beneficial use.

The current regulation distinguishes piles of CCR *on-site* (at an electric utility or independent power producer site) from temporary piles of CCR *off-site* (at a beneficial use site), based on whether CCR from the pile could fairly be considered to be in the process of being

beneficially used. See § 257.53 (definition of CCR pile); 80 FR 21356 (April 17, 2015). While the CCR from the pile on-site *may* someday be beneficially used, it is not currently in the process of being beneficially used, and even when some amount is transported away, a new amount from the utility may replace it. See *Id.* The extended placement of CCR directly on the land in such a manner is a potential source of uncontrolled releases. To address these potential releases, the regulation requires that the pile be containerized (*i.e.*, that the facility adopt measures to control these releases, and any resulting exposures to human health and the environment). Such measures include placement of CCR on an impervious base such as asphalt, concrete or geomembrane; leachate and run off collection; and walls or wind barriers. See *Id.* If CCR is not containerized, the pile is a CCR pile and subject to the same requirements as a CCR landfill. See *Id.*

In contrast, the regulations treat CCR stored off-site at a beneficial use site in a temporary pile to be in the process of being beneficially used (even though a pile is not itself a beneficial use). If the CCR is temporarily placed at a beneficial use site and meets the regulatory definition of a beneficial use, the pile is not a CCR pile and is not subject to disposal requirements. See *Id.* Thus, if the temporary pile contains less than the 12,400-ton threshold amount of CCR identified in criterion 4 of the beneficial use definition, criteria 1-3 must be met. For a temporary pile exceeding the threshold amount in the beneficial use definition, all four criteria must be met, including the environmental demonstration, which generally requires the user to evaluate the potential releases from the pile. One way to meet the environmental demonstration is to control releases from the pile. See 40 CFR § 257.53; 80 FR 21347-54 (April 17, 2015). Thus, the regulation seeks to achieve the same end result—controlling releases and potential exposures—through different regulatory mechanisms.

In response to the May 2017 petitions from AES Puerto Rico LP and USWAG, EPA has reconsidered its current approach of distinguishing between on-site and off-site piles; and is proposing to replace it with a single regulatory mechanism applicable to all temporary placement of CCR on the land, whether the CCR is on-site or off-site, and whether the CCR is subsequently destined for disposal or beneficial use. The EPA is not proposing to revise the general standard that already applies to both on-site and off-site piles (“to control releases from the pile”). However, EPA considers that a single regulatory approach would consistently address the potential environmental and human health issues associated with such piles, which are largely unrelated to whether the pile is on the land on-site or off-site and whether the CCR is destined for disposal or beneficial use.

The EPA is, therefore, proposing to establish a single set of requirements applicable to all temporary placement of unencapsulated CCR on the land, whether destined for beneficial use or disposal, that maintains the current standard applicable to both on-site and off-site piles under the current regulation. Rather than characterizing such activities as either disposal or beneficial use, EPA considers that these activities are better characterized as “storage,” with criteria established pursuant to the authority in section 1008(a)(3) to control releases. Therefore, EPA is proposing a definition of a CCR storage pile to distinguish between the activities that will be considered storage and those that will be considered disposal. Specifically, EPA is proposing to define a CCR storage pile as a temporary accumulation of unencapsulated CCR on the land, whether on-site or off-site. As a second element, EPA is proposing to include in the definition a requirement to control releases of CCR (e.g., from windblown dust, or from stormwater or run-on and run-off) to the environment. Accumulations of unencapsulated CCR in enclosed structures, would not be required to meet either the definition of a CCR storage pile or the landfill requirements in

part 257. The accumulation of unencapsulated CCR that does not meet all elements of the proposed definition of a CCR storage pile, including the requirement to control releases of CCR, would be considered to be disposal when placed on the land, and would be subject to the part 257 landfill regulations.

Accordingly, in this action, EPA is proposing several revisions to § 257.53 and conforming changes in § 257.2.

#### *A. The Definition of a CCR Storage Pile*

The EPA is proposing to establish criteria to distinguish activities that constitute the temporary storage of unencapsulated CCR in a pile from those activities that are truly disposal and therefore need to comply with the part 257 requirements. Specifically, 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.”

##### *1. Definition of a Temporary Accumulation*

As noted in the preamble to the 2015 CCR rule, EPA considered placing a time limit on a pile; as an alternative regulatory strategy, a limit (e.g., 180 days) would have been established on the amount of time that the CCR would have been allowed to be maintained in a pile without regulation as a CCR landfill. See 80 FR 21355 (April 17, 2015). The EPA rejected this option because it would have been difficult to oversee and verify the actual time when CCR had been placed in a pile and when the CCR was subsequently removed. See *Id.* In this action, in place of establishing a time limit, EPA is proposing to define the properties of a temporary accumulation and allow the use of several criteria to identify a temporary pile. Specifically, EPA is proposing to define a temporary accumulation as an accumulation on the land that is neither permanent nor indefinite.

To demonstrate that the accumulation on the land is temporary, at some point, all of the CCR must be removed from the pile at the site. To ensure that a temporary accumulation is identifiable, EPA is proposing that the entity engaged in the activity must have a record, such as a contract, purchase order, facility operation and maintenance plan, or fugitive dust control plan, documenting that all of the CCR in the pile will be completely removed according to a specific timeline.

The criterion requiring possession of a record is designed to be flexible and account for the practical realities of current practices; pile removal is contingent on business activities, which are performed according to agreements and schedules, such as for the sale of CCR, for hauling services for the disposal of CCR, or purchase orders for products made with CCR from the pile. The EPA is not proposing to require any particular type of a record be used to demonstrate that a pile is temporary; however, an appropriate, useful record should contain verifiable information about amounts of CCR to be sold/purchased/removed and the timeline of removal activities.

The EPA solicits comment on whether the criterion requiring possession of a record to show that the CCR will be removed can be feasibly implemented. Namely, EPA requests comment about (i) specific cases where piles are temporary but records are not available; and (ii) an alternative criterion inclusive of such cases. For example, EPA is considering whether utilities with on-site landfills possess or could develop verifiable records to show that the CCR from piles will be transported for disposal at the utility-owned landfill in a timely manner (e.g., do utilities with on-site landfills, or could utilities with on-site landfills, keep schedules of daily on-site operation, and would such schedules sufficiently provide the needed information). Similarly, EPA is considering whether cement kilns and concrete batch plants can match purchase orders for products made with CCR to piles of CCR, or if alternative records are readily available to

demonstrate that the CCR in a pile will be used. The EPA is also seeking comment about whether purchase orders for construction materials are sufficiently forward-looking to allow the piles of CCR that are set up early in a construction season to be matched up with construction projects beginning late in the construction season, or if a grace period should be allowed for cement kilns and concrete batch plants supplying construction materials with CCR, to put applicable agreements in place (e.g., 90-120 days after the start of the construction season). The EPA also requests comment and information on additional or alternative criteria crucial for demonstrating that a pile is temporary and/or effectuating the timely removal of CCR.

## 2. Proposed Requirement to Control Releases

The EPA is proposing to include in the definition of CCR storage pile a requirement to control releases to be consistent with the definition of disposal in 42 U.S.C. §6903(3). As stated in that definition, disposal includes the “placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwaters.”

When significant and persistent volumes of unencapsulated CCR are present, similarities exist in the potential risks posed to human health, groundwater resources, or the air between the placement of CCR in piles and placement in CCR landfills, if inappropriately managed. See 80 FR 21356 (April 17, 2015). The same pollution control measures, such as liners, leachate collection systems, and groundwater monitoring, would appropriately control releases and address the potential adverse effects from both the piles of significant and persistent volumes and CCR landfills.

The EPA's proposal is designed to address these potential risks. Under the proposed definition, temporary accumulations are limited to the amount of CCR specified to be used as documented in the relevant record, and all of the CCR will be removed. Therefore, by defining a CCR storage pile as a temporary accumulation, EPA would effectively limit the amount of unencapsulated CCR that will be placed and persist in one location. Due to these factors, EPA considers that it is not necessary to impose on CCR storage piles the same set of technical requirements as for CCR landfills, but that meeting the requirement to control releases of CCR in the definition of a CCR storage pile 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.

Moreover, none of these concerns are present when CCR is stored in enclosed structures. The EPA's proposed definition, therefore, would explicitly exclude CCR contained in enclosed structures. In Unit V.B of this preamble (Definition of an Enclosed Structure), EPA is proposing to identify the structural properties and design and operational elements of an enclosed structure, modeled after the requirements in § 264.1100 for units in which hazardous wastes are stored or treated not to be subject to the definition of land disposal.

The definition of disposal in 42 U.S.C. §6903(3) regards all environmental media, and consistent with this definition of disposal, EPA's requirement to control releases of CCR would apply to all environmental media. Releases covered by the requirement to control releases in the proposed definition of the CCR storage pile would at a minimum, include releases through wind-blown dust, surface transport by precipitation runoff and releases to soil and to groundwater.

Meeting the requirement to control releases would mean having to account for normal conditions and operating procedures. The EPA is proposing that one way for the entities engaged in the activity to meet the requirement is 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. Examples of federal, state, or local regulations include stormwater discharge permits for construction sites; nation-wide effluent limits for relevant industry sectors (e.g., cement, concrete and gypsum facilities, and power plants); states' groundwater protection plans; and states' requirements for implementing control measures to prevent releases from storage piles of CCR. Releases that are specifically authorized under federal, state and local regulations for surface water, groundwater, soil or air protection would be allowed under this proposal. Situations in which CCR is being swept away and released to soil, water or air in violation of existing local, state and federal requirements, would be considered to be evidence of disposal.

Examples of measures that might be used to control releases from a CCR storage pile include: periodic wetting, application of surfactants, tarps or wind barriers to suppress dust; tarps or berms for preventing contact with precipitation and controlling run-on/runoff; and impervious storage pads, geomembrane liners or tarps for soil and groundwater protection. The EPA is not proposing to impose a specific set of control measures in every case, as the amount of CCR stored and the prevailing weather conditions may affect which controls are appropriate. Therefore, EPA intends to provide the entities engaged in the activity with flexibility to determine the control measures most appropriate to meet the requirement to control releases at a given site. This flexibility also ensures that EPA's requirements do not contradict any state or local requirements for the use of prescribed controls. However, if control measures are not used or are inadequate for prevailing conditions, increasing the likelihood of CCR being swept away, then the entity engaged in the activity would not have met the requirement to control releases, and the accumulation of CCR would be considered to be disposal. Visible dust, run-on/runoff

and ponding of the water at the bottom of the pile, point to an issue with the choice of control measures.

The EPA's understanding is that for many beneficial uses, beneficial users are implementing measures to protect the mechanical and chemical properties of CCR. These measures frequently match the controls necessary to meet the proposed requirement to control releases. Furthermore, several federal, state and local government regulations for environmental protection require the use of pollution controls that would also meet the requirement. Below is a brief summary of EPA's understanding of current beneficial use handling practices and existing regulations that would apply to control releases.

*Fly Ash used in concrete.* The EPA's understanding is that the handling of fly ash marketed for beneficial use in concrete production is consistent across the industry; fly ash is collected in a dry powder form and directed to silos, domes, or buildings at concrete batch plant sites in a self-contained system from start to end. The reason for the containment is that fly ash provides mechanical and chemical benefits when used in concrete, making it a valuable ingredient and fully warranting the protection of its properties through handling and storage.

*Flue Gas Desulphurization (FGD) gypsum used in wallboard.* The EPA's further understanding is that FGD gypsum may be transferred down a conveyor belt directly from an electric utility or independent power producer to a wallboard plant. Generally, it will either be contained in a building or stored on a pad.<sup>13</sup>

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<sup>13</sup> In order to be subject to RCRA, the material must be a solid waste. When FGD gypsum used for wallboard manufacture is a product rather than a waste or discarded material, and its use meets product specifications, FGD gypsum would not be regulated under the CCR rule. See, 80 FR at 21348. Note that whether the FGD gypsum is being managed as a "waste" or a "product" is a fact-specific determination, <https://www.epa.gov/coalash/frequent-questions-about-beneficial-use-coal-ash>.

*CCR used as raw feed at cement kilns.* The EPA's understanding is that the CCR used as a source of silica for production of clinker at cement kilns is generally stored on concrete pads or within partial enclosures composed of a concrete pad, overhead cover and several, but not all four sides. Placement of CCR on concrete pads controls releases to soil and groundwater, and federal, state and local regulations impose further requirements to control releases to air and surface water. For example, at cement kilns, fugitive dust from raw material storage, which includes piles of CCR, must be controlled to an opacity standard in § 60.62(b), and this opacity standard limits the allowed particulate matter (PM) emissions;<sup>14</sup> moreover, federal regulations require National Pollutant Discharge Elimination System (NPDES) permit coverage and compliance with stormwater effluent discharge standards in 40 CFR Part 411, Subpart C.<sup>15</sup>

*CCR used in construction.* NPDES permits are also required for construction activities that disturb at least one acre, including sites that are part of a larger common plan of development that will ultimately disturb at least one acre.<sup>16</sup> The EPA has authorized most states to administer the NPDES permitting program;<sup>17</sup> however, where EPA has not authorized states to implement the NPDES program and EPA maintains the NPDES permitting authority, the Agency issues a Construction General Permit (CGP). The CGP requires implementation of pollution prevention controls to minimize the stormwater discharges of pollutants and also

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<sup>14</sup> Examples of emission control measures implemented in Portland cement manufacturing facilities for raw materials, such as CCR, can be found at: Bhatti, Javed I., Miller, F. MacGregor, and Kosmatka, Steven H.; editors, *Innovations in Portland Cement Manufacturing*, SP400, Portland Cement Association, Skokie, Illinois, U.S.A., 2004; page 656. This book is available in the docket to this rulemaking.

<sup>15</sup> US EPA, "Developing your Stormwater Pollution Prevention Plan: A Guide for Industrial Operators." EPA 833-B-09-002. June 2015. Available in the docket to this rulemaking.

<sup>16</sup> See, § 122.26(a)(1)(ii), (a)(9)(i)(B), (b)(14)(x), and (b)(15)(i). Exclusions exist if the construction site disturbs less than five acres, and the rainfall erosivity factor ("R" in the revised universal soil loss equation, or RUSLE) value is less than five during the period of construction activity. For more information, please see EPA's web page on "Rainfall Erosivity Factor Calculator for Small Construction Sites" at <https://www.epa.gov/npdes/rainfall-erosivity-factor-calculator-small-construction-sites>.

<sup>17</sup> A copy of EPA's web page titled "Authorization Status for EPA's Construction and Industrial Stormwater Programs" is available in the docket to this rulemaking.

requires dust minimization and suppression.<sup>18,19</sup> States and localities also require dust control during construction.<sup>20,21</sup>

The EPA requests comment on whether this proposal will appropriately address the risks associated with the potential releases from piles of CCR in all circumstances. The EPA asks if in some cases, it is acceptable to manage releases retroactively. For example, are there situations in which CCR will only enter the topmost layer of soil over the time the CCR is in place at the site, in which retroactive management of these releases combined with an active management of releases to air and water, could avoid all reasonable probability of adverse effects on human health and the environment. For example, commenters may have information to show that the placement of CCR at a construction site, which typically occurs over a brief, one-time period, is precisely one such situation in which releases to soil and groundwater can retroactively be managed by removing the CCR and the contaminated soil beneath it, at the completion of the project. The EPA also seeks comment and data on whether there are additional situations where piles are commonly in place for a short period of time (e.g., 90 days or less), at the end of which the CCR is fully removed and presents no reasonable probability of adverse effects on human health or the environment, thus supporting an exemption from having to meet the requirement to control releases. The EPA also asks for information about key characteristics of such piles that would make them readily identifiable in practice. Further, EPA requests comment on whether requiring that a pile must be temporary is a key element of controlling risks associated with the

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<sup>18</sup> A copy of EPA's web page titled "2017 Construction General Permit (CGP)" is available in the docket to this rulemaking.

<sup>19</sup> A copy of EPA's 2017 Construction General Permit is available in the docket to this rulemaking.

<sup>20</sup> Examples include: <http://bentoncleanair.org/windblown-dust/urban-fugitive-dust-policy/>

<sup>21</sup> Examples include: [https://www.michigan.gov/documents/deq/deq-ead-caap-genpub-FugDustMan\\_313656\\_7.pdf](https://www.michigan.gov/documents/deq/deq-ead-caap-genpub-FugDustMan_313656_7.pdf); <https://www.arb.ca.gov/drdb/sb/curhtml/R345.pdf>; <https://www.tceq.texas.gov/airquality/stationary-rules/pm>; <https://www.pacode.com/secure/data/025/chapter123/s123.1.html>

potential releases from piles of CCR; for example, do commenters have information to show that the size of a pile is sufficiently controlled by the ability to use pollution control measures to control releases of CCR and that the temporary element is not needed. The EPA also solicits comment on the existence of any data documenting instances in which releases from temporary placement of CCR on the land caused adverse effects even though releases had been managed consistently with current regulatory standards. Finally, EPA solicits comment on whether specific state criteria for storage, or any other criteria, would form a more appropriate basis for a national storage standard.

#### *B. The Definition of an Enclosed Structure*

The EPA is proposing to define an enclosed structure by identifying structural properties and design and operational elements that would ensure CCR is appropriately contained. Entities containing CCR within such structures would not be subject to the definition of CCR storage pile or CCR landfill requirements in the part 257 regulations. The proposed key properties and elements are modeled after the requirements in § 264.1100 for units in which hazardous wastes are stored or treated not to be subject to the definition of land disposal.

From § 264.1100 requirements, EPA is proposing to omit the requirements that are specifically relevant to the containment of hazardous waste and liquid waste. Examples of such requirements pertain to the control of fumes using pressure gradients, provisions for contact between the structure and hazardous wastes, or the need for a system of containment barriers to contain liquid wastes.

The EPA is also proposing to omit the requirement that the “no visible fugitive emissions” standard and Method 22 – Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares in 40 CFR part 60, appendix A, be met. Rather than

requiring a potentially challenging-to-oversee-and-enforce observation and recording procedure, EPA is proposing to include in the design and operational elements of an enclosed structure a performance standard stating that enclosed structures must be designed and operated to prevent the release of fugitive dust emissions through openings, including doors, windows and vents.

The remaining § 264.1100 requirements, which EPA proposes to adopt, pertain to full containment of waste, as well as to the structural stability and integrity of the enclosure. Stability and integrity are marked by the ability to withstand external loads from seismic and climatic conditions, as well as any internal loads from daily operating activities, such as the operating of heavy equipment inside the enclosure.

### *C. The Definitions of a CCR Pile and CCR Landfill*

The EPA is also proposing to revise the definition of a CCR pile to be consistent with the above proposals. In the current definition, EPA distinguishes between piles on-site (which were almost always regulated as landfills) and piles off-site, (which, if temporary, were generally considered to be beneficial use, subject only to the four criteria in the definition). The current regulation also distinguishes between on-site piles that are not containerized and those that are containerized. See 80 FR 21356 (April 17, 2017); § 257.53. In this action, EPA is proposing to maintain the term CCR pile to identify accumulations of CCR that will be subject to the disposal requirements. However, as discussed previously, EPA is proposing to treat all piles on- and off-site the same, such that the only piles of CCR subject to the disposal requirements are those accumulations that do not meet the definition of a CCR storage pile. Consequently, EPA is proposing to delete from the current definition of CCR pile the phrase “non-containerized” and the sentence “CCR that is beneficially used off site is not a CCR pile.” While EPA is proposing

to maintain the term CCR pile, EPA also requests comment whether the term and the definition remain necessary or should instead, be deleted.

In another conforming change, EPA is also proposing to revise the definition of a CCR landfill to include accumulations of CCR on the land that do not meet the definition of a CCR storage pile. This proposed change would apply to the definition of CCR landfill in §§ 257.2 and 257.53.

## **VI. Proposal to Revise the annual groundwater monitoring and corrective action report requirements**

Section 257.90(e) requires owners and operators of CCR units to prepare an annual groundwater monitoring and corrective action report. This annual report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. The CCR rule also specifies the minimum information that must be included in the annual report. For example, one of the current requirements is to provide all the monitoring data obtained under the groundwater monitoring and corrective action program for the year covered by the report. The CCR regulations further require the owner or operator to include in the report a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the samples were required by the detection monitoring or assessment monitoring programs. See § 257.90(e)(3). Except for certain inactive CCR surface impoundments, owners and operators were required to prepare the initial annual report no later than January 31, 2018, and post the report to its publicly accessible CCR website within 30 days of preparing the report. See §§ 257.90(e) and 257.107(d). For eligible

inactive CCR surface impoundments<sup>22</sup>, the deadline to prepare the initial annual report is August 1, 2019. See § 257.100(e)(5)(ii).

The Agency reviewed the annual reports available on the CCR websites and observed that some facilities provided groundwater monitoring data in formats that were clear and easy for the public to understand, while some did not. Many reports contained a concise summary in the beginning of the report to orient the reader to the stage of groundwater monitoring that the facility was in, whether any constituents have been determined to be present at statistically significant levels above background (for part 257 Appendix III constituents) or a groundwater protection standard (for part 257 Appendix IV constituents), and the groundwater monitoring data in a table format. In other reports, it was difficult to tell whether the analytical results corresponded to background or downgradient wells, whether the CCR unit was operating under the detection or assessment monitoring program, when the assessment monitoring program was initiated for the CCR unit, or whether the facility had initiated corrective action for the unit. In addition, several facilities only provided laboratory printouts of the data, potentially making it difficult for the public and other stakeholders to put the results into context within the overall groundwater monitoring program.

The purpose of requiring posting of the annual reports is to allow the public, states and EPA to easily see and understand the groundwater monitoring data. To accomplish this purpose, the Agency is considering two possible revisions to the annual groundwater monitoring and corrective action reporting requirements.

First, EPA is proposing to amend § 257.90 by adding new paragraph (e)(6). This new provision would establish minimum set of requirements that would need to be addressed in the

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<sup>22</sup> For more information on eligible inactive CCR surface impoundments, see the preamble to the direct final rule published on August 5, 2016 (81 FR 51802).

summary discussion of the status of the groundwater monitoring and corrective action programs for the CCR unit. This summary would be placed at the beginning of the annual report (e.g., as part of the report's executive summary) for readers to readily access the information. The minimum requirements for this summary would include stating whether the CCR unit was operating pursuant to the detection monitoring program under § 257.94 or the assessment monitoring program under § 257.95, identifying those constituents and the corresponding wells, if any, for which the facility had determined that there is a statistically significant increase over background levels for constituents listed in Appendix III (or if operating under the assessment monitoring program, constituents in Appendix IV that were detected at statistically significant levels above the groundwater protection standard), the date when the assessment monitoring program was initiated for the CCR unit, and describing any corrective measures initiated or completed (to include the dates of these actions), including the remedy, during the annual reporting period.

Second, the Agency solicits comment on whether to amend § 257.90 to require that the groundwater monitoring analytical results and related information be presented in a standardized format such as multiple tables and included in the annual report. As noted, the purpose of requiring posting of the groundwater reports is to allow members of the public, as well as the states and EPA, to easily see and understand the groundwater monitoring data. The EPA requests comment on whether the regulations need to establish a standardized format for these reports in order to accomplish this purpose. Possible examples of what form these formats could take are available for review in the docket to this rulemaking.<sup>23</sup> The Agency also requests comment on formats that could be used.

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<sup>23</sup> See EPA memorandum titled "Annual Groundwater Monitoring Report Data Examples"; dated July 1, 2019.

Information about the groundwater wells could include the following data elements: well identification number, sampling date, latitude and longitude in decimal degrees, groundwater elevation including well depth to groundwater and total depth of groundwater, and whether the groundwater well is upgradient or downgradient of the CCR unit. The well information provides context for each sample and therefore helps the members of the public understand the sampling results. This information is already collected and reported in the groundwater sampling and analysis plan under § 257.93 and so the information is readily available to the facility.

Sample information could be provided in a table that contains fields including sampling date, sampling time, sampling phase (i.e., background, detection monitoring, assessment monitoring, corrective action), whether the groundwater well is upgradient or downgradient of the CCR unit, and analytical methods listed separately for every method used to analyze the constituent concentrations. Appendix III to Part 257- Constituents for Detection Monitoring could contain concentrations in milligrams per liter (unless otherwise specified) of the following: boron, calcium, chloride, fluoride, pH (standard units), sulfate, and total dissolved solids (TDS). Appendix IV to part 257- Constituents for Assessment Monitoring could contain concentrations in milligrams per liter (unless otherwise specified) of the following: antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, lead, lithium, mercury, molybdenum, radium 226-228 combined (pCi/L), selenium, and thallium. It is recommended that each constituent concentration identify the detection limit for the analytical method used with data qualifiers specified for non-detect samples.

The EPA solicits comment both on requiring a standardized format and on the elements of the format. The EPA believes that a required standardized format would increase transparency and enable the general public, as well as federal, state, and local officials, to more easily

understand the groundwater monitoring data and thus plan for and evaluate the appropriate next steps to protect public health and the environment.

## **VII. Establishing an Alternative Risk-Based Groundwater Protection Standard for Boron**

The 2015 CCR rule required the owner or operator of a CCR unit to set the groundwater protection standard (GWPS) at the Maximum Contaminant Level (MCL) or to background for all constituents in Appendix IV to part 257 that are detected at a statistically significant level above background. MCLs are levels of constituent concentrations promulgated under section 1412 of the Safe Drinking Water Act. If no MCL exists for a detected constituent, then the GWPS was required to be set at background.

On March 15, 2018, EPA proposed to add boron to the list of constituents in Appendix IV of part 257 that trigger corrective action. See 83 FR 11588-89. The EPA is still considering the comments received in response to this and has made no decision on whether to add boron to Appendix IV.

In the July 2018 final rule, EPA established specific GWPS for each of the four constituents now listed in Appendix IV without MCLs, to be used in place of the default background concentrations currently required under § 257.95(h)(2). See 83 FR 36443-45 (July 30, 2018). Consistent with this decision, if EPA does finalize the addition of boron to Appendix IV, an alternative risk-based GWPS should be established since boron does not have an MCL. Accordingly, EPA is proposing to establish an alternate risk-based GWPS for boron, which would be finalized only if boron is ultimately added to Appendix IV.

The EPA is proposing to adopt a standard for boron using the same methods that were used to develop the standards established in the July 30, 2018 final rule. See 83 FR 36443-45. Specifically, the Agency is proposing to adopt 4,000 micrograms per liter ( $\mu\text{g/L}$ ) as the GWPS

for boron, if boron is added to Appendix IV. This level was derived using the same methodology that EPA proposed to require States to use to establish alternative GWPS in the March 15, 2018 proposed rule (see 83 FR 11598-99, 11613), and that EPA ultimately used to develop the revised GWPS in the July 30, 2018 final rule. The methodology follows Agency guidelines for assessment of human health risks of an environmental pollutant. This means that EPA has established this GWPS at the concentration to which the human population could be exposed to on a daily basis without an appreciable risk of deleterious effects over a lifetime.

The EPA used the equations in the Risk Assessment Guidance for Superfund (RAGS) Part B to calculate these revised GWPS.<sup>24</sup> RAGS Part B provides guidance on using drinking water ingestion rates and toxicity values to derive risk-based remediation goals. The use of these methods, consistent with EPA risk assessment guidelines will protect sensitive populations. The EPA relied upon relevant exposure information from the 2008 *Child-Specific Exposure Factors Handbook*,<sup>25</sup> the *Exposure Factors Handbook: 2011 Edition*<sup>26</sup> and the 2014 *Human Health Evaluation Manual, Supplemental Guidance: Update of Standard*.<sup>27</sup> Values based on residential receptors were used to capture the range of current and future potential receptors. The EPA identified toxicity values according to the hierarchy established in the 2003 Office of Solid Waste and Emergency Response Directive 9285.7-53,<sup>28</sup> which encourages prioritization of values from sources that are current, transparent and publicly available, and that have been peer

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<sup>24</sup> Risk Assessment Guidance for Superfund (RAGS) Part B can be accessed at <https://www.epa.gov/risk/risk-assessment-guidance-superfund-rags-part-b>.

<sup>25</sup> US EPA, “Child-Specific Exposure Factors Handbook”, EPA/600/R-06/096F, September 2008. This document is available in the docket to this rulemaking.

<sup>26</sup> US EPA, “Exposure Factors Handbook: 2011 Edition”, EPA/600/R-090/052F, September 2011. This document is available in the docket to this rulemaking.

<sup>27</sup> US EPA, “2014 Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors.” This document is available in the docket to this rulemaking.

<sup>28</sup> US EPA, “Human Health Toxicity Value in Superfund Risk Assessments”, OSWER Directive # 9285.7-53, December 5, 2003. This document is available in the docket to this rulemaking.

reviewed. Finally, EPA used the same toxicity values (reference doses) that were used in the risk assessment supporting the 2015 CCR Rule. Cancer slope factors (CSF) were not identified for boron. The proposed GWPS for boron was set using a target based on a Hazard Quotient (HQ) equal to 1.

### **VIII. Revisions to the Publicly Accessible CCR Website Requirements**

In the 2015 CCR rule, pursuant to section 7004(b)(2), the Agency promulgated a requirement for owners and operators of any CCR unit to establish and maintain a publicly accessible Internet site, titled “CCR Rule Compliance Data and Information.” Section 7004(b)(3) directs EPA to provide for, encourage, and assist “[p]ublic participation in the development, revision, implementation, and enforcement of any regulation, guideline, information, or program under this chapter.” To achieve these ends, internet postings are required for various elements identified in the following sections of the CCR regulations: Location restrictions; design criteria; operating criteria; groundwater monitoring and corrective action; closure and post closure care. Consistent with the statutory directive, the websites are to make the notices and relevant information required by the regulations available to the public in a manner that will encourage and assist public participation in the implementation of the regulations. This necessarily means, for example that the posted documents must be clearly identifiable as documents, reports, demonstrations, etc., to those attempting to access them. The Agency considers the internet the most widely accessible and effective means for gathering and disseminating information to the public and the states.

The EPA has observed that some of the publicly accessible websites that owners and operators of CCR facilities have established in response to the CCR regulations in practice, fail to make the posted documents publicly accessible. For example, a number of CCR websites

require either some sort of registration whereby personal information identifying the user must be provided before members of the public are granted “access” to the website. The Agency has seen other websites where a user must submit a request for each document individually and the requested document is subsequently emailed to the user. Still other websites have been designed such that the posted “publicly available” documents cannot be downloaded or printed from the website. The EPA does not consider these kinds of practices to be consistent with the requirement that the information be made publicly available. The EPA acknowledges that the current regulation does not define the term “publicly available,” or contain detailed requirements that such websites must meet; nor are these practices explicitly prohibited. To avoid any further confusion, EPA is proposing to amend the current regulation to clearly specify that facilities must ensure that all information required to be on the websites must be made available to any member of the public, including through printing and downloading, without any requirement that the public wait to be “approved”, or provide information in order to access the website.

Another issue EPA has noticed is that the internet addresses for many of the publicly accessible CCR websites have changed; for some sites, more than once. It is very difficult for the public, states, and EPA to access the information required to be posted on these websites if the URL’s change without notice. The EPA website has a “contact us” form whereby anyone can submit a comment or question to EPA that can be accessed at <https://www.epa.gov/coalash/forms/contact-us-about-coal-ash>. It would be very helpful if when a facility decides to change their web address they would submit a comment to that effect so that EPA can update its website that lists the CCR facilities nationwide and includes their web addresses. The Agency is therefore proposing to amend the regulations to require that facilities

notify EPA within 14 days of changing their CCR website address, to allow EPA to update the Agency's website with the correct URL address.

Similar to the difficulties that arise when a facility changes its web address for its CCR website, as discussed above, EPA has also noticed that when there is a question or problem with a publicly accessible CCR website, such as a broken link or a document that will not download, it can be difficult to reach the appropriate contact at the facility who has knowledge of the information posted to the CCR website. Therefore, the Agency is requesting comment on whether each CCR website should be required to have a mechanism (e.g., a "contact us" electronic form on the CCR website) for the public to bring to the attention of the facility issues of information accessibility.

## **IX. The Projected Economic Impacts of this Action**

### *A. Introduction*

The EPA estimated the costs and benefits of this action in an Economic Analysis (EA) which is available in the docket for this action. The EA estimates the incremental costs and cost savings attributable to the provisions of this action, against the baseline costs and practices in place as a result of the 2015 CCR final rule and, in some cases, existing federal and state regulations governing specific project types. The EA estimates that the net annualized impact of this proposed regulatory action over a 40-year period of analysis will be annual costs of between \$0.43 million and \$3.8 million. The costs are roughly evenly attributable to the two provisions in the rule. This action is not considered an economically significant action under Executive Order 12866.

## *B. Affected Universe*

The proposed rule affects entities in a number of different sectors who obtain quantities of CCR for use in a range of beneficial use applications and place it in “piles” prior to using or disposing it. The universe also includes entities that beneficially use CCR in applications that are a) unencapsulated, b) applied to land, and c) not part of the construction of roadways. The types of facilities and applications potentially affected include: 1) highway and non-road construction projects that use CCR for flowable fill, structural fill, embankments, soil modifications/stabilization, mineral filler in asphalt, and aggregate; 2) local authorities that use CCR for snow and ice control on roadways; 3) agricultural projects that use FGD gypsum as a soil amendment; and 4) oil/gas field services that use CCR in flowable fill or similar forms to stabilize wells. A number of other potentially affected sectors appear to already have operations consistent with the provisions in the proposed rule and are not expected to change operations or incur any costs. These include cement kilns, concrete batch plants, and mining applications.

While the sectors affected are large, the number of operations and projects using CCR in a manner that would be affected by the rule is limited; the EA estimates that at most, roughly 700 operations across all sectors would be affected by either or both provisions. This number reflects the number of individual projects for construction; the number of companies affected is likely lower. In addition, some or all of these projects and operations may already be operating in a manner consistent with the requirements of the proposed rule, due to existing state and federal regulations.

## *C. Baseline Costs*

The baseline costs for this rule are not explicitly estimated because they represent part of standard operating costs across multiple project types and sectors. The baseline does assume that

entities are subject to the relevant (i.e., beneficial use-related) costs of compliance with EPA's 2015 CCR rule, as well as the costs of compliance with other federal and state regulations that address various transportation, construction, and waste management practices.

#### *D. Costs and Benefits of the Proposed Rule*

The costs to comply with this proposed rule for facilities that are not currently operating in compliance includes, for the management of CCR piles, the cost of ensuring that the releases from CCR piles are controlled. For the preparation of a Criteria 4 (of the definition of "beneficial use of CCR") investigation two costs are relevant. The first are the costs to determine whether the proposed Criterion 4 location-based standards apply to a specific project and the preparation of a demonstration consistent with Criterion 4. The second are the per-project costs to demonstrate compliance with the proposed rule's location standards.

The EA estimates that number of facilities/operations that will employ new practices to control releases from piles is between 0 (assuming that all existing operations are already compliant due to other federal and state regulations) and 536; the annual costs associated with changing operations are estimated to range from \$0 to roughly \$3.2 million. These costs are assumed to apply every year to the same number of facilities and construction projects, which may overstate costs to the extent that management changes at permanent facilities may occur only once.

The EA estimates that the number of projects requiring investigation of the applicability of location-based standards under Criterion 4 is between 359 and 585; in most cases these are the same facilities and operations that are affected by the requirement for managing CCR in piles. The annual costs associated with conducting these investigations ranges from roughly \$0.26 million to roughly \$0.47 million, again assuming a consistent number of projects require

assessment every year. Further, the EA estimates that 16 to 43 projects would trigger a location-based standard and therefore require a demonstration consistent with Criterion 4. The annual costs associated with developing these demonstrations are estimated to range from \$0.044 million to \$0.12 million. Therefore, the total annual costs associated with the location-based standards for Criterion 4 are estimated to range from \$0.26 million to \$0.47 million, though these costs may be overestimated because they assume that all projects will conduct all six location-based standards investigations (even if a single investigation indicates that a Criterion 4 demonstration must be made), and that new project in new locations occur in the same frequency every year.

The EA also estimates the costs to owners and operators of CCR management units who will have to revise their groundwater monitoring and corrective action reports, as well as the costs to owners and operators of CCR management units who will have to amend their websites to comply with the rule's reporting and documentation requirements. The economic analysis estimates that approximately 700 CCR management units and 5 websites will be affected by these respective provisions, resulting in annualized costs of roughly \$0.1 million.

The total costs estimated for this EA across these two provisions are therefore estimated to range roughly between \$0.43 million and \$3.8 million.

Benefits associated with the rule are not quantified due to the uncertainty about the extent and location of behavior changes. However, improved control of releases from CCR piles and elimination of releases of CCR in areas where location restrictions apply would likely improve ecological and human health by reducing the risk of exposures to arsenic and other toxic metals

## **X. Statutory and Executive Orders Reviews**

### *A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563:*

#### *Improving Regulation and Regulatory Review*

This action is a significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review because this action may raise novel legal or policy issues arising out of legal mandates, the President's priorities or the principles set forth in the Executive Order. Any changes made in response to OMB recommendations have been documented in the docket. The EPA prepared an analysis of the potential costs and benefits associated with this action. This Economic Analysis (EA), entitled *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*, is summarized in Unit IX of this preamble and the EA is available in the docket for this proposal.

### *B. Executive Order 13771: Reducing Regulation and Controlling Regulatory Costs*

This action is expected to be an Executive Order 13771 regulatory action. Details on the estimated costs of this proposed rule can be found in EPA's analysis of the potential costs and benefits associated with this action.

### *C. Paperwork Reduction Act (PRA)*

The information collection activities in this rule have been submitted for approval to the Office of Management and Budget (OMB) under the PRA. The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 1189.31, OMB control number 2050-0053. This is an amendment to the ICR approved by OMB for the Final Rule: Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals

from Electric Utilities published April 17, 2015 in the **Federal Register** at 80 FR 21302. You can find a copy of the ICR in the docket for this action, and it is briefly summarized here. This rulemaking, specifically the provision clarifying 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 §§ 257.96-257.98, increases the paperwork burden attributable to provisions of the April 17, 2015 CCR Final Rule.

Respondents/affected entities: Coal-fired electric utility plants that will be affected by the rule.

Respondent's obligation to respond: The recordkeeping, notification, and posting are mandatory as part of the minimum national criteria being promulgated under Sections 1008, 4004, and 4005(a) of RCRA.

Estimated number of respondents: 1,336.

Frequency of response: The frequency of response varies.

Total estimated burden: EPA estimates the total annual burden to respondents to be an increase in burden of approximately 7,829 hours from the currently approved burden. Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: The total estimated annual cost of this rule is a cost increase of approximately \$445,055. This cost is composed of approximately \$445,055 in annualized labor costs and \$0 in capital or operation and maintenance costs.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

*D. Regulatory Flexibility Act (RFA)*

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. The small entities subject to the requirements of this action are beneficial users of CCR spread amongst several industries including construction, snow and ice control, the production of gypsum wallboard, agriculture, and oil/gas field services. This action is expected to result in net cost amounting to approximately \$0.43 million per year to \$3.8 million per year. Costs will accrue to all regulated entities, including small entities. Because fewer than 20% of small entities in any sector will experience impacts, and because impacts will fall below 1% of revenues for small entities in all sectors, this action will not have a significant economic impact on a substantial number of small entities. Further information on the economic effects of this action can be found in Unit IX of this preamble and in the Economic Analysis, which is available in the docket for this action.

*E. Unfunded Mandates Reform Act (UMRA)*

This action does not contain any unfunded mandate of \$100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. This action imposes no enforceable duty on any state, local or tribal governments or the private sector. The costs involved in this action are imposed only by participation in a voluntary federal program. UMRA generally excludes from the definition of “federal intergovernmental mandate” duties that arise from participation in a voluntary federal program.

*F. Executive Order 13132: Federalism*

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

*G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments*

This action does not have tribal implications as specified in Executive Order 13175. For the “Final Rule: Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities” published April 17, 2015 (80 FR 21302), EPA identified three of the 414 coal-fired electric utility plants (in operation as of 2012) as being located on tribal lands; however, they are not owned by tribal governments. These are: (1) Navajo Generating Station in Coconino County, Arizona, owned by the Arizona Salt River Project; (2) Bonanza Power Plant in Uintah County, Utah, owned by the Deseret Generation and Transmission Cooperative; and (3) Four Corners Power Plant in San Juan County, New Mexico owned by the Arizona Public Service Company. The Navajo Generating Station and the Four Corners Power Plant are on lands belonging to the Navajo Nation, while the Bonanza Power Plant is located on the Uintah and Ouray Reservation of the Ute Indian Tribe. Thus, Executive Order 13175 does not apply to this action.

*H. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks*

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action’s health and risk assessments are contained in the document titled “Human and Ecological Risk Assessment of Coal Combustion Residuals,” which is available in the docket for the 2015 CCR rule as docket item EPA-HQ-RCRA-2009-0640-11993.

As ordered by EO 13045 Section 1-101(a), for the “Final Rule: Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities”

published April 17, 2015 (80 FR 21302), EPA identified and assessed environmental health risks and safety risks that may disproportionately affect children in the revised risk assessment. The results of the screening assessment found that risks fell below the criteria when wetting and run-on/runoff controls required by the rule are considered. Under the full probabilistic analysis, composite liners required by the rule for new waste management units showed the ability to reduce the 90<sup>th</sup> percentile child cancer and non-cancer risks for the groundwater to drinking water pathway to well below EPA's criteria. Additionally, the groundwater monitoring and corrective action required by the rule reduced risks from current waste management units. This action does not adversely affect these requirements and EPA believes that this rule will be protective of children's health.

*I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use*

This action is not a "significant energy action" because it is not likely to have a significant adverse effect on the supply, distribution or use of energy. For the 2015 CCR rule, EPA analyzed the potential impact on electricity prices relative to the "in excess of one percent" threshold. Using the Integrated Planning Model (IPM), EPA concluded that the 2015 CCR rule may increase the weighted average nationwide wholesale price of electricity between 0.18 percent and 0.19 percent in the years 2020 and 2030, respectively. As the proposed rule represents a cost savings rule relative to the 2015 CCR rule, this analysis concludes that any potential impact on wholesale electricity prices will be lower than the potential impact estimated of the 2015 CCR rule; therefore, this proposed rule is not expected to meet the criteria of a "significant adverse effect" on the electricity markets as defined by Executive Order 13211.

*J. National Technology Transfer and Advancement Act (NTTAA)*

This rulemaking does not involve technical standards.

*K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*

The EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994).

The documentation for this decision is contained in EPA's Regulatory Impact Analysis (RIA) for the CCR rule, which is available in the docket for the 2015 CCR final rule as docket item EPA-HQ-RCRA-2009-0640-12034.

The EPA's risk assessment did not separately evaluate either minority or low-income populations. However, to evaluate the demographic characteristics of communities that may be affected by the CCR rule, the RIA compares the demographic characteristics of populations surrounding coal-fired electric utility plants with broader population data for two geographic areas: (1) one-mile radius from CCR management units (i.e., landfills and impoundments) likely to be affected by groundwater releases from both landfills and impoundments; and (2) watershed catchment areas downstream of surface impoundments that receive surface water run-off and releases from CCR impoundments and are at risk of being contaminated from CCR impoundment discharges (e.g., unintentional overflows, structural failures, and intentional periodic discharges).

For the population as a whole 24.8 percent belong to a minority group and 11.3 percent falls below the Federal Poverty Level. For the population living within one mile of plants with surface impoundments 16.1 percent belong to a minority group and 13.2 percent live below the

Federal Poverty Level. These minority and low-income populations are not disproportionately high compared to the general population. The percentage of minority residents of the entire population living within the catchment areas downstream of surface impoundments is disproportionately high relative to the general population, i.e., 28.7 percent, versus 24.8 percent for the national population. Also, the percentage of the population within the catchment areas of surface impoundments that is below the Federal Poverty Level is disproportionately high compared with the general population, i.e., 18.6 percent versus 11.3 percent nationally.

Comparing the population percentages of minority and low income residents within one mile of landfills to those percentages in the general population, EPA found that minority and low-income residents make up a smaller percentage of the populations near landfills than they do in the general population, i.e., minorities comprised 16.6 percent of the population near landfills versus 24.8 percent nationwide and low-income residents comprised 8.6 percent of the population near landfills versus 11.3 percent nationwide. In summary, although populations within the catchment areas of plants with surface impoundments appear to have disproportionately high percentages of minority and low-income residents relative to the nationwide average, populations surrounding plants with landfills do not. Because landfills are less likely than impoundments to experience surface water run-off and releases, catchment areas were not considered for landfills.

The CCR rule is risk-reducing with reductions in risk occurring largely within the surface water catchment zones around, and groundwater beneath, coal-fired electric utility plants. Since the CCR rule is risk-reducing and this action does not add to risks, this action will not result in new disproportionate risks to minority or low-income populations.

**List of Subjects in 40 CFR Part 257**

Environmental protection, Waste treatment and disposal.

Dated: July 29, 2019.

Andrew R. Wheeler,

Administrator.

For the reasons set out in the preamble, EPA proposes to amend 40 CFR part 257 as follows:

**PART 257—CRITERIA FOR CLASSIFICATION OF SOLID WASTE DISPOSAL FACILITIES AND PRACTICES**

1. The authority citation for part 257 continues to read as follows:

Authority: 42 U.S.C. 6907(a)(3), 6912(a)(1), 6944(a), 6945(d); 33 U.S.C. 1345(d) and (e).

2. In § 257.2 revise the definition of “CCR landfill” to read as follows:

**§ 257.2 Definitions.**

\* \* \* \* \*

*CCR landfill* means an area of land or an excavation that receives CCR and which is not a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground or surface coal mine, or a cave. For purposes of this subpart, a CCR landfill also includes sand and gravel pits and quarries that receive CCR, CCR piles, any practice that does not meet the definition of a beneficial use of CCR, and any accumulation of CCR on the land that does not meet the definition of a CCR storage pile.

\* \* \* \* \*

3. Amend § 257.53 by:

- a. Revising paragraph (4) the definition of “Beneficial use of CCR” and the definitions of “CCR landfill or landfill” and “CCR pile”; and
- b. Adding in alphabetical order the definitions of “CCR storage pile”, “Enclosed structure” and “Temporary accumulation”.

The revisions and additions read as follows:

**§ 257.53 Definitions.**

\* \* \* \* \*

*Beneficial use of CCR* means the CCR meet all of the following conditions:

(4) When unencapsulated use of CCR involves the placement on the land in the following areas: (a) within 1.52 meters (five feet) of the upper limit of the uppermost aquifer; (b) in a wetland; (c) in an unstable area (d) within a 100-year flood plain; (e) within 60 meters (200 feet) of a fault area; (f) or within a seismic impact zone in non-roadway applications, the user must demonstrate and keep records, and provide such documentation upon request, that environmental releases to groundwater, surface water, soil and air are comparable to or lower than those from analogous products made without CCR, or that environmental releases to groundwater, surface water, soil and air will be at or below relevant regulatory and health-based benchmarks for human and ecological receptors during use.

\* \* \* \* \*

*CCR landfill or landfill* means an area of land or an excavation that receives CCR and which is not a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground or surface coal mine, or a cave. For purposes of this subpart, a CCR landfill also includes sand and gravel pits and quarries that receive CCR, CCR piles, any practice that does not meet the definition of a beneficial use of CCR, and any accumulation of CCR on the land that does not meet the definition of a CCR storage pile.

*CCR pile* means any accumulation of solid, non-flowing CCR that is placed on the land and that is not a CCR storage pile.

*CCR storage pile* means 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. CCR

contained in an enclosed structure is not a CCR storage pile. Examples of control measures to control releases from CCR storage piles include: periodic wetting, application of surfactants, tarps or wind barriers to suppress dust; tarps or berms for preventing contact with precipitation and controlling run-on/runoff; and impervious storage pads or geomembrane liners for soil and groundwater protection.

\* \* \* \* \*

*Enclosed structure* means:

(1) A completely enclosed, self-supporting structure that is designed and constructed of manmade materials of sufficient strength and thickness to support themselves, the CCR, and any personnel and heavy equipment that operate within the structure, and to prevent failure due to settlement, compression, or uplift; climatic conditions; and the stresses of daily operation, including the movement of heavy equipment within the structure and contact of such equipment with containment walls;

(2) Has containment walls that are designed to be sufficiently durable to withstand any movement of personnel, CCR, and handling equipment within the structure;

(3) Is designed and operated to ensure containment and prevent fugitive dust emissions from openings, such as doors, windows and vents, and the tracking of CCR from the structure by personnel or equipment.

\* \* \* \* \*

*Temporary accumulation* means an accumulation on the land that is neither permanent nor indefinite. To demonstrate that the accumulation on the land is temporary, all CCR must be removed from the pile at the site. The entity engaged in the activity must have a record in place, such as a contract, purchase order, facility operation and maintenance, or fugitive dust control

plan, documenting that all of the CCR in the pile will be completely removed according to a specific timeline.

\* \* \* \* \*

4. In § 257.90 add paragraph (e)(6) to read as follows:

**§ 257.90 Applicability.**

\* \* \* \* \*

(e) \* \* \*

(6) A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit. At a minimum, the summary must specify:

(i) At the start of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in § 257.94 or the assessment monitoring program in § 257.95;

(ii) At the end of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in § 257.94 or the assessment monitoring program in § 257.95;

(iii) If it was determined that there was a statistically significant increase over background levels for one or more constituents listed in appendix III to this part pursuant to § 257.94(e):

(A) Identify those constituents listed in appendix III to this part and the names of the monitoring wells associated with such an increase; and

(B) Provide the date when the assessment monitoring program was initiated for the CCR unit.

(iv) If it was determined that there was a statistically significant increase above the groundwater protection standard for one or more constituents listed in appendix IV to this part pursuant to § 257.95(g):

(A) Identify those constituents listed in appendix IV to this part and the names of the monitoring wells associated with such an increase;

(B) Provide the date when the assessment of corrective measures was initiated for the CCR unit; and

(C) Provide the date when the assessment of corrective measures was completed for the CCR unit.

(v) Whether a remedy was selected pursuant to § 257.97 during the current annual reporting period, and if so, the date of remedy selection; and

(vi) Whether remedial activities were initiated or are ongoing pursuant to § 257.98 during the current annual reporting period.

\* \* \* \* \*

5. In § 257.107 revise paragraph (a) to read as follows:

**§ 257.107 Publicly accessible Internet site requirements.**

(a) Each owner or operator of a CCR unit subject to the requirements of this subpart must maintain a publicly accessible Internet site (CCR Web site) containing the information specified in this section. The owner or operator's Web site must be titled "CCR Rule Compliance Data and Information." The website must ensure that all information required to be posted is immediately available to anyone visiting the site, without requiring any prerequisite, such as registration or a requirement to submit a document request. All required information must be clearly identifiable and must be able to be printed and downloaded by anyone accessing the site.

If the owner/operator changes the URL at any point, they must notify EPA via the “contact us” form on EPA’s CCR Website within 14 days of making the change.

\* \* \* \* \*

[FR Doc. 2019-16916 Filed: 8/13/2019 8:45 am; Publication Date: 8/14/2019]