BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	R 2020-019
STANDARDS FOR THE DISPOSAL	)	
OF COAL COMBUSTION RESIDUALS	)	(Rulemaking - Water)
IN SURFACE IMPOUNDMENTS:	)	
PROPOSED NEW 35 ILL. ADM.	)	
CODE 845	)	

NOTICE OF FILING

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board a **NOTICE OF FILING** and **PRE-FILED ANSWERS** on behalf of the Illinois Environmental Protection Agency, a copy of which is herewith served upon you.

Respectfully submitted,

Dated: August 3, 2020

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,

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Petitioner,

BY: /s/ Christine Zeivel
Christine Zeivel

THIS FILING IS SUBMITTED ELECTRONICALLY

SERVICE LIST

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ILLINOIS EPA'S PRE-FILED ANSWERS

NOW COMES the Illinois Environmental Protection Agency (Illinois EPA or Agency), by and through one if its attorneys, and submits the following information with respect to its pre-filed answers.

1. On March 30, 2020, the Illinois EPA filed a rulemaking, proposing new rules at 35 Ill. Adm. Code 845 concerning coal combustion residual surface impoundments at power generating facilities in the State.

2. Public Act 101-171, effective July 30, 2019, amended the Illinois Environmental Protection Act, by among other things, adding a new Section 22.59 (415 ILCS 5/22.59). Public Act 101-171 includes a rulemaking mandate in Section 22.59(g) which directs the Board to adopt rules "establishing construction permit requirements, operating permit requirements, design standards, reporting, financial assurance, and closure and post-closure care requirements for CCR surface impoundments." 415 ICLS 5/22.59(g). The Board is required is adopt new rules for 35 Ill. Adm. Code part 845 by March 30, 2021.

3. The Agency timely filed pre-filed testimony for eight witnesses.

4. Based on the pre-filed testimony, Illinois EPA received over 1000 questions counting subparts.

5. On June 30, 2020, the Agency asked that it be granted until August 3, 2020 to respond to the pre-filed questions.

6. On July 14, 2019, the hearing officer granted the Agency's request.

7. Since receiving all the pre-filed the questions, Agency staff has been working diligently to respond to all the pre-filed questions. However, despite the extra time granted the Agency was not able to prepare final answers by the August 3, 2020 filing deadline for the following: Dynegy and Midwest Generation.

8. The Agency will continue to work to address questions raised by Dynegy and Midwest Generation and hopes to file written answers before the first hearing. If that is not possible, the Agency will be prepared to address those pre-filed questions at the August hearing.

9. The Agency is today filing responses to: Little Village Environmental Justice Organization, ELPC, Prairie Rivers Network and Sierra Club, CWLP, Illinois Environmental Regulatory Group, Ameren, and the Board.

10. It should be noted that if a question was directed at a witness and the Agency answered it as a panel, the answer is provided as: "Agency Response".

LVEJO

Questions for Lynn E. Dunaway

1. **Both the Coal Ash Pollution Prevention Act, 415 ILCS 5/3.143, and proposed Section 845.120, use the term "natural topographical depression" within the definition of a surface impoundment.**

   a. **What is the definition of a natural topographical depression?**

      Response: A natural topographic depression is an area of the land surface that is lower than the land surface adjacent to it, as a result of various geologic processes.

   b. **Why isn't the term " natural topographical depression" defined in Illinois EPA's proposed regulations?**

      Response: The term was not defined because the meaning of each word in the phrase can easily be found in a Webster's or on-line dictionary and do not have different meanings in the proposed rule.

2. **Both the Coal Ash Pollution Prevention Act, 415 ILCS 5/3.143, and proposed Section 845.120, use the term "man-made excavation" within the definition of a surface impoundment.**

   a. **What is the definition of a man-made excavation?**

      Response: A man-made excavation is an area of the earth from which human beings have removed the material located there.

   b. **Why isn't the term " man-made excavation" defined in Illinois EPA' s proposed regulations?**

      Response: The term was not defined because the meaning of each word in the phrase can easily be found in a Webster's or on-line dictionary and do not have different meanings in the proposed rule.

3. **What is the difference between a landfill that contains CCR and a man-made excavation where CCR was disposed? See: 415 ILCS 5/3.143 and proposed Section 845. 100(h).**

   Response: A man-made excavation where CCR is disposed could be a CCR surface impoundment or a landfill, but a landfill that receives CCR is not a CCR surface impoundment.

4. **What is the difference between a landfill that contains CCR and a natural topographical depression where CCR was disposed? See: 415 ILCS 5/3.143 and proposed Section 845.100(h).**

   Response: A natural topographic depression where CCR is disposed could be a CCR surface impoundment or a landfill, but a landfill that receives CCR is not a CCR surface impoundment.

5. How does Illinois EPA distinguish between "inactive CCR surface impoundments at active and inactive electric utilities or independent power producers" and landfills that contain CCR at these same facilities? See: Proposed Sections 845.lOO(c) and 845. 100(h).

Response: CCR surface impoundments, by definition, are designed to hold liquids and CCR, landfills are not.

6. Does the Coal Ash Pollution Prevention Act include the same exclusion for " landfills that receive CCR" that is in Illinois EPA's proposed Section 845.100(h)? If not, what is Illinois EPA's legal authority for this exclusion?

Response: Section 22.59 of the Act is titled "CCR surface impoundments", contains requirements to which CCR surface impoundments are subject and makes no mention of landfills that receive CCR. Section 845.100(h) is a clarification that the Board rules mandated by Section 22.59 of the Act also pertain only to CCR surface impoundments.

7. Do Illinois EPA's Proposed Regulations apply to all natural topographical depressions and man-made excavations where coal combustion residual has been disposed at power generating facilities?

Response: No, Part 845 applies to CCR surface impoundments at electric utilities and independent power producers.

8. Is Illinois EPA aware of any CCR surface impoundments not located at the 23 power generating facilities identified on pages 37 and 38 of its Statement of Reasons? If so, where are these off-site surface impoundments?

Response: There are 10 CCR surface impoundments of which the Agency is aware that are off-site from the power generating facility they serve. These CCR surface impoundments are off-site from the Joliet 9 Station, south of Joliet, City Water Light and Power in Springfield and Southern Illinois Power Cooperative, south of Marion, by Lake of Egypt.

9. If a CCR surface impoundment is outside of the property boundaries of a power generating facility (for example, on an adjacent or nearby property), will Illinois EPA's Proposed Regulations apply to this off-site surface impoundment?

Response: If the hypothetical CCR surface impoundment is owned or operated by an electric utility or an independent power producer, Part 845 would be applicable.

a. If not, how is this exclusion consistent with the statutory mandate that "environmental laws should be supplemented to ensure consistent, responsible regulation of all existing CCR surface impoundments (415 ILCS 5/22.59(a)(4), emphasis added)?

Response: Not applicable. Please see Response 9.

b. What steps has Illinois EPA taken to identify CCR surface impoundments that are not located at the 23 power generating facilities identified on pages 37 and 38 of its Statement of Reasons?

Response: The Agency has not taken steps to identify CCR surface impoundments at facilities which are not utilities or independent power producers. According to USEPA in its Federal Registry entry for Part 257, located at 80 Fed. Reg. 21340, (Apr. 17, 2015), industries using coal to generate electricity and heat for their own use, consumed less than one percent of the coal burned. Hence, these industries would produce less than one percent of the CCR generated.

Section 22.59(a)(3) of the Act states, as a finding of the General Assembly, that the electrical generating industry has caused groundwater contamination at active and inactive plants throughout Illinois. Further, Section 22.59(g)(1) of the Act requires that the rules adopted pursuant to Section 22.59(g), be as protective and comprehensive as Subpart D of 40 CFR 257 governing CCR surface impoundments. It is the Agency's position that the same universe of CCR surface impoundments is intended to be regulated by Part 845. Based on this information, as drafted, Part 845 would regulate approximately 99% of the CCR generated and is consistent with the General Assembly's findings.

10. How will Illinois EPA identify the CCR surface impoundments with the highest risk to public health and the environment, as required by 415 ILCS 5/22.59(g)(9)? Is this process set forth in the Proposed Regulations?

Response: The required closure or retrofit of CCR surface impoundments is generally addressed in Section 845.700, with the specific prioritization in Section 845.700(g).

11. Why are decisions about implementing interim measures delegated to owners and operators? Proposed Section 845.680(a)(3). Why isn't this an Illinois EPA authority and responsibility?

Response: The Agency is responsible for reviewing and approving an overall corrective action plan. The interim measures being described here are actions expected of owners and operators to mitigate a situation prior to the completion of the formal approval process. For example: if an active CCR surface impoundment received damage to a liner system. The owner or operator could begin dewatering the impoundment prior to approval of the corrective action plan and permitting process to reduce the amount of leachate that could potentially impact groundwater.

12. 415 ILCS 5/22.59(b)(l) prohibits the discharge of any contaminants from CCR surface impoundments into the environment"... so as to cause, directly or indirectly, a violation of this Section or any regulations or standards adopted by the Board under this Section, either alone or in combination with contaminants from other sources." Dust control is specifically mandated by 415 ILCS 5/22.59(g)(10).

a. Under Illinois EPA's Proposed Regulations, does this provision apply to dust that originates from CCR surface impoundments <u>in combination with</u> other on-site and off- site sources that are also discharging dust?

Response: No. CCR surface impoundments are separate from the other particles released to the air by surrounding facilities or other sources where the CCR surface impoundment

is located. The Agency will treat CCR surface impoundments separately from existing state and federal air permits.

b. If so, where is this stated and applied in Illinois EPA's Proposed Regulations?

Response: Please see Response 11(a)

13. Can the owner/operator of a site that includes a CCR surface impoundment elect to remediate the surface impoundment pursuant to the Illinois Site Remediation Program, 415 ILCS 5/58, 35 IAC 740 and 742, as an alternative to the requirements contained in Illinois EPA's Proposed Regulations?

Response: Part 845 applies only to CCR surface impoundments owned or operated by utilities and independent power producers. Therefore, the owner or operator of a CCR surface impoundment who is not subject to Part 845 could apply for enrollment into the Illinois Site Remediation Program (SRP). The owner or operator of a CCR surface impoundment who is subject to Part 845 is not specifically prohibited from applying for enrollment in the SRP, however, all of the requirements of Part 845 would still be applicable.

14. Why doesn't the Pre-Application Public Notification mandated by proposed Section 845.240(b) require information about where and when the public will be able to acquire all documentation relied upon the permit applicant in preparing its tentative construction permit application (proposed Section 845.240(e))? In the absence of this information in the Pre- Application Public Notice, how will members of the public know when these documents will be available and how to access them?

Response: Please see Response to Board question 24.

15. How can members of the public access documents that are subsequent to the tentative permit application? Proposed Section 845.240(e). Why doesn't Illinois EPA's regulatory proposal make provision for continuously updated on-line access to these documents, especially since Illinois EPA has the existing capability to post permit transaction documents on its Public Notice website and/or on its Document Explorer website?

Response: Documents subsequent to the tentative permit application would be included in the final permit application submitted to the Agency. Section 22.59(i) of the Act requires the owner of a CCR surface impoundment to post all closure plans, permit applications, and supporting documentation, as well as any Agency approval of the plans or applications, on its publicly available website. Accordingly, proposed Section 845.800 requires that copies of all closure plans and amendments, permit applications and permits be placed in the facility's operating records and made available on the owner or operator's CCR website.

Furthermore, 845.260(a) requires the Agency to post a notification on the Agency webpage and to email the notice to the Agency's listserv for a facility when it receives the permit application. When the draft permit is ready to be publicly noticed, the public notice will

include the information for where and how members of the public can obtain further information, such as a copy of the permit application and related documents pursuant to 845.260(b)(2). FOIA is also always available for access to publicly available documents within the Agency's possession, including permit transaction documents.

16. Why does Illinois EPA require Pre-Application Public Meetings (proposed Section 845.240) but give itself discretion about whether to hold a Public Hearing as part of the same permit process (proposed Section 845.260(d))?

Response: The Agency's existing NPDES permitting program, which is a USEPA delegated program, contains provisions for meaningful public participation during a 30-day public notice process. During this public notice process, the public may make comments on the draft permit, provide the Agency with information it did not possess prior to the public notice, or ask questions of the Agency on its tentative decision. The public notice process included in Part 845 was modeled after the NPDES program.

a. Why is it necessary for members of the public to request a public hearing and "include the reasons why a hearing is warranted"? Proposed Section 845. 260(d)(2). How is this requirement consistent with the legislative finding that meaningful public participation is critical? 415 ILCS 5/22.59(a)(5).

Response: As addressed in Question 16, the public notice process was modeled after the NPDES public notice and public hearing processes. These existing processes include a requirement for a hearing request and justification for why a hearing is warranted. Section 845 as proposed includes a pre-application public meeting requirement, which is above and beyond the requirements of the existing NPDES program, and is intended to allow for public discussion of the proposal with the hope that local concerns can be addressed prior to the filing of an application with the Agency. All application submittals may not attract the same level of public interest or concern, and therefore may not warrant the automatic scheduling of a public hearing.

b. Why is it necessary for the Agency to determine on a case-by-case basis whether there is a "significant degree of public interest in the proposed permit." Proposed Section 845.260(d)(1)? How will the Agency make this determination? How is this requirement consistent with the legislative finding that meaningful public participation is critical? 415 ILCS 5/22.59(a)(5).

Response: The Agency modeled this proposed permitting process after the existing NPDES permitting program found in Section 309.115(a). Significant degree of public interest is something the Agency looks at on a case by case situation. If there is any doubt whether to hold a hearing or not, the Agency favors holding the hearing.

c. In the absence of an Illinois EPA public hearing and the resulting transcript, how will the Illinois Pollution Control Board assess whether Illinois EPA adequately addressed the interests of affected members of the public as part of a permit appeal pursuant to proposed Section 845.270(e)(2)?

Response: As with the NPDES permit process from which this process was modelled, if a public hearing is not held, the Agency will still prepare a written response to comments received during the public notice process. These response letters will be sent to the commenter when the Agency makes its final determination on the permit. Written comments received, as well as any hearing request that was received, but denied and documents submitted as part of the Permit, which must include records from the owner's or operator's public meeting are all part of the record that the Board could review.

17. **In the absence of a public hearing, proposed Section 845.260(c)(1)-(5) ("Public Comment Period") does not require Illinois EPA to prepare a summary of all significant comments, criticisms and suggestions or the Agency's response to these significant comments, criticisms and suggestions. This is in contrast to the requirement for a Responsiveness Summary if a public hearing is held. Proposed Section 845.260(f)(4) and (5).**

    a. **Why is the requirement for a Responsiveness Summary not included when there are written comments but not a public hearing?**

        Response: Section 845.260(c)(3) and (5) requires the Agency to consider all timely submitted comments in its final determination with respect to permit applications. As with the NPDES permit process from which this process was modeled, if a public hearing is not held, the Agency will still prepare a written response to comments received during the public notice process. These response letters will be sent to the commenter when the Agency makes its final determination on the permit.

    b. **In the absence of a Responsiveness Summary, how will the Illinois Pollution Control Board assess whether Illinois EPA adequately addressed the interests of affected members of the public as part of a permit appeal pursuant to proposed Section 845.270(e)(2)?**

        Response: Please see Response 16(c).

18. **Does Illinois EPA consider a significant proportion of non-English speaking residents an important factor in the design and implementation of public participation strategies?**

        Response: Yes, hence the requirements of Section 845.240.

    a) **Why is Illinois EPA requiring the permit applicant to distribute a Pre-Application Public Notification in the appropriate non-English language (proposed Section 845.240(c), but is not proposing this for its own Draft Permit Notice (proposed Section 845.260(b))?**

        Response: The Agency's public engagement and notification publication will be conducted pursuant to the Illinois EPA Environmental Justice Public Participation Policy, which includes as a consideration, translation of documents such as the draft permit notice contemplated in Section 845.260(b).

    b) **If the permit applicant concludes its regulated activity is located in an area with a significant proportion of non-English speaking residents pursuant to proposed Section 845.240(c), why isn't the permit applicant required to have translation services available at the Pre-Application Public Meeting?**

Response: Based on this question, if the Board believes a revision is warranted, the Agency suggests that the Board add the following requirement to Section 845.240(c)

(c) When a proposed construction project or any related activity is located in an area with a significant proportion of non-English speaking residents, the notification must be circulated, or broadcast, in both English and the appropriate non-English language, and the owner or operator must provide translation services during the public meetings required by Section 845.240(a), if requested by non-English speakers.

c) If the Illinois EPA concludes a permit will affect an area with a significant proportion of non-English speaking residents, why isn't Illinois EPA required to have translation services available at the public hearing for its draft permit as part of proposed Section 845.260(d)?

Response: The Agency's public engagement, including the public hearing for the draft permit, will be conducted pursuant to the Illinois EPA Environmental Justice Public Participation Policy, which includes as a consideration, translation during public hearings.

19. *No Question was received for placement of 19.

20. Do the public participation requirements in proposed Sections 845.240 and 845.260 apply to the submission of a proposed Corrective Action Plan pursuant to proposed Section 845.670 and the Illinois EPA's process of approving a Corrective Action Plan? If not, why not, especially given the short-term and residual risks that might be posed to the community (proposed Section 845.670(e)(1)(B) and (D)), the potential for exposure of humans and environmental receptors (proposed Section 845.670(e)(1)(F)) and the need to identify a remedy that is protective of human health and the environment (proposed Section 845.670(d)(1))?

Response: The processes laid out in Sections 845.240 and Section 845.260 apply to a construction permit for corrective action just as they would for other required construction activities.

Questions for Chris Pressnall

1. The link to EJ Start on page 2 of your testimony is not a valid link. Can you provide a correct link to this resource and provide a practical example of how this resource can be used to identify environmental justice areas of concern pursuant to proposed Sections 845.700(g)(6) and (7)?

Response: This is the This is the link to EJ Start: https://illinois-epa.maps.arcgis.com/apps/webappviewer/index.html?id=be7488489355496682fd6ba13ff0b287. *Chrome web browser is required for using. The Illinois EPA has also added an EJ layer to the coal ash impoundments GIS map found here: https://illinois-epa.maps.arcgis.com/apps/webappviewer/index.html?id=558102bb7b304d20907d3420ddcdf9eb *Chrome web browser is required for using. In addition, the Illinois EPA provided a list of coal ash impoundments located in areas of EJ concern to the Board question 1(l).

2. **Based on Illinois EPA' s list of 23 facilities and 73 surface impoundments on pages 37 and 38 of its Statement of Reasons, which surface impoundments are currently located in areas of environmental justice concern as defined by Illinois EPA in proposed Sections 845.700(g)(6) and (7)?**

   Response: The Illinois EPA identified a list of coal ash impoundments located in areas of EJ concern in the answer to PCB's question 1(l).

3. **415 ILCS 5/22.59(a)(5) refers to "vulnerable populations who may be affected by regulatory actions".**

   a. **What are vulnerable populations and how will Illinois EPA make this determination?**

   b. **Can you provide an example of a vulnerable population?**

   c. **Does Illinois EPA consider a community with a significant proportion of English non-speaking residents as a factor in defining a vulnerable population?**

      Response: The Illinois EPA proposes utilizing the EJ Start Geographic Information System screening tool to fulfill the legislative mandate to determine "areas of EJ concern". As such, the Illinois EPA does not propose defining and identifying "vulnerable populations" as referenced in the legislative findings in Section 22.59. Notwithstanding, for the purposes of public participation, a community with a significant proportion of English non-speaking residents should be accommodated via translation services.

4. **415 ILCS 5/22.59(a)(5) refers to "communities in this State that bear disproportionate burdens imposed by environmental pollution."**

   a. **What are "communities in this State that bear disproportionate burdens imposed by environmental pollution"?**

   b. **Is this the same as the U.S. EPA definition of "over-burdened communities" described in your written testimony?**

   c. **How will Illinois EPA identify these communities?**

   d. **Can you provide an example of a community that bears disproportionate burdens imposed by environmental pollution?**

      Response: The Illinois EPA proposes utilizing the EJ Start Geographic Information System screening tool to fulfill the legislative mandate to determine "areas of EJ concern". As such, the Illinois EPA does not propose defining and identifying "communities in this State that bear disproportionate burdens imposed by environmental pollution" as referenced in the legislative findings in Section 22.59.

5. 415 ILCS 5/22.59(g)(8) refers to "areas of environmental justice concern in relation to CCR surface impoundments".

a. Why does Illinois EPA propose this determination should be based solely on the demographic characteristics of areas that are proximate to CCR surface impoundments (proposed Sections 845.700(g)(6)(A) and (B))?

Response: The Illinois EPA proposed utilizing the existing demographic screening tool for consistency in application of EJ concepts across Agency Programs.

b. Why doesn't Illinois EPA incorporate information about communities that bear disproportionate burdens imposed by environmental pollution?

Response: The Illinois EPA proposed utilizing the existing demographic screening tool for consistency in application of EJ concepts across Agency programs.

6. Are there differences between:

- "vulnerable populations who may be affected by regulatory actions"

- "communities in this State that bear disproportionate burdens imposed by environmental pollution"; and,

- "areas of environmental justice concern in relation to CCR surface impoundments"?

If so, what are these differences and how does Illinois EPA account for these differences in its Proposed Regulations?

Response: The Illinois EPA proposes utilizing the EJ Start Geographic Information System screening tool to fulfill the legislative mandate to determine “areas of EJ concern”. As such, the Illinois EPA does not propose defining and identifying “communities in this State that bear disproportionate burdens imposed by environmental pollution” or “vulnerable populations who may be affected by regulatory actions” as referenced in the legislative findings in Section 22.59.

7. On pages 3 and 4 of your Pre-Filed Testimony, you reference U.S. EPA's EJ Screen.

a. Does Illinois EPA currently use EJ Screen to identify environmental justice areas and, if so, how?

Response: No. However, Illinois EPA may utilize USEPA EJ Screen as an ancillary tool when researching and analyzing a community that has identified potential EJ issues.

b. Does Illinois EPA currently use EJ Screen to differentiate between the disproportionate burdens present in different environmental justice areas and, if so, how?

Response: No but it has utilized USEPA EJ Screen to look at areas of EJ concern versus communities that do not meet the criteria of an area of EJ concern.

8. Your pre-filed testimony indicates that you are a member of the Illinois Commission on Environmental Justice.

a. Please describe the methodology the Commission proposed for the Illinois Power Agency to determine environmental justice communities as part of implementing the Future Energy Jobs Act.

Response: The methodology recommended by the Illinois Commission on Environmental Justice can be found in this letter: https://www2.illinois.gov/epa/Documents/iepa/environmental-justice/commission/resources/ejcommissionipa2.pdf

*Chrome web browser is required for using.

b. Was this methodology approved by the Illinois Commerce Commission?

Response: Yes

c. Why isn't Illinois EPA proposing the same methodology to be used as part of the present rulemaking?

Response: The Illinois EPA proposed utilizing the existing demographic screening tool for consistency in application of EJ concepts across Agency programs and to fulfill its obligation to identify "areas of EJ concern". The Illinois Power Agency was given a statutory mandate to define "EJ communities" for the administration of the Illinois Solar For All program and developed a mapping tool to identify "EJ communities" in accordance with recommendations made the Commission on Environmental Justice.

d. If the methodology approved by the Illinois Commerce Commission and utilized by the Illinois Power Agency isn't used, won't this lead to inconsistency in how environmental justice areas are identified in Illinois?

Response: The Illinois EPA's EJ Start and Illinois Power Agency's Illinois Solar For All EJ community GIS screening tool are both currently utilized in Illinois by their respective agencies.

9. What are the differences between Illinois EPA's Environmental Justice Public Participation Policy and the process described in Illinois EPA's proposed Sections 845.240-845.270? What additional public participation measures will Illinois EPA utilize in environmental justice areas and, if there are any, why aren't these additional requirements stated in the Proposed Regulations?

Response: The Illinois EPA has proposed that the Board consider revising the proposed regulations to address issues such as non-English translation in communities with a significant number of persons that do not utilize English as their primary written or spoken language.

ELPC, PRAIRIE RIVERS NETWORK AND SIERRA CLUB

MELINDA SHAW

Location Standards:
1. Could you please identify all CCR impoundments in Illinois known by the Illinois Environmental Protection Agency ("Agency") to have been constructed:

a. Less than five feet above the uppermost aquifer?
b. In a wetland?
c. In a fault area?
d. In a seismic impact zone?
e. In an unstable area?

Response: The IEPA does not yet have information on each CCR surface impoundment regarding location restrictions. Each facility will need to make a demonstration as to whether they meet the locations restrictions under Subpart C in the permit application after the regulations are promulgated. At this time, the facilities have not submitted this information to the Hydrogeology and Compliance Unit.

2. You state that the location restriction concerning the uppermost aquifer is "to protect groundwater from coming into contact with CCR in a surface impoundment." Why should groundwater be protected from coming into contact with CCR?

Response: The Agency's intent is to protect groundwater from contamination at CCR surface impoundment sites.

3. If a CCR surface impoundment does not meet the uppermost aquifer location restriction, is it the Agency's position that closure in place is permissible?

Response: The Agency is not taking a specific position. Closure details will be determined with site specific information.
The CCR surface impoundment that cannot meet location restrictions would need to follow the closure procedures proposed in 35 IAC 845 Subpart G, which requires a closure analysis to determine the safest method of closure, whether that be by removal or closure in place.

a. What is the basis for that position?

Response: Any decision made will be based on site specific information.

4. You state that an owner or operator may locate a CCR surface impoundment in a wetland only if it provides "a clear and objective rebuttal to the presumption that an alternative to the CCR surface impoundment is reasonably available that does not involve wetlands." Regarding that rebuttable presumption, you state that "[f]actors in the rebuttable presumption include the construction and operation of the CCR surface impoundment will not cause or contribute to any violation of any applicable state or federal water quality standard…."

a. Does the Agency consider existing groundwater quality standards under 35 Ill. Adm. Code pt. 620 to be "applicable state…water quality standard[s]?"

Response: Yes

b. Does the Agency consider existing groundwater protection standards under 40 C.F.R. Part 257 to be "applicable. . . federal water quality standard[s]?"

Response: Yes

c. Could you please identify all standards that the Agency considers to be "applicable state or federal water quality standard[s]?"

Response: The Owner/Operator must comply with Sections 307 and 404 of the Clean Water Act, the Interagency Wetlands Policy Act of 1989, and the Rivers, Lakes, and Streams Act, 35 IAC Part 302 and 303, Part 620 and 40 CFR Part 257, as applicable. (Agency Response)

d. Will the Agency take into account existing groundwater monitoring data from CCR surface impoundments covered by the Federal CCR Rule in determining whether "the construction and operation" of the impoundment "will not cause or contribute to any violation of any applicable state or federal water quality standard?"

Response: Existing groundwater quality data would be taken into account for determining if a CCR surface impoundment already at that location meets the requirements of Section 845.310. For the construction of a new CCR surface impoundment, which is compliant with the proposed requirements of Part 845, Subpart D, existing groundwater water quality may not be relevant, because the design of the new CCR surface impoundment may be significantly different than a CCR surface impoundment not designed pursuant to Part 845, Subpart D. (Agency Response)

i. **If so, what monitoring results would lead the Agency to determine that operation of the impoundment "will not cause or contribute to any violation of any applicable state or federal water quality standard?**

Response: Monitoring results of water quality will determine whether operation will not cause or contribute to any violation to an applicable standard. (Agency Response)

e. Will the Agency take into account existing groundwater monitoring data from CCR surface impoundments not covered by the Federal CCR Rule in determining whether "the construction and operation" of the impoundment "will not cause or contribute to any violation of any applicable state or federal water quality standard?"

Response: CCR surface impoundments not subject to Part 257, are not subject to the requirements of Part 845. (Agency Response)

i. **If so, what monitoring results would lead the Agency to determine that operation of the impoundment "will not cause or contribute to any violation of any applicable state or federal water quality standard?"**

Response: Please see Response 4(d). (Agency Response)

5. You state that an owner or operator may locate a CCR surface impoundment in a wetland only if it demonstrations that "no degradation of the wetlands will occur." You explain that "this" is "based on several factors including . . . stability."

a. How do you expect that owners or operators will make such a demonstration?

Response: An owner operator will need to make the determination based on site specific information and have a professional engineer certify that all of the requirements in Subpart C are met.

b. How do you expect that owners or operators will make such a demonstration specifically concerning the "stability" factor?

Response: The language of Subpart C is taken directly from the 40 CFR 257 regulations in an effort to qualify as an approved state program under the US EPA. In Subpart C, the word "stability" is in reference to soils in a wetland. An owner operator will need to make the determination based on site specific information and have a professional engineer certify that all of the requirements in Subpart C are met.

c. What education or other qualifications would be required to evaluate the validity of such a demonstration?

Response: A qualified professional engineer must meet and be registered by the Illinois Department of Financial and Professional Regulation.

d. Could you please identify the Agency staff who possess such education or qualifications and will review such demonstrations in permit applications for CCR surface impoundments?

Response: The Agency will have an appropriate number of personnel to review demonstrations as required to administer Part 845. The Agency intends to consult with IDNR as needed. (Agency Response)

e. Could you please list any posted open positions at the Agency which seek a candidate with the education or qualifications noted in your response to Question 5(c), who will be tasked with reviewing such demonstrations in permit applications for CCR surface impoundments?

Response: Please see Response 5(d). (Agency Response)

6. If an existing CCR surface impoundment is located in a wetland and does not demonstrate that no "degradation of the wetlands will occur," does the Agency take the position that closure in place is permissible?

Response: The selection of an appropriate closure method will be based on the closure alternatives analysis pursuant to Section 845.710.

7. You explain that CCR surface impoundments may not be located "within 200 feet of a recently active fault that has shown displacement during the last 11,700 years."

a. Has the Agency evaluated whether there are such fault areas in Illinois?

Response: The Agency has not conducted such an evaluation. This will be determined with site specific information.

b. If so, where are they located?

8. You state that an owner or operator may locate a CCR surface impoundment in a fault area only if it "can show that no structural damage to a CCR surface impoundment will result with a distance less than 200 feet."

a. How can such a demonstration be made?

Response: An owner operator will need to make the determination based on site specific information and have a professional engineer certify that all of the requirements in Subpart C are met.

b. What education or other qualifications would be required to evaluate the validity of such a demonstration?

Response: A qualified professional engineer must meet and be registered by the Illinois Department of Financial and Professional Regulation.

c. Could you please identify the Agency staff who possess such education or qualifications and will review such demonstrations in permit applications for CCR surface impoundments?

Response: The Agency is accepting the certification by the qualified professional engineer and will assure the certification has been submitted and stamped.
The Agency will have an appropriate number of personnel to review demonstrations as required to administer Part 845. The Agency intends to consult with IDNR as needed. (Agency Response)

d. Could you please list any posted open positions at the Agency which seek a candidate with the education or qualifications noted in your response to Question 8(b), who will be tasked with reviewing such demonstrations in permit applications for CCR surface impoundments?

Response: Please see Response 8(c).

9. If a CCR surface impoundment is located in a fault area and does not show that "no structural damage to a CCR surface impoundment will result with a distance less than 200 feet," is it the Agency's position that closure in place is permissible?

Response: The Agency is not taking a specific position. Closure details will be determined with site specific information.
The CCR surface impoundment that cannot meet location restrictions would need to follow the closure procedures proposed in 35 IAC 845 Subpart G, which requires a closure analysis to determine the safest method of closure, whether that be by removal or closure in place.

10.You define a seismic impact zone as "an area having a 2% or greater probability that the maximum expected horizontal acceleration, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10 g in 50 years."

a. Has the Agency evaluated whether there are "seismic impact zones," as you define it, in Illinois?

Response: The Agency has not conducted such an evaluation. This will be determined with site specific information.

b. If so, where are they located?

11.You state that the purpose of the seismic impact location restriction "is to ensure that the structural stability of a CCR surface impoundment will not be compromised due to seismic activity."

a. In your opinion, is it important that the structural stability of a CCR surface impoundment not be compromised, whether due to seismic activity or other forces?

Response: Yes

b. If so, why?

Response: Structural stability needs to be maintained during the active, closed, and post-closure care period to protect human health and the environment.

12.You define the "maximum horizontal acceleration in lithified earth material" as "the maximum expected horizontal acceleration at the ground surface as depicted on a seismic hazard map…."

a. Which "seismic hazard map" is used for purposes of this definition?

Response: The language of Subpart C is taken directly from the 40 CFR 257 regulations in an effort to qualify as an approved state program under the US EPA, therefore any map acceptable for Part 257 would be acceptable for Part 845. (Agency Response)

b. Is it a map the owner/operator or its consultants creates?

Response: While an owner or operator or their consultant could theoretically create a seismic hazard map, the Agency would not be obligated to accept it. Because the USGS, accepted experts in the field of seismic hazard mapping, have on-line mapping tools available, the Agency would question deviations from such a publicly available map. (Agency Response)

c. Or is there a particular seismic hazard map that should be used in making this determination?

Response: Please see Responses 12(a) and (b).

13.You state that an owner or operator may "conduct a site-specific seismic risk assessment to determine the maximum horizontal acceleration."

a. What does such a risk assessment entail?

Response: An Owner/Operator would need to ensure that someone with the appropriate geotechnical expertise would provide this information.

There are online resources produced by the USGS that can offer this information. It is likely that an owner/operator's consultant would use published, USGS information.

b. What education or other qualifications would be required to evaluate the validity of such risk assessment?

Response: A qualified professional engineer must meet and be registered by the Illinois Department of Financial and Professional Regulation.

c. Could you please identify the Agency staff who possess such education or qualifications and will review such risk assessments in permit applications for CCR surface impoundments?

Response: The Agency is accepting the certification by the qualified professional engineer and will assure the certification has been submitted and stamped.
The Agency will have an appropriate number of personnel to review demonstrations as required to administer Part 845. The Agency intends to consult with IDNR as needed.

d. Could you please list any posted open positions at the Agency which seek a candidate with the education or qualifications noted in your response to Question 13(b), who will be tasked with reviewing such risk assessments in permit applications for CCR surface impoundments?

Response: Please see Response 13(c).

14. In your testimony, you state that an owner or operator may locate a CCR surface impoundment in a seismic impact zone only if the impoundment is "designed and engineered to withstand the calculated maximum horizontal acceleration."

a. How can such a demonstration be made?

Response: The language of Subpart C is taken directly from the 40 CFR 257 regulations in an effort to qualify as an approved state program under the US EPA. An owner operator will need to make the determination based on site specific information and have a professional engineer certify that all of the requirements in Subpart C are met.

b. What education or other qualifications would be required to evaluate the validity of such a demonstration?

Response: A qualified professional engineer must meet and be registered by the Illinois Department of Financial and Professional Regulation.

c. Could you please identify the Agency staff who possess such education or qualifications and will review such demonstrations in permit applications for CCR surface impoundments?

Response: The Agency is accepting the certification by the qualified professional engineer and will assure the certification has been submitted and stamped.
The Agency will have an appropriate number of personnel to review demonstrations as required to administer Part 845. The Agency intends to consult with IDNR as needed.

d. Could you please list any posted open positions at the Agency which seek a candidate with the education or qualifications noted in your response to Question 14(b), who will be tasked with reviewing such demonstrations in permit applications for CCR surface impoundments?

Response: Please see Response 14(c).

15.If a CCR surface impoundment is not designed and engineered to withstand the calculated maximum horizontal acceleration, does the Agency take the position that closure in place is permissible?

Response: The Agency is not taking a specific position. Closure details will be determined with site specific information.

The CCR surface impoundment that cannot meet location restrictions would need to follow the closure procedures proposed in 35 IAC 845 Subpart G, which requires a closure analysis to determine the safest method of closure, whether that be by removal or closure in place.

16.You define an unstable area as "a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity…of the CCR surface impoundment…."

a. Could you identify examples of "forces" capable of impairing the integrity of the impoundment?

Response: Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and karst terrains.

b. Is erosion one such force?

Response: Yes

17. You state that unstable areas can include "areas susceptible to mass movements." Could you please elaborate on what the Agency understands as an "area susceptible to mass movements," and provide examples?

Response: Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and karst terrains. Mass movements are earth materials moving downslope due to gravity. The language of Subpart C is taken directly from the 40 CFR 257 regulations in an effort to qualify as an approved state program under the US EPA.

18. Has the Agency evaluated whether there are unstable areas, as you define them, in Illinois?

Response: The IEPA does not yet have information on each CCR surface impoundment regarding location restrictions. Each facility will need to make a demonstration as to whether they meet the locations restrictions under Subpart C in the permit application after the regulations are promulgated. At this time, the facilities have not submitted this information to the Hydrogeology and Compliance Unit. If there are other areas to be considered unstable, they will be identified with site specific information.

a. If so, where are they located?

Response: This information will be based on site specific information.

19. You state that "if the CCR surface impoundment is in an unstable area, then the structure must be designed and engineered to ensure the integrity of structural components."

a. How can such a demonstration be made?

Response: The language of Subpart C is taken directly from the 40 CFR 257 regulations in an effort to qualify as an approved state-program under the US EPA. An owner operator will need to make the determination based on site specific information and have a professional engineer certify that all of the requirements in Subpart C are met.

b. Can it always be made?

Response: A professional engineer who meets the requirements and is registered by the Illinois Department of Financial and Professional Regulation should be able to make the determination of the integrity of structural components.

c. Are there circumstances – say, underlying mine voids or other circumstances – in which the impoundment cannot be designed and engineered to ensure its structural integrity?

Response: Potentially, it is possible that an impoundment cannot meet the locations restrictions even with engineering design.

d. What education or other qualifications would be required to evaluate the validity of such a demonstration?

Response: A qualified professional engineer must meet and be registered by the Illinois Department of Financial and Professional Regulation.

e. Could you please identify the Agency staff who possess such education or qualifications and will review such demonstrations in permit applications for CCR surface impoundments?

Response: The Agency is accepting the certification by the qualified professional engineer and will assure the certification has been submitted and stamped.
The Agency will have an appropriate number of personnel to review demonstrations as required to administer Part 845. The Agency intends to consult with IDNR as needed. (Agency Response)

f. Could you please list any posted open positions at the Agency which seek a candidate tasked with reviewing such demonstrations in permit applications for CCR surface impoundments?

Response: See answer 19(e).

20. If a CCR surface impoundment is not designed and engineered to ensure the integrity of structural components, is it the Agency's position that closure in place is permissible?

Response: The Agency is not taking a specific position. Closure details will be determined with site specific information.
The CCR surface impoundment that cannot meet location restrictions would need to follow the closure procedures proposed in 35 IAC 845 Subpart G, which requires a closure analysis to determine the safest method of closure, whether that be by removal or closure in place.

Manifests:

21. You state that "[f]ly ash is specifically mentioned in this subsection." Why is fly ash specifically mentioned?

Response: Fly ash is mentioned in the manifest requirements because the regulation that provides the requirements (35 IAC 809) has an exemption to haulers that only transport fly ash. The inclusion of fly ash in the proposed 35 IAC 845 regulations overrides this exemption in 35 IAC 809.

22. Are manifests also required for transport of bottom ash, slag, or other CCR?

Response: Yes.

a. If not, why not?

Recordkeeping:

23. Regarding 35 Ill. Adm. Code 845.800(d):

a. Why is there not a requirement to put in the operating record any demonstration of a new owner or operator's ability to comply with all applicable financial requirements of proposed Subpart I, pursuant to proposed 35 Ill. Adm. Code 845.280(a)?

Response: The Agency does not believe the operating record is the appropriate location for that documentation. If the Board believes a revision is warranted the Agency suggests a new Section 845.230(a):

17) A certification that the owner or operator meets the financial assurance requirements of Subpart I, of this Part.

And a new Section 845.230(d)(2):

M) A certification that the owner or operator meets the financial assurance requirements of Subpart I, of this Part. (Agency Response)

b. Why is there not a requirement to put in the operating record any demonstration or agreement containing the specific date of transferring permit responsibility from a current permittee to a new permittee?

Response: Section 845.280(a) requires Agency approval before a permit can be transferred and will hence become part of the permit record.

c. Why is there not a requirement to put in the operating record any demonstration that a surface impoundment has satisfied an alternative closure requirement in accordance with proposed 35 Ill. Adm. Code 845.700(d)?

Response: Closure will be documented by a construction permit, which the Agency believes is more appropriate than the operating record.

d. Why is there not a requirement to put in the operating record proof of financial assurance as required by proposed 35 Ill. Adm. Code 845.900?

Response: Please see Response 23(a).

24. Regarding proposed 35 Ill. Adm. Code 845.810(f), why was a 14-day time period selected?

Response: The 14-day time period in Section 845.810(f) is consistent with Section 845.240(e).

LYNN DUNAWAY

Statement of Reasons

1. **On page 3 of the Statement of Reasons, the Agency states that some power generating facilities remove ash from surface impoundments and dispose it off-site. Could you please identify the power generating facilities in Illinois that remove CCR from impoundments for disposal elsewhere?**

   Response: The Agency does not have an exhaustive list, but is aware that CWLP sends CCR to a mine for disposal and that the Joliet 29 and Joliet 9 power stations have sent CCR for disposal in the Lincoln Stone Quarry.

2. **On page 3 of the Statement of Reasons, the Agency states that some CCR impoundments are dammed. Could you please provide a list of all such CCR impoundments, along with the acreage of the enclosure and the height of the dike for each impoundment?**

   Response: The Agency is aware that some surface impoundments have embankments that are considered dams, but does not have a list of the dam height or CCR surface impoundment acreage.

3. **On page 3 of the Statement of Reasons, the Agency states that it has identified 73 CCR surface impoundments at power generating facilities. Could you please identify:**

   a. **Which impoundments are already closed?**

      i. **Which of those closed impoundments are "legacy" impoundments – i.e., at plants that closed before the Oct. 2015 effective date of the federal rule?**

      ii. **When was closure completed at those plants?**

   b. **Which of the closed impoundments have approved closure plans but have not completed closure?**

   Response: Please see Response to Board Question 1 Table.

4. **On page 3 of the Statement of Reasons, the Agency states that "Some of [the] surface impoundments are lined with impermeable materials, while others are not." Could you please identify which CCR impoundments are lined, and with what type of lining?**

Response: To the best of the Agency's knowledge and belief, the following CCR surface impoundments have some type of liner.

1. Hutsonville Pond A, synthetic
2. Hutsonville Pond B, synthetic- removed with CCR
3. Hutsonville Pond C, synthetic- removed with CCR
4. Coffeen GMF Pond, synthetic
5. Coffeen GMF Recycle Pond, synthetic
6. Duck Creek GMF Pond, composite
7. Duck Creek GMF Recycle Pond, composite
8. Duck Creek Bottom Ash Pond, concrete over composite
9. Havana Pond 1, clay
10. Havana Pond 2, synthetic
11. Havana Pond 3, synthetic
12. Hennepin New East Pond, composite
13. Hennepin New East Secondary Pond, clay
14. Vermilion New East Pond, clay
15. Wood River West Pond 2E, composite
16. Wood River New East Pond, composite
17. Will County Pond 2, synthetic
18. Will County Pond 3, synthetic
19. Powerton Ash Basin, synthetic
20. Powerton Secondary Ash Basin, synthetic
21. Powerton By-Pass Basin, synthetic
22. Powerton Metal Cleaning Basin, synthetic
23. Joliet 29 Pond 1, synthetic
24. Joliet 29 Pond 2, synthetic
25. Joliet 29 Pond 3, synthetic

5. On page 3 of the Statement of Reasons, the Agency states that it "believes there are up to 6 CCR surface impoundments with liners that comply with the federal liner standards in 40 CFR 257." Could you please identify all such CCR impoundments?

Response: To the best of the Agency's knowledge and belief, the following CCR surface impoundments have a Part 257 compliant liner: Duck Creek GMF Pond, Duck Creek GMF Recycle Pond, Duck Creek Bottom Ash Pond, Hennepin New East Pond, Wood River West Pond 2E and Wood River New East Pond.

6. On pages 3 and 4 of the Statement of Reasons, the Agency states that "When the CCR surface impoundments are not lined with impermeable material, these contaminants may leach into the groundwater, affecting the potential use of the groundwater."

a. Could you please identify all CCR impoundments from which contaminants currently are, or are suspected by the Agency to be, leaching into groundwater?

Response: Please see Response to Board Question 1 Table.

b. Is the Agency aware of any lined CCR impoundments from which contaminants are, or are suspected by the Agency to be, leaching into groundwater?

Response: The Agency is not aware of any such CCR surface impoundments, but the Agency has not evaluated the circumstances described.

c. Is the Agency aware of any CCR impoundments at which a liner was installed after the impoundment had commenced operation?

Response: The Agency is aware that some CCR surface impoundments have been lined after they began operation.

i. If so, what was done with the coal ash already in the impoundment prior to the installation of the liner?

Response: The Agency is not aware of the disposition of CCR removed from CCR surface impoundments that were lined after operation began.

ii. Did the Agency require operators to evaluate the potential for contamination from those impoundments prior to lining them?

Response: No.

d. Could you please identify all CCR impoundments that are located in floodplains? Please provide the basis for your answer.

Response: Please see the following publicly available website: *Use Chrome for web browser.
https://www2.illinois.gov/epa/topics/water-quality/watershed-management/ccr-surface-impoundments/Pages/default.aspx

e. Is the Agency aware of any CCR impoundments that have caused contamination of groundwater that is connected hydrologically to surface waters?

Response: No.

f. Is the Agency aware of any CCR impoundments that are at times directly connected to surface waters, such as during flood events?

Response: Without clarification of the context of "directly connected to surface

water" the Agency is unable to answer the question.

7. **On page 10 of the Statement of Reasons, the Agency states "The proposed rules contain groundwater protection standards that apply in addition to the groundwater quality standards in Part 620." However, the Agency deleted 845.600(c) of the draft rule which stated "In addition to the groundwater protection standards in subsections (a) and (b), the groundwater quality standards in 35 Ill. Adm. Code 620 apply to CCR surface impoundments. When the groundwater protection standards in subsections (a) and (b) and the groundwater quality standards in 35 Ill. Adm. Code 620 are inconsistent, the more stringent standard shall apply." Why did the Agency delete this language?**

   Response: The Agency believes the change clarifies the applicability of Part 845. Please see Response to Board Question 48(a).

Inactive Closed CCR Surface Impoundments:

8. **Could you please identify the CCR surface impoundments in Illinois that are inactive closed CCR surface impoundments, as defined in the proposed rules in proposed Section 845.120?**

   Response: Please see Response to Board Question 1 Table.

9. **On page 1 of your testimony, you state that, under the Agency's proposal, inactive closed CCR surface impoundments must "initiate or continue corrective action for releases that occurred prior to closure."**

   a. **Could you please identify the inactive closed CCR surface impoundments that are already performing corrective action for releases that occurred prior to closure, and identify the constituents released from each such impoundment?**

   Response: 1.Venice Station North and South Ponds CCR surface impoundments, in a March 2010 document, Ameren identified the following constituents with concentrations in excess of the Part 620, Class I standards: Arsenic, Boron, Iron, Manganese and TDS

   2. Hutsonville Pond D CCR surface impoundment, in a May 2009 filing to the Board, Ameren identified the following constituents with concentrations in excess of the Part 620, Class I standards: Boron, Manganese, pH, Sulfate and TDS

   3. Prairie Power North Pond CCR surface impoundment, the Agency alleged exceedances of the Part 620 standards for the following constituents in a 2012 violation notice: Boron, Chloride, Iron, Manganese, Sulfate and TDS.

      i. **Under the Agency's proposal, would the inactive closed CCR surface impoundment need to obtain a permit to continue that corrective**

action? If so, please identify the relevant provision(s).

Response: Section 845.230(d)(4) establishes the requirements for an operating permit relative to an inactive closed CCR surface impoundment.

ii. For each such impoundment, was the ongoing corrective action approved by the Agency?

Response: Yes.

iii. For each such impoundment, was the proposal for the ongoing corrective action made available for public review and comment before it was initiated?

Response: Venice Station North and South Ponds CCR surface impoundments: The closure and post-closure care plan were posted on the Agency's website. No public comments were received regarding the closure or post-closure care plan. Additionally, once received by the Agency the information is available by FOIA.

Hutsonville Pond D CCR surface impoundment: Closure and post-closure care requirements under 35 Ill. Adm. Code 840, PCB Case No. # R2009-21. There were two public commenters other than Ameren and the Agency. This information was not reposted on the Agency's website as it was available on the Board's website. Additionally, once received by the Agency the information is available by FOIA.

Prairie Power North Pond CCR surface impoundment: The closure and post-closure care plans were not publicly posted. There is no regulatory requirement that there be any public posting, however, once received by the Agency the information is available by FOIA.

b. Could you please identify the inactive closed CCR surface impoundments that have yet to initiate corrective action for releases that occurred prior to closure, and identify the constituents released from each such impoundment?

Response: No inactive closed CCR surface impoundments have yet to initiate corrective action for releases prior to closure. The identified contaminants are listed in Response 9(a).

i. Under the Agency's proposal, would the inactive closed CCR surface impoundment need to obtain a permit to initiate that corrective action? If so, please identify the relevant provision(s).

Response: Please see Response 9(b).

ii. For each such impoundment, has the corrective action been approved by the Agency?

Response: Please see Response 9(b).

iii. For each such impoundment, has the corrective action been made available for public review and comment?

Response: Please see the response to Question # 9(b).

c. How will "releases that occurred prior to closure" be distinguished from new releases?

Response: Each of the four inactive closed CCR surface impoundments had groundwater modeling performed and have groundwater monitoring systems and have statistically calculated existing concentrations. An increase over the existing concentration which does not agree with the predictive modeling may represent a new release.

d. Is the Agency aware of inactive closed CCR surface impoundments from which releases continued, or continue, to occur *after* closure was completed? If so, please identify those inactive closed CCR surface impoundments and the constituents that continue, or continued, to be released from each such impoundment.

Response: The Agency is not aware of leaching at a concentration above the applicable GWPS as measured at the points of compliance following closure.

10. On pages 1-2 of your testimony, you indicate that there is a "post-closure care period" for inactive closed CCR surface impoundments. However, the proposed regulations at section 845.170 propose to exclude inactive closed CCR surface impoundments from the post-closure care period set out in proposed section 845.780(c).

a. How long is the post-closure care period for inactive closed CCR surface impoundments?

Response: Hutsonville Pond D, post-closure care lasts until the compliance standards of 35 Ill. Adm. Code 840.116 have been achieved.
Venice North and South Ponds, post-closure care lasts a minimum of 15 years after closure but also has stipulations against statistical increases and requires protection of human health and the environment.
Prairie Power North Pond, post-closure care lasts until the compliance standards of 35 Ill. Adm Code 620 have been achieved.

b. When do the requirements for post-closure care end?

Response: For all four of the inactive closed CCR surface impoundments, post-closure care ends if the Agency approves the post-closure care report

c. Do the requirements for post-closure care continue if corrective action is found to be needed?

Response: Yes. The statistically significant increases in constituent concentrations that would trigger the need for corrective action are part of post-closure care.

11. What is the mechanism for the public to meaningfully participate in permitting decisions concerning post-closure and corrective action for inactive closed CCR surface impoundments? Please point to the relevant provision(s) in the proposed rules.

Response: There is none for these four CCR surface impoundments, which completed closure and were in post-closure care before Part 257 was adopted.

Groundwater Protection Standards:

12. On page 2 of your testimony, you state that the federal GWPS do not "have numerical values for all of the parameters commonly associated with CCR." Please identify those parameters and provide the basis for your statement.

Response: Boron, Calcium, Chloride, pH and Sulfate do not have MCLs nor has the USEPA adopted risk based GWPS for these constituents in amendments to Part 257, which form the basis for numerical GWPS in Part 257.

13. On page 5 of your testimony, you state that "when the up gradient background concentration of any constituent exceeds the numerical GWPS…an SSI over background is the only reasonable approach for compliance determinations."

a. Are there circumstances in which groundwater samples from "up gradient background" monitoring wells may contain CCR contamination? Please describe such circumstances.

Response: The agency needs additional clarification prior to answering this question.

b. Are there circumstances in which groundwater samples from up gradient monitoring wells may contain CCR contamination? Please describe such circumstances.

Response: The agency needs additional clarification prior to answering this question.

c. Is the Agency aware of any CCR surface impoundments in Illinois where groundwater samples from up gradient monitoring wells, or up gradient "background" monitoring wells, have revealed CCR contamination? If so, please identify those CCR surface impoundments.

Response: The agency needs additional clarification prior to answering this

question.

d. If groundwater samples taken from up gradient monitoring wells reflect CCR contamination, would the Agency consider that to be "background"?

Response: The agency needs additional clarification prior to answering this question.

i. If so, is it the Agency's position that an SSI over the concentrations in such wells is "reasonable approach for compliance determination"?

Response: The agency needs additional clarification prior to answering this question.

ii. If not, what is the appropriate approach and is it included in the proposed rules?

Response: The agency needs additional clarification prior to answering this question.

14. On page 6 of your testimony, you specify when the requirements of proposed Part 845 would end under different closure methods, and state that "during those time frames, any constituent with a Part 620 GWQS that is not subject to proposed Part 845, Subpart F still applies at CCR surface impoundments."

a. Could you please clarify which time frames you mean when you state, "during those time frames"?

Response: For CCR surface impoundments closed with a final cover system, as proposed, the time frame is the longer of the 30-year post closure care period, or the end of corrective action. For closure by removal, as proposed, the time frame is the time required to complete CCR removal plus the end of corrective action.

b. Could you please identify the provision(s) in the proposed rules that specify that "a constituent with a Part 620 GWQS that is not subject to proposed Part 845, Subpart F still applies at CCR surface impoundments"?

Response: Part 620 already applies statewide; therefore, Part 845 doesn't need to stipulate that Part 620 does apply. Also see Section 845.110.

15. On page 7 of your testimony, you state that "post-closure care for CCR surface impoundments closing by removal may cease being subject to proposed Part 845 in a relatively short time frame, while the completion of post-closure care for CCR surface impoundments closing with a final cover is many years in the future."

a. Could you explain why you state that CCR surface impoundments closing by removal "may cease being subject to proposed Part 845 in a relatively short time frame"?

Response: This is a comparison between the minimum of three years groundwater monitoring required following closure by removal, which may go longer if corrective action is needed due to GWPS exceedances, and the minimum 30-year post closure care period required for CCR surface impoundments closing with a final cover system, even if there are no exceedances of the GWPSs.

b. Could you explain why you say that completion of post-closure care for CCR surface impoundments closing with a final cover is "many years in the future"?

Response: Please see Response to 15(a).

c. In your opinion, will post-closure care likely be required for more than thirty years at CCR surface impoundments? Please provide the basis for your answers.

Response: Beyond 30 years, the length of post-closure care would depend on site specific conditions.

16. On page 7 of your testimony, you state that "[o]nce the applicability of proposed Part 845 ends (at the end of post-closure care), the alternative standard pursuant to Part 620.450(a)(4), is once again available for any constituent with a GWQS."

a. If the GWPS have been achieved, can you explain why the owner/operator of the CCR surface impoundment should be permitted to rely on alternative groundwater standards for those constituents after that standard was achieved?

Response: Please see Response to Board Question 48(a).

b. Why require achievement of those standards, only to allow them to be loosened once they've been achieved?

Response: The Agency objects to the characterization that Part 620 would loosen the applicable standards.

General Requirements:

17. On page 7 of your testimony, you state that proposed Section 845.610, concerning groundwater monitoring programs and "the establishment of background…does not preclude the use of existing information."

a. What existing information will be acceptable?

Response: Any data that the Agency during its technical review, determines meets the requirements of Part 845.

b. If a groundwater monitoring program already in use does not meet the requirements of Subpart F, given the various differences in the monitoring programs, will the Agency require revisions to that program?

Response: The Agency can require the revision of any monitoring plan subject to Subpart F if it is deemed to be necessary.

18. On page 7 of your testimony, you state that "owners or operators of CCR surface impoundments, in the event of a release, must control the source of the release immediately and begin appropriate corrective action as required by this Subpart."

a. What does the Agency understand as a "release" in this context?

Response: Please see the response to Board Question 49(b).

b. Is it different from the leaking of CCR constituents into groundwater as determined by proposed Subpart F?

i. If so, how?

Response: Please see the response to Board Question 49(b).

c. Is that interpretation set out in the proposed regulations (or elsewhere in statute or regulations) and if so, could you please identify the relevant provision(s)?

Response: Please see the response to Board Question 49(b).

Hydrogeologic Site Characterization:

19. On page 8 of your testimony, you state that the hydrogeologic site characterization "will pull together information about surficial and subsurface geological characteristics…"

a. Do you agree that information about the vertical distance between the bottom of the CCR and the uppermost zone of saturation is necessary to identify contaminant migration pathways?

Response: Section 845.620(b)(11) requires the identification of potential migration pathways. Depending on site specific conditions, the distance between the bottom of the CCR and the uppermost saturated zone, may be a factor in identification of potential migration pathways.

b. If you do not agree, why not? Please provide the basis for your opinion.

20. Do the proposed regulations require that leakage of water from unlined ponds be evaluated with respect to its influence on groundwater flow directions and potential impacts on up gradient water quality? If so, please identify the relevant provision(s).

Response: As stated in a) above, a map of the potentiometric surface is required. If the map shows a radial flow out of the impoundment, that would indicate leakage from the impoundment. In Section 845.630 a) 1), it states that the "owner or operator of a CCR surface impoundment must install a groundwater monitoring system that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples that: Accurately represent the quality of background groundwater that has not been affected by leakage from a landfill containing CCR or CCR surface impoundment.

21. Would you agree that the elevation of water in unlined impoundments is necessary to adequately evaluate groundwater flow direction?

Response: Depending on site specific conditions, the elevation of water in an unlined CCR surface impoundment could be necessary to determine groundwater flow direction.

a. Do the proposed regulations require elevation of the water in unlined impoundments to be measured, and if so, how frequently? Please identify the relevant provision(s).

Response: Section 845.620(b)(18) provides a general requirement for that type of information. In consideration of this concern, if the Board believes a revision is needed, the Agency suggests the following:

Section 845.620(b)…
(18) measurement of water elevation within the CCR surface impoundment, each time the groundwater elevations are measured pursuant to Section 845.650(b)(2); and
~~18)~~ 19) Any other information required by the Agency.

Groundwater Monitoring System:

22. On page 9 of your testimony, you state that the "groundwater monitoring system must be able to produce groundwater samples that represent groundwater which has not been impacted by a landfill or surface impoundment containing CCR."

a. What does the Agency understand to be a "landfill containing CCR"?

Response: The Agency believes a landfill containing CCR has the same meaning as a CCR landfill in Part 257. (Agency Response)

i. Is that definition contained in any statutory or regulatory provisions or the proposed regulations? If so, please identify the provision(s).

Response: The Agency has not defined landfill containing CCR in Part 845. (Agency Response)

b. Why must the groundwater monitoring system be able to "produce groundwater samples that represent groundwater which has not been impacted by a landfill or surface impoundment containing CCR"?

Response: Part 845 is for the regulation of CCR surface impoundments. Therefore, it is necessary to be able to determine compliance with the GWPS at the down gradient waste boundary of each CCR surface impoundment. If there is another CCR surface impoundment or landfill containing CCR, which could be releasing similar contaminants, up gradient of the first CCR surface impoundment, monitoring wells which are not impacted by the most up gradient CCR surface impoundment are necessary to determine if, or to what extent, either the first or second CCR surface impoundment are impacting groundwater, or whether these hypothetical exceedances of the GWPS have a different source. Such up gradient wells would not substitute for wells located between the first and the second CCR surface impoundment, assuming there is space between the up gradient waste boundary of the first CCR surface impoundment and down gradient waste boundary of the second CCR surface impoundment.

23. On page 9 of your testimony, you state "Separate groundwater systems are not required for each CCR surface impoundment if a release from any one of the CCR surface impoundments can be detected by the same groundwater monitoring system."

a. Does the groundwater monitoring system have to be able to identify which impoundment is the source of the contamination?

Response: Ideally, yes. However, some CCR surface impoundments have no physical space between them in the direction of groundwater flow. In such instances, groundwater monitoring would not be able to distinguish which, or if all of the monitored CCR surface impoundments are leaching regulated constituents.

ii. If so, why?

iii. If not, why not?

Response: Please see Response 23(a).

Groundwater Sampling and Analysis Requirements:

24. On page 10 of your testimony, you note that "the quality of groundwater is known to have natural variations" and highlight the need for an "understanding of the groundwater quality that is flowing onto a facility and beneath the CCR surface impoundment(s)."

a. What do you mean by "facility" in this statement?

Response: In the context of that statement, "facility" has the same meaning as the definition provided in Section 845.120.

b. Is background groundwater quality, which you recognize as "vital to any groundwater sampling and analysis plan," intended to establish the quality of groundwater based on those "natural variations"?

Response: Background groundwater quality may be established to determine the difference between natural variations in groundwater quality and groundwater potentially impacted by a CCR surface impoundment, or background groundwater quality may be used to distinguish between groundwater potentially impacted by a CCR surface impoundment and another CCR surface impoundment that may be impacting groundwater quality.

25. What are the implications of a finding of a statistically significant increase (SSI) over background in the proposed regulations?

Response: The implication is the potential need to do corrective action.

a. If an SSI is found, what would happen next under the proposed regulations?

Response: An immediate resample would be required.

b. If an SSI over background is not found in a down gradient monitoring well, but an exceedance of the GWPS for that same constituent is detected in that well, does the non-SSI affect the need to proceed to assessing corrective measures to address that exceedance?

Response: The scenario described in question 25(b) doesn't appear to be possible. The GWPS at the down gradient waste boundary for a CCR surface impoundment is either the numeric values listed in Section 845.600(a)(1), or the statistically derived background of that CCR surface impoundment.

i. If so, how?

Response: Please see Response 25(b).

Groundwater Monitoring Program:

26. On page 12 of your testimony, you state that owners and operators of CCR surface impoundments may "submit a demonstration that a source other than the monitored CCR surface impoundment(s) is the source of the releases and that the monitored CCR surface impoundment(s) didn't contribute to the detected contamination…"

a. Is the Agency aware of other sources of CCR contaminants near CCR surface impoundments in Illinois? If so,

i. Which impoundments?

ii. Which contaminants?

iii. What are the other source(s)?

iv. Have the other sources of that contamination been removed?

v. Has the contamination those other sources caused or contributed to been cleaned up?

Response: The Agency does not have a list of historical industrial activities, their locations and the materials they may have used, which could contaminate groundwater. That sort of information could be part of the alternative source demonstration and would be site specific.

b. What records does the Agency have of industrial sites or disposal sites that pre- dated environmental regulation in Illinois?

Response: The Agency objects as to the scope of this question.

c. Do those records ever omit chemicals or materials used at those sites? If so, please provide an example and explain how the Agency learned of that example.

Response: The Agency objects as to the scope of this question.

d. How has the Agency become aware of industrial sites or disposal sites that pre- dated environmental regulation?

Response: The Agency objects as to the scope of this question.

e. Have there been instances where non-Agency staff, including but not limited to former workers at such old industrial or disposal sites, alerted the Agency about releases or possible releases at such sites? If so, please identify those

instances.

Response: The Agency objects as to the scope of this question.

f. Have there been instances where non-Agency staff, including but not limited to former workers at, or residents near, regulated industrial or disposal sites, alerted the Agency about releases or possible releases at such regulated sites? If so, please identify those instances.

Response: The Agency objects as to the scope of this question.

g. Is it the Agency's position that there are certain contaminants or combinations of contaminants that serve as a "chemical signature" of CCR, that, if found, make it unlikely that anything other than CCR is the source of those contaminations? If so, please identify those contaminants.

Response: No.

27. On pages 12-13 of your testimony, you state that "if an alternative source demonstration is not provided, the owner or operator must characterize the nature and extent of the release…."
Response: Yes.

28. Under the Agency's proposal, must the owner or operator only "provide" an Alternate Source Demonstration in order for the owner or operator to avoid characterizing the nature and extent of the release?

Response: The Agency must concur with the alternative source demonstration to avoid initiating the assessment of corrective measures.

a. What is the timing of the submission of an Alternate Source Demonstration relative to the characterization of the nature and extent of the release?

Response: An alternative source demonstration must be submitted within 60 days of the detection of an exceedance of a GWPS.

b. What is the timing of the submission of an Alternate Source Demonstration relative to the assessment of corrective measures?

Response: An alternative source demonstration must be submitted within 60 days and an assessment of corrective measures must be initiated within 90 days of the detection of an exceedance of a GWPS.

Assessment of Corrective Measures:

29. On page 14 of your testimony, you state that the owner or operator "must discuss the results of the assessment of corrective measures…at a public meeting with interested and affected parties."

a. Under the Agency's proposal, must the assessment of corrective measures be made available to the public prior to the public meeting?

Response: Section 845.240(e) and (f) require that the owner or operator post on their publicly available website at least 14 days prior to the public meeting all documentation relied upon in making the tentative construction permit application and at the public meeting must out-line the decision making process for the construction permit application including the corrective actions alternatives, respectively.

i. If so, how far in advance? Please identify the relevant provision(s).

Response: Please see Response 29(a).

ii. Under the Agency's proposal, must the assessment of corrective measures – not just the "results" thereof – be made available at the public meeting? Please identify the relevant provision(s).

Response: Please see Response 29(a).

b. Must the assessment of corrective measures be included in the corrective action construction permit application?

i. If not, why not?

Response: Yes, Section 845.220(c), requires the corrective action plan as specified in Section 845.670.

30. On page 14 of your testimony, you state that "if the owner or operator of a CCR surface impoundment is completing closure and corrective action together, the requirements of this subsection and 845.710 may be combined."

a. Could you please explain what you mean by "combined"?

Response: The documents and associated assessments required for closure and for corrective action can be submitted in a single construction permit application.

b. If an owner or operator is seeking a permit for both corrective action and closure, must all requirements of both Proposed Sections 845.660 and 845.710 (and all other applicable requirements for closure and corrective action) be met?

Response: Yes.

Corrective Action Plan:

31. On page 15 of your testimony, you state that "while a remedy is being selected, the owner or operator must submit a semiannual report of the progress being made." What "progress" is that referring to?

a. Progress in doing what?

Response: The progress of evaluating and selecting a remedy.

32. On page 15 of your testimony, you state that the standards for the protection of the environment and public health that you state the corrective action plan "must...meet" include "controls of releases to the maximum extent feasible to eliminate future releases."

a. What does the Agency mean by "feasible"?

Response: Since feasible is not otherwise defined in Parts 257 or 845, the Agency would attach the common understanding of the word's definition. Common synonyms include workable, achievable, reasonable or attainable.

b. What information will be considered in determining what is "feasible"?

Response: All of the factors required for consideration by the owners and operators in Section 845.670.

33. Does the Agency plan to consider any information concerning costs of different corrective action alternatives in reviewing corrective action construction permit applications?

Response: Cost is not a factor listed for consideration for any activity required by Part 845.

a. If so, what is the basis for doing so?

b. If not, why do the proposed regulations not make clear that cost will not be considered in evaluating corrective action permit applications?

Response: Part 845 is written to specify the requirements that the Agency and owners and operators of CCR surface impoundments at utilities and independent power producers must follow to provide protection to human health and the environment.

34. On page 15 of your testimony, you state that "the alternatives analysis must also assess any short term risks to the local community and the environment from the excavation, transportation and re-disposal of wastes . . . ."

a. Would you agree that different transport methods – for example, rail, barge, or truck – pose different risks to the local community? If not, please explain.

Response: The examples given pose some of the same and some different risks to local communities.

b. Would you agree that different transport methods – for example, rail, barge, or truck – have different pollution profiles from each other? If not, please explain.

Response: It is unclear what is meant by "pollution profiles".

c. Did Agency staff review the location of rail or barge in relationship to coal ash impoundments? If not, please explain.

Response: No. The access to different modes of transport for CCR will be addressed as part of the closure alternatives analysis in Section 845.740(c)(1)(B)(i).

d. Are Agency staff familiar with low-sulfur diesel trucks and/or the development of electric trucks?

Response**:** The Agency is aware that ultra-low sulfur diesel fuel is available and that electric semi-tractor trailers are being developed.

e. Why didn't the Agency include specifications for types of trucks that may be used for transport of CCR in the proposed regulations?

Response: The type of trucks or other means of transport used is most appropriately addressed by owners and operators as part of the closure alternatives analysis.

35. On page 15 of your testimony, you note that a factor considered in the alternatives analysis for corrective action is "the availability of treatment technologies, the degree of difficulty in constructing the technologies used and the reliability of that technology."

a. Are you familiar with treatment technologies for remediating contaminated groundwater? If so, please identify and briefly describe each such technology.

Response: A list of common water treatment techniques is filtration of particulate matter, aeration with filtration of particulates, which introduces air with subsequent filtration of oxide particles, ion exchange which substitutes cations in the water and reverse osmosis which passes water through semi-permeable membranes. Each of these techniques reduces contaminants in water, but creates a new waste stream that must be managed.

b. What do you mean by the "availability" of a treatment technology?

Response: Availability means whether it is feasible to implement the technology at the specific location.

c. What information will be considered in evaluating that "availability"?

Response: Factors considered would include how long it would take to acquire and assemble the treatment equipment, if there are personnel who can run the equipment, is there space for the equipment at the location, is the equipment compatible with the CCR surface impoundment and will operation of the equipment be acceptable to the local community.

i. Is the information required to be submitted in the permit application? If so, please identify the relevant provision(s).

Response: Please see Response 29(b).

d. What do you mean by the "degree of difficulty" in constructing the technologies?

Response: The physical limitations exist regarding construction of the equipment.

e. What information will be considered in evaluating that "degree of difficulty"?

Response: Factors such as the physical space required for the equipment, whether soils are suitable for the equipment and is the equipment compatible with the CCR surface impoundment.

i. Is the information required to be submitted in the permit application? If so, please identify the relevant provision(s).

Response: Please see Response 29(b).

f. What information will be considered in evaluating the "reliability" of a technology?

Response: Information such as how long the technology has been in use, how it has been used and what were the results of its use.

i. Is the information required to be submitted in the permit application? If so, please identify the relevant provision(s).

Response: Please see Response 29(b).

36. Could you please clarify what the Agency understands as "destabilizing activities" for purposes of the corrective action alternatives analysis?

Response: Destabilizing activities could include any natural events such as major earthquakes, or anthropogenic activities such as blasting or drainage modifications.

37. On page 16 of your testimony, you state that when "establishing the implementation and completion schedule for a corrective action plan, the owner or operator must consider .

. . the likelihood that a remedy will achieve the GWPS . . . .” However, achievement of the GWPS is a requirement for selecting a remedy and for approval of that remedy under proposed Section 845.670(d)(2). Given that requirement, why is “likelihood” that the remedy will achieve the GWPS a relevant factor for consideration?

Response: That statement was an error in the summarization of the requirements of a corrective action plan. The actual requirement is consideration of the “magnitude of residual risks in terms of the likelihood of future releases…”.

38. On page 16 of your testimony, you state that in establishing the corrective action implementation schedule, the owner or operator must consider “availability of treatment and disposal capacity . . . .” What do you mean by “availability” and what information will be considered in evaluating that availability?

Response: Availability means it will be feasible to use a treatment technology or disposal capacity. All of the factors required in a corrective action plan required by Section 845.670 would have to be considered.

39. How often will the Agency review progress of compliance with corrective action plans?

Response: The Agency intends to review corrective action progress at least annually.

40. How will they review such progress? On paper, or on site?

Response: There is a required annual report which the Agency will review. That review does not preclude site visits.

41. How many inspectors does the Agency have to do such inspections?

Response: Once the regulatory requirements have been established, the Agency will assess staffing needed for implementation.

42. Has the Agency had experience with instances in which cleanup did not go as planned or proposed and modifications had to be made? If so, please answer the following questions.

Response: Yes.

a. How did the Agency know of the need for such modifications?

Response: The need for modifications were typically identified by required reporting.

b. How long had the problems with the cleanup plan been present before they were identified?

Response: Though it may vary on a site-specific basis reporting is typically annually, therefore problems may be identified in less than one year.

c. How long had the problems with the cleanup plan been present before the cleanup plan was modified?

Response: Typically one year or less, since reporting is in generally on an annual basis.

d. Have requests by community members led the Agency to inspect/investigate and find that cleanup or closure wasn't going as planned?

Response**:** The Agency's Groundwater Section is not aware of any such requests.

e. Does the Agency require polluters to submit progress reports on cleanup or other actions? If so, please answer the following questions.

Response: Yes.

i. What are those instances?

Response: When corrective actions are required, the Agency requires regular reporting of progress and/or monitoring results.

ii. Has the Agency ever identified challenges or deficiencies with implementation of cleanup or other plans via such progress reports?

Response: Yes.

iii. Did the Progress Reports allow the Agency to address the problems more quickly than otherwise?

Response: The Agency would be forced to speculate about what may have happened without the reports, since the reports were required.

iv. How does the Agency plan to allow for public input into whether corrective action or closure is properly implemented?

Response**:** The documents required for corrective action and closure, including groundwater monitoring data and required reports, must be available on the owner or operators publicly available website.

v. Is that specified in the proposed rules? If so, please identify the relevant provision(s).

Response: Those requirements are in Sections 845.800 and 845.810.

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Hydrogeologic Site Characterization:

1. **You state that "[r]eview of direction of groundwater flow helps determine appropriate locations for up-gradient wells, down-gradient wells, and compliance wells for the unit(s)."**

    a. **Do the proposed regulations require determination of the elevation of water in unlined ponds as well as the groundwater elevation? If so, please identify the relevant provision(s).**

Response: The elevation of water in an unlined pond would be the same as groundwater elevation if the level is below the ground surface. In Section 845.620 (b)(16), it states "The hydrogeologic site characterization shall include but not be limited to the following: Hydraulic characteristics of the geologic layers identified as migration pathways and geologic layers that limit migration, including:

A) water table depth

and

E) map of the potentiometric surface.

These two items would provide the elevations of ground or surface water in unlined ponds, as they would be considered a migration pathway.

    b. **Do the proposed regulations require that leakage of water from unlined ponds be evaluated with respect to its influence on groundwater flow directions and potential impacts on "up-gradient" water quality? If so, please identify the relevant provisions.**

Response: As stated in a) above, a map of the potentiometric surface is required. If the map shows a radial flow out of the impoundment, that would indicate leakage from the impoundment. In Section 845.630 (a)(1), it states that the "owner or operator of a CCR surface impoundment must install a groundwater monitoring system that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples that: Accurately represent the quality of background groundwater that has not been affected by leakage from a landfill containing CCR or CCR surface impoundment.

    c. **Do you agree that knowing the elevation of water in unlined impoundments could be necessary to adequately evaluate groundwater flow direction?**

Response: It will be necessary, yes.

2. **Does the hydrogeologic site assessment require determination of the vertical distance between the bottom of the CCR and the uppermost zone of saturation?**

   Response: Yes. As stated above, water table elevations and aquifer potentiometric surface maps are required as part of the hydrogeologic characterization. These are potential migration pathways and the information would be required.

   a. **Would you agree that knowing that distance is necessary to identify contamination migration pathways? If not, please explain.**

Response: Please see answer above.

3. **You state that, for existing CCR surface impoundments, "[a]ny discrepancies noted between the site characterization data and proper designs of the monitoring system and monitoring plans will be noted and missing data will be requested and addressed."**

   a. **Could you please explain what you mean by "addressed"?**

   Response: If data is noted to be missing from the hydrogeologic site characterization that is needed for the design of the groundwater monitoring system and monitoring plan, the missing data will be requested, reviewed when submitted, and any changes then needed to the monitoring system and plan will then be requested of the owner or operator
   If the site characterization data indicates that the monitoring system was not properly designed or implemented, what will the Agency do?
   Response: See answer to a) above.

   b. **Will the Agency require a new groundwater monitoring design be submitted in order to issue an operating permit for the impoundment?**

      Response: If needed, yes. In most cases, it is anticipated that some changes to the monitoring plan will be requested to be submitted.

   c. **If the pre-existing groundwater monitoring system at sites that are currently monitoring groundwater is not designed so that background monitoring wells meet the proposed requirements, how will the Agency address that?**

      Response: If this is found to have occurred, changes to the groundwater monitoring plan will be requested, which may involve installation of new groundwater monitoring wells.

4. **Do the proposed regulations require that leakage of water from unlined ponds be evaluated with respect to its influence on groundwater flow directions and**

potential impacts on "up-gradient" water quality? If so, please identify the relevant provision(s).

Response: Please see Response to question 1(b) above.

5. **Do you agree that knowing the elevation of water in unlined impoundments could be necessary to adequately evaluate groundwater flow direction? Please explain your answer.**

   Response: Yes. Please see Response to question 1(b) above.

Closure or Retrofit of CCR Surface Impoundments:

6. **You state that "[a]ll surface impoundments required to initiate closure or electing to initiate closure rather than retrofit must immediately categorize the surface impoundment according to subsection (g) of Section 845.700 and then complete the closure alternatives analysis in Section 845.710." The proposed regulations at Section 845.700(c) provide that, "[n]o later than 30 days after the effective date of this Part, the owner or operator must send the category designation, including a justification for the category designation, for each CCR surface impoundment to the Agency for review."**

   a. **Does the Agency intend to approve or disapprove the proposed category designation, in addition to reviewing it?**

      Response: The Agency plans to review the category designation. If the Agency disagrees with the designation, the owner or operator of the impoundment will be notified that the Agency disagrees with the designation and why the Agency believes it falls into another category.

   b. **Will the Agency disapprove the proposed categorization if the Agency finds that the owner or operator did not adequately support its proposed category designation?**

      Response: Yes. See answer above.

   c. **Will the Agency consider information available to it, even if not included in the owner or operator's category designation, in determining whether to approve or disapprove a proposed category designation?**

      Response: Yes, the Agency will consider all available information.

   d. **When and how will the public be afforded opportunities to provide input into whether the owner or operator's proposed category designation is appropriate? Please specify the proposed provision(s) that provide opportunities for public input on that category designation.**

Response: The current proposed rules do not afford public input into category designation. The owner or operator categorizes their impoundments, and the Agency may designate an impoundment to another category when site-specific conditions contradict the designations provided by the owner or operator.

e. When and how will the public be notified of the closure prioritization category of an impoundment? Please specify the proposed provision(s) that provide for such notice.

Response: The public is notified on the publicly available internet site 14 days before the pre-application meeting for construction permits held by the owner or operator.

f. If community members have information indicating that the closure prioritization category should be higher than proposed by the owner or operator, but the first opportunity for formal public input into the category designation is when the construction permit application is due, how will that deficiency be remedied?

Response: The current proposed rules do not afford public input into category designation. Citizens may provide information relative to the categorization of a CCR surface impoundment to the Agency at any time.

7. You state in your testimony that the proposed prioritization scheme for closure is based on "risk to health and the environment and the impoundment's proximity to areas of environmental justice concern."

a. How will the Agency evaluate the "risk to health and the environment" posed by an impoundment?

Response: The risk to health and the environment is evaluated by looking at the groundwater monitoring data for the impoundment. Based upon whether there is an impact to a potable water supply well or its setback or an exceedance of a groundwater protection standard, the impoundments are placed into different categories for closure. The groundwater protection standards are based upon risk to human health and the environment. Category 2 also recognizes factors of safety and location restrictions in Part 845.700(g)(5).

i. What information is necessary to evaluate that "risk to health and the environment"?

Response: Please see answer to 7(a) above.

ii. Is that information required to be submitted to the Agency? If so, please specify the relevant provision(s).

Response: Yes, information on groundwater monitoring will be submitted to the Agency. In addition, location restriction certifications must be submitted along with any other information relied upon in the justification for the category designation in Part 845.700(c).

iii. **Is that information required to be submitted in a permit application? If so, please specify the relevant provision(s).**
Response: No. Please see answer in (a)(ii).

b. **Does the Agency consider the stability of an impoundment important to determining the health and environmental risks it poses? Please explain your answer.**

Response: Yes. Any impoundment considered at risk of failure due to stability issues would be placed in Category 2. Categories 1 through 4 are given the earliest timeframe to submit either an application for a final closure plan or to retrofit the CCR surface impoundment.

c. **Does the Agency plan to consider a CCR surface impoundment's compliance with the location restrictions in evaluating such "risk to health and the environment"?**

Response: Yes.

i. **If so, which location restrictions?**

Response: The Agency will consider all location restrictions in Subpart C of Part 845.

ii. **Is that specified in the proposed regulations? If so, please specify the relevant provision(s).**

Response: Yes, the Agency may designate a CCR surface impoundment as a Category 2 surface impoundment when is has not demonstrated compliance with the location restrictions in Subpart C of Part 845 pursuant to Section 845.700(g)(5)(B).

d. **If the Agency plans to consider only some location restrictions but not others, could you please provide the basis for considering some but not others?**

Response: See Response to question 7(c) above.

e. **Do you agree there are risks to allowing an unlined impoundment in a floodplain?**

Response: There are risks to allowing an unlined impoundments anywhere.

i. How does the Agency define "floodplain"?

Response: The Agency defines floodplain as FEMA Special Flood Hazard Area (SFHA). The SFHA is the land area covered by the floodwaters of the base flood is the Special Flood Hazard Area (SFHA) on NFIP maps. The SFHA is the area where National Flood Insurance Program's (NFIP's) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies.

ii. If you agree there are risks to allowing an unlined impoundment in a floodplain, what are those risks?

Response: There are risks in times of flooding

iii. Are there any reasons you believe those risks would not be present for any CCR surface impoundment in Illinois? If so, please identify the impoundment and explain why.

Response: CCR surface impoundments not in a floodplain would not be subject to the risks of floods.

f. Does Illinois allow landfills to be located in floodplains?

Response: Yes. A new or proposed landfill can be built/located within a floodplain. It must be engineered to withstand and not restrict the flow of a 100-year flood.

i. If so, does that include unlined landfills?

Response: Yes. However, no new unlined landfills are allowed to be constructed anywhere within the state. Existing unlined landfills that were located in floodplains had to close but were not required to be moved from floodplains.

g. What qualifications are necessary to evaluate the "risk to health" that an impoundment poses?

Response: The ability to compare the groundwater protection standards at the facilities to the groundwater monitoring data and the current status of the facility would be the main requirements. In addition, the ability to review records to ensure that required documentation and

certification of safety standards have been provided as required by the proposed rule would be necessary.

h. Could you please identify Agency staff who possess the qualifications necessary to evaluate "risk to health" and will review owners/operators proposed closure category designations?

Response: Once the regulatory requirements have been established, the Agency will assess staffing needed for implementation.

8. You state that the timeframes for closure are "staggered" and that the "second date [for closure] is October 15, 2023 for CCR surface impoundments that have demonstrated that alternative disposal capacity is infeasible under 40 CFR 257.103."

a. What must be shown for a CCR surface impoundments to "demonstrate[] that alternative disposal capacity is infeasible"?

Response: Demonstrations that alternative disposal capacity is infeasible are outlined in 40 CFR 257.103:

(i) No alternative disposal capacity is available on-site or off-site. An increase in costs or the inconvenience of existing capacity is not sufficient to support qualification under this section;
(ii) The owner or operator has made, and continues to make, efforts to obtain additional capacity. Qualification under this subsection lasts only as long as no alternative capacity is available. Once alternative capacity is identified, the owner or operator must arrange to use such capacity as soon as feasible;
(iii) The owner or operator must remain in compliance with all other requirements of this subpart, including the requirement to conduct any necessary corrective action; and
(iv) The owner or operator must prepare an annual progress report documenting the continued lack of alternative capacity and the progress towards the development of alternative CCR disposal capacity.

b. Will the Agency review those "demonstrations"?

Response: No.

c. Will the Agency approve or, if the demonstration does not meet requirements, disapprove those demonstrations?

9. You state that the "date for closure completion is October 17, 2023" for impoundments that are forty acres or smaller at closed coal-fired power plants. As noted in your testimony and under Proposed Section 845.700(h), the earliest date for submission of a closure construction permit application is January 1, 2022, while the latest date for submission of a closure construction permit

applications is July 1, 2023, depending on the closure prioritization category. These dates do not seem to account for each other. Please explain whether closure may be completed later than the specified October 17, 2023 date.

Response: When closing by a final cover system or retrofitting, the January 1, 2022 and July 1, 2023 dates are the earliest and latest dates for the prioritized categories for which a construction application, containing either a final closure plan or a plan to retrofit an impoundment, must be submitted **no later than**. (Emphasis added.) In other words, the impoundments in the categories must have a construction application submitted by those applicable dates. The owner or operator may submit a construction application for closure at an earlier date than January 1, 2022, and the Agency encourages it in these instances. Closure may not be completed later than October 17, 2023 for these impoundments.

Closure Alternatives Analysis:

10. **You state that the owner or operator of a CCR surface impoundment must take into account the short- and long-term effectiveness and protectiveness of the closure method.**
(Agency Response)

    a. **What does the Agency consider to be an "effective" closure method? Please explain.**

Response: The Agency will use transient, calibrated groundwater flow, and fate and transport modeling outputs provided by the permittee to evaluate the mass flux of contaminants to the groundwater under different closure methods. "**Mass flux" or "J"** means the mass of a contaminant in grams per day per square meter in the groundwater that passes through a predefined cross-sectional area over a period-of-time at a specific hydraulic gradient.

$\boldsymbol{J = KIC}$ in grams per day per square meter ($g/d/m^2$)

Where:
K= hydraulic conductivity in meters per day (m/day)
i = hydraulic gradient meters/meter
C = contaminant concentration in milligrams per liter (mg/L)

Mass flux is an quantitative assessment of the of the performance-based standard under proposed Part 845.670(d)(3) (Part 257.96(b)(3): "Control the source(s) of releases so **as to reduce or eliminate, to the maximum extent feasible, further releases of constituents** in appendix IV to this part into the environment."). (Emphasis added)

The predictive modeling output will graphically illustrate the concentration of a contaminant in mg/L over time in response to the proposed remedy. Thus, the

closure scenarios are modelled and predict the decrease in the reduction of a contaminant in - **mg/L/day** at the down gradient point of compliance at the edge of the waste boundary as a metric of effectiveness of the proposed remedies. This metric will be plotted relative to the groundwater protection standard concentration in mg/L.

The same groundwater model can be used to map the concentration of contaminants in mg/L relative to distance from the edge of the waste boundary.

b. What does the Agency consider to be a "protective" closure method? Please explain.

Response: Using J to reduce or eliminate, to the maximum extent feasible, further releases of constituents to protect public health and the environment.

c. What does the Agency consider to be "long-term"?

Response: See response to (c)(i).

i. What is the basis for selecting that length of time?

Response: First, standard groundwater modeling practice is to let models run until steady state conditions and mathematical convergence is achieved. It may take a long length of time for steady state to be achieved. That is part of the answer.

Secondly, comparison of the modeled closure methods and the subsequent predicted reduction of mass flux of contaminant concentration ***C*** per time in **-mg/L/day** at the downgradient point of compliance relative to the groundwater protection standard. This will be a basis for selecting a time frame.

Third, the effect of removing free water and dewatering coal ash will be seen immediately in a significant reduction of J in -mg/L/day because of the reduction of vertical head in the hydraulic gradient ***i***.` This vertical head is the driving force of moving contaminants to the groundwater table. Once the vertical head component of the hydraulic gradient ***i*** is eliminated the spatial component of the hydraulic gradient is left. In general, Illinois has flat-water table conditions that are reflected in small spatial gradients.

Further, once the vertical gradient is reduced by free water removal and coal ash dewatering, vertical gradients are going to re-establish. Thus, anything that is in the shallow subsurface, and any contaminants are going to be pushed up because the water wants to flow up versus down.

Fourth, an intermediate term remedy may be a low permeability cap, that will significantly reduce recharge through the coal ash and will further reduce J -mg/L/day but make take longer to predict.

Fifth, examples of longer-term remedies would be hydrodynamic dispersion after closure in place or closure by removal.

d. Are you aware of how long constituents can continue to leach out of CCR?

Response: Yes. That is determined on a site-by-site basis taking into account the hydrogeology of a site and the aquifer property data in the mass flux equation provided in Response to 10(a). As described above, the question can be quantitively modeled and then evaluated against real world observations.

i. If so, for how long and what is the basis for that statement?

Response: It's a case-by-case determination as described above.

e. Are you familiar with the Risk Assessment performed by U.S. EPA when it finalized the 2015 Federal CCR Rule?

Response: No.

i. If so, have you reviewed that document's conclusions with regard to how long constituents can continue to leach out of CCR?

ii. If so, what are those conclusions?

f. Given how long constituents can continue to leach out of CCR, how long must water be kept out of contact with CCR in order for the closure method to continue to be effective and protective? Please explain.

Response: See above. It's a case-by-case evaluation that takes into account all of the factors described above. Transient groundwater modeling will also need to be conducted to determine the effect of a seasonally intersecting water table on J -mg/L/day to evaluate the reduction or elimination, to the maximum extent feasible, further releases of constituents to protect public health and the environment.

g. Given how long constituents can continue to leach out of CCR, how long must a cover be maintained in order for the closure method to continue to be effective and protective? Please explain.

Response: They have to maintain for the post-closure care period.

h. Are you familiar with how long the covers the Agency here proposes in Proposed Section 845.750(c) limit infiltration of precipitation, runoff, or other water on the surface of the cover into the CCR?

i. If so, how long? Please provide the basis for your answer.

Response: As long as they remain intact.

i. What maintenance is necessary to ensure a cover continues to limit infiltration into the CCR?
Response: Please see Section 845.780(b).

i. Is there a time when the need for such maintenance stops?

Response: Upon completion of the post-closure care period in Section 845.780(e), maintenance is no longer required.

ii. If so, when is that and what is the basis for that statement?

j. Do the proposed regulations require inspection and maintenance of the cover even after the end of the post-closure care period? If so, please identify the relevant provision(s).

Response: No.

k. How will future Illinois residents know the state of the cover after post-closure care has ended, including whether the cover has deteriorated or become damaged, allowing infiltration to the CCR to increase?

Response: Part 845 does not provide this information.

l. If a river is meandering toward the CCR surface impoundment, does erosion of the CCR surface impoundment and release of the CCR contained therein ever cease to be a concern?

Response: Concerns about rivers meandering can be addressed by engineering controls on a case by case basis.

i. If so, when? Please provide the basis for your statements.

11. You state that the closure alternatives analysis must consider the amount of risk reduction of existing risks and the magnitude of residual risks related to future releases.

a. What assumptions about future land use and potential receptors must be included in such analysis? Please explain.

Response: The Agency assumes there could be some future risk, therefore a deed notation has been required in Part 845.760(h.

b. Are those assumptions specified in the proposed regulations? If so, please specify the provision(s).

Response: See response 11(a.

12. You state that the closure alternatives analysis must consider "the difficulty of implementation of a potential closure method." (Agency answer)

a. What does the Agency understand to constitute "difficulty of implementation"?

Response: There are some unique difficulties, associated with CCR surface impoundments, as follows:

1) Dewatering requirements and methods are a factor related to the difficulty of implementation. Water removal from a CCR surface impoundment is critical to construction, and long-term performance. During closure another example of a difficulty related to dewatering is limiting disturbance and resuspension of CCR surface impoundment solids, especially when construction activities take place in the vicinity of the dewatering intake structure. A temporary settlement structure may be needed. Proper dewatering of saturated CCR before removal is necessary because excavations risk caving and cut slope collapse, creating safety hazards and difficult repairs.

   Additional dewatering factor difficulties related to the success of impoundment closure relates to allotting adequate time for solids to drain. Sumps, well points, and dewatering ditches have a limited radius of influence, so as CCR is drained and stabilized, dewatering must progressively advance.

   Moreover, the drainage properties of CCR may dictate that dewatering be initiated weeks if not months before initiation of other closure activities

   Further, another potential difficulty related to dewatering is the effect of seasonal surface drying and precipitation have on the dewatering of the CCR.

2) CCR presents some unique challenges and difficulties as a construction material affecting site safety and constructability. Some CCR materials appear to be competent, solid materials that maintain a steep angle of repose as they are excavated. However, after being subjected to vibration, such as during transport in the bed of a truck, the physical properties change dramatically as the CCR

liquifies and becomes a fluid that is impossible to stack, grade, or cover. Liquefaction of CCR surface impoundment solids after transport to a disposal area is a difficulty factor.

b. What sort of difficulties would the Agency consider relevant?

Response: Difficulties of closure will be determined on a site-by-site basis. See the above examples of what Illinois EPA considers to be relevant.

c. Are there any sorts of "difficulties" that the Agency would not consider? If so, please explain and provide examples.

Response: No.

13. You state that the closure alternatives analysis must take into account "the concerns of residents within communities where the CCR will be handled, transported and disposed."

a. How will the Agency know which are the relevant communities?

Response: The closure alternatives analysis must discuss the various alternatives for closure and the ultimate destination of any ash, if closure will be by removal, for each closure alternative, including transportation type and routes. Therefore, relevant nearby communities will be identified for each closure alternative.

b. Did the Agency review the location of rail or barge in relationship to coal ash impoundments? If not, please explain.

Response: The Agency has not reviewed specific types of transportation available for closure by removal at the various impoundments throughout the state. The Agency has not ruled any type of transportation out. This will be thoroughly reviewed for each impoundment in the closure alternatives analysis.

c. Is the Agency familiar with the development of fuel cell trucks, electric trucks, or low-sulfur diesel trucks?

Response: Yes.

d. Did the Agency consider including requirements for transport of CCR only via electric, fuel-cell, or low-diesel trucks?

Response: No.

i. If not, why not?

Response: Various factors affect the length of time closure by removal will take to occur. Many of these impoundments are quite large. The Agency is uncertain of the feasibility or availability of these types of vehicles with the size of the impoundments and the large number of truckloads daily in and out of many of these facilities over a large number of years.

ii. **If so, what is the basis for not directing companies to use such trucks if trucks are needed to transport ash?**

Response: See answer above.

14. **You state that the closure alternatives analysis must, for each alternative, "contain groundwater contaminant transport modeling showing that the alternative will achieve applicable groundwater protection standards."**

a. **Must the model include all constituents for which the Agency establishes groundwater protection standards (GWPS)? If not, please answer the following:**

Response: No.

i. **Why not?**

Response: Generally, it is not necessary to model each constituent. Usually, the most mobile constituents are modeled. If the most mobile, or most likely to move from the source area, are modeled and then reach the groundwater protection standards, then the least mobile would not be exceeding the groundwater protection standards.

ii. **Which constituents must be modeled?**

Response: It is site specific, as each impoundment can have slightly different problem constituents.

iii. **How can modeling only a limited set of constituents show that the closure option will achieve the applicable groundwater protection standards for all constituents for which there are GWPS?**

Response: See answers above.

b. **Has the Agency considered that there may be alternatives that will never achieve the groundwater protection standards?**

Response: Yes.

c. Has the Agency considered that there may be alternatives that will take hundreds of years to achieve the groundwater protection standards?

Response: Yes.

d. If modeling does not show achievement of the standards for more than 100 years, will that disqualify an alternative from approval?

Response: No, time is only one factor that must be considered in a closure alternatives analysis.

e. Is there a certain period of time that a closure alternative will take to achieve the groundwater protection standards that the Agency will consider unacceptable?

Response: These decisions will be made on a case by case basis based upon the closure alternatives analysis.

f. How many years, at a minimum, does the Agency propose to require owners and operators to model out?

Response: The Agency does not have a minimum specified, but in practical terms at least 30 years post closure for closure in place. The model must also meet a steady state after passive remedial activities have been installed and active remedial activities have stopped, in order to show that problems will not reoccur in the future.

i. Is that specified in the proposed regulations? If so, please specify the relevant provision(s).

Response: No, it is not specified in the regulations.

g. Are there groundwater modeling methods that account for continuous or intermittent saturation of coal ash due to rising groundwater or the lateral flow of groundwater, rather than from solely recharge from above?

Response: Yes, there are. It is more complicated for intermittent groundwater rising into the coal ash, due to needing to add time steps to account for the changes in groundwater elevation. In order to do predictive modeling, it is also necessary to have additional data for those times and expected frequencies of increased groundwater elevations.

i. If so, which methods?

Response: One method would be to use a combination of river boundary cells or constant heads cells for nearby water bodies, and general head boundary cells for the cells at the bottom of the impoundments using MODFLOW. There are, however, other ways this could be accomplished.

ii. **Is the Agency requiring those methods to be used where an impoundment fails to meet the aquifer location restriction? Please specify the relevant provision(s).**

Response: There are no provisions in the proposed rule outlining specific ways to do the modeling as there are multiple potential possible ways it could be done.

iii. **Is the Agency requiring those methods to be used when information makes clear that CCR is intermittently or continuously wetted by groundwater? Please specify the relevant provision(s).**

Response: Please see Response 14(g)(ii).

15. **Does the Agency plan to consider any information concerning costs of different closure alternatives in evaluating construction permit applications for closure?**

Response: No.

a. **If so, what is the basis for doing so?**

b. **If not, why do the proposed regulations not make clear that cost will not be considered in evaluating closure permit applications?**

Response: The closure alternatives analysis provides all of the factors that must be considered when selecting the best closure method.

Initiation of Closure:

16. **You state that an owner or operator must "initiate closure of an impoundment no later than 30 days after the date on which the impoundment either receives the final placement of waste or removes the final volume of CCR for the purpose of beneficial use," and that "closure has been initiated if the owner\operator has ceased placing waste in the CCR surface impoundment and has submitted to the Agency a closure construction permit application."**

a. **What is the timeframe for submission of the closure construction permit application if the impoundment ceased receiving waste before the effective date of the rules?**

Response: For those impoundments that have ceased receiving waste before the effective date of the rules and are required to close or retrofit, the latest date for which a closure construction permit application may be submitted for an impoundment is the relevant date listed for its priority category in Section 845.700(h).

b. Could you please explain how that submission deadline will allow for at least two public meetings at least 30 days prior to submission of the application under Proposed Section 845.240(a)?

Response: For those impoundments that have ceased receiving waste before the effective date of the rules and are required to close or retrofit, the latest date for which a closure construction permit application may be submitted for an impoundment is the relevant date listed for its priority category in Section 845.700(h).

c. Does an owner/operator of a surface impoundment that will be receiving the final placement of waste or removing the final volume of CCR for beneficial use need to hold the two public meetings require by Proposed Section 845.240(a) before they receive the final volume of waste or remove the final volume of CCR for beneficial use?

Response: Yes, they will need to hold the two public meetings beforehand. The owners or operators will need to plan ahead on expected final placement of waste or final removal for beneficial use.

Closure by removal:

17. You state that "closure by removal is complete when all CCR has been removed from the impoundment and all areas affected by releases from the impoundment have been decontaminated." You then state that, "after removal is completed, groundwater monitoring must continue until . . . for three years after closure" or for three years after the monitoring "does not show any exceedance of the groundwater protection standard, whichever is longer."

a. What does the Agency mean by "decontaminated"?

Response: In the instance of closure by removal, decontaminated means removal of all ash, soil covers, liners, leachate within the impoundment, collection systems, and contaminated soil. It does not include remediation of groundwater outside the impoundment, which would be accomplished by corrective action.

i. Is it achievement of the groundwater protection standards, or something else?

Response: Please see Response 17(a).

ii. **If it is achievement of the groundwater protection standards, is not closure not complete until the groundwater protection standards are achieved? Please explain.**

Response: Please see Response 17(a).

b. **What does the Agency mean by "areas affected by releases"?**

Response: Please see Response 17(a).

c. **How are "areas affected by releases" determined?**

Response: The closure plan, which must have Agency review and approval before implementation, will contain the criteria by which decontamination of the CCR surface impoundment is determined.

d. **Do the proposed regulations for closure by removal require achievement of the GWPS (groundwater protection standards)? If so, please identify the specific provision(s).**

Response: Yes. See Section 845.740(b).

18. **How does the Agency intend to determine compliance with the transportation plan and other removal requirements – including, in particular, fugitive dust mitigation requirements – in Proposed Section 845.740? (**Agency Response)

Response: The Agency will defer enforcement questions to the appropriate state and federal agencies for the specific issues that arise. The Agency will enforce specific requirements for the Fugitive Dust Control Plans as specified in 845.500

19. **How will the Agency, the owner/operator, workers, and communities know that dust is being limited to safe levels on a daily basis?** (Agency Response)

Response: It would be unreasonable to expect the Agency to be aware of a specific site's condition on a daily basis. The Agency does accept citizen complaints regarding fugitive dust problems.

20. **Did the Agency consider requiring air monitors to determine the effectiveness of the dust controls?** (Agency Response)

Response: The Agency has drafted the proposed rule with the intention that site conditions can and will change. The owners, operators, and site staff are more equipped to determine the specific levels of monitoring per OSHA regulations.

a. **If not, why not?**

Response: See previous response.

b. If so, why did the Agency choose not to require their use? Please explain.

Response: See previous response.

21. How will it be determined whether a CCR pile is "temporary"?

Response: "Temporary accumulation" is defined in this Part. It 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."

22. Why did the Agency not define "temporary" in this instance, in contrast to 415 ILCS 5/3.135, where a limitation on the duration of piles is included?

Response: Closure by removal from a large CCR surface impoundment will take multiple years. The record keeping requirements of Section 845.740 will assure a balance between CCR removed from the surface impoundment and CCR transported off-site, such that no net accumulation will occur.

Closure with a final cover system:

23. You state that the "impoundment must be closed in a manner that will control, minimize, or eliminate, as much as feasible, post-closure infiltration of liquids and also releases of CCR, leachate, or contaminated runoff."

a. What does the Agency mean by "as much as feasible"?

Response: As much as feasible means that infiltration would be controlled, minimized or eliminated to the extent workable or reasonable.

b. What information will be considered in determining what is "feasible"?

Response: All of the information contained in the closure alternatives assessment would have to be considered to determine which closure alternatives are feasible. See also Response to 10(b) above.

c. What does the Agency mean by "post-closure infiltration of liquids"? Please provide examples of how liquids could continue to infiltrate the

CCR surface impoundment after closure.

Response: Post-closure infiltration of liquids refers to minor amounts of precipitation that infiltrate through all cover systems, groundwater that may enter a CCR surface impoundment post-closure or precipitation that may fall into a CCR surface impoundment closed by removal that has not yet completed post-closure monitoring or corrective action.

24. You state that the owner or operator must eliminate free liquids by removing liquid wastes and solidifying the remaining wastes and residues. Does the Agency consider CCR surface impoundments that allow groundwater to flow into, and leachate to flow out of, CCR – either continuously or episodically – as having "eliminated free liquids"? Please explain the basis for your statement.

Response: Elimination of free liquids refers to the easily removed liquids that separate from the CCR solids under ambient temperature and pressure. This does not mean all groundwater flow into and out of the impoundment has been eliminated.

25. Did the Agency consider requiring a drainage layer on top of the low permeability layer to promote movement of infiltrated liquids off of the cover?

a. If not, why not?

Response: Yes.

b. If so, could you please explain why the Agency did not propose to require a drainage layer?

Response: The Agency did not require a drainage layer because the roots of vegetation, required on the required protective layer, can clog a drainage layer reducing its performance. Further, a drainage layer could create an additional zone of potential slope failure. Since cover system performance and stability are key elements when assessing closure alternatives, inclusion of a drainage layer should be optional based on-site specific conditions.

26. Has the Agency evaluated the potential environmental impact of allowing additional CCR, rather than clean fill, to be placed in the impoundment before closure?

Response: Yes.

a. If not, why not?

b. If so, could you please describe the results?

Response: As this is CCR that has already been generated at the facility at the time closure was initiated, the CCR must be handled by the facility, closed either in place on site or by removal.

If CCR is going to be closed in place, as long as the modeling indicates the use of the CCR will not preclude achievement of the GWPS, the Agency does not consider its use to be a greater environmental risk, if the CCR is used pursuant to the requirements of Section 845.750(d).

Completion of closure:

27. What is the Agency's basis for allowing unlimited extensions of closure deadlines for CCR surface impoundments closing by removal?

Response: As CCR surface impoundments that are closing by removal may need quite a bit of time to remove the amount of CCR in the impoundments, the Agency feels it is justified, as long as the need for the extension is demonstrated. Removal of the source (the CCR) involves drying the CCR enough for removal and transport, the actual transport of the large amount of CCR, permitting, if required, of the final location of the CCR. This all can take quite a bit of time.

28. Is there any information that the Agency will not consider in evaluating requests for extensions (whether for removal or for closure by cap-in-place)? If so, please explain.

Response: Time extensions must be based on the requirements of Section 845.760(b), (c) and (d).

29. How often will the Agency review progress of compliance with closure plans?

Response: The Agency intends to review closure annually. The owners and operators of CCR surface impoundments are also required to inspect for erosion and signs of deterioration at least weekly and summarize those reports monthly, pursuant to Section 845.540. Owners and operators closing by removal must also summarize CCR removed and transported on a monthly basis pursuant to Section 845.740(d). Both of these monthly reports will be available on the public website and therefore available to the Agency and public.

30. How will they review such progress (e.g., on paper, onsite inspection, etc.)?

Response: The Agency intends to use a combination of on-site and electronic document review.

31. How many inspectors does the Agency have to do such inspections?

Response: Once the regulatory requirements have been established, the Agency will assess staffing needed for implementation.

32. Has the Agency had experience with instances in which closure of waste sites did not go as planned or proposed and modifications had to be made?

Response: Yes

a. How did the Agency know of the need for such modifications?

Response: There are a number of avenues by which the Agency becomes aware of cleanup or closure plan issues at facilities. Primarily, the Agency would become aware of such issues from facility self-notification or from IEPA field inspection of the facility property. Occasionally, the Agency receives third party notification or other government entities receive notification (that are then forwarded to IEPA).

b. How long had the problems with the cleanup or closure plans been present before they were identified?

Response: Any problems associated with cleanup activities or closure plans that the Agency receives would vary on a site-specific basis.

c. How long had the problems with the cleanup or closure plan been present before the plans were modified?

Response: The time frame for problems addressed or modified that are associated with cleanup activities or closure plans will vary on a site-specific basis and be based upon a regulatory or permitting timeline.

33. Have requests by community members led the Agency to inspect/investigate and find that closure was not going as planned?

Response: The Agency's Groundwater Section is not aware of any such requests. However, the Agency will communicate with community members in a timely fashion to address their issues and determine if they are pertinent to a cleanup activity or closure plan with regards to a regulatory or permitting requirement.

34. Does the Agency require owners and operators of other waste sites or other regulated entities to submit progress reports on closure? Please specify the relevant waste sites and regulatory provisions.

Response: In general, the owner/operator of waste sites or other regulated entities (including but not limited to mine sites) will submit to the Agency a detailed closure plan, which will include a schedule of closure activities that will be approved either through the regulatory or permitting process. In general, all facilities are expected to adhere to their closure plan and schedule of activities.

a. If so, has the Agency identified challenges or deficiencies with implementation of closure plans via such progress reports?

Response: The Agency has approved the proposed closure plan through either the regulatory or permitting process. All anticipated challenges or deficiencies

with implementation of the closure plan have been reviewed and addressed in the regulatory letter or issued permit. The Agency would be forced to speculate concerning any unidentified challenges or deficiencies with the implementation of a closure plan.

b. If so, did the progress reports allow the Agency to address the problems more quickly than they otherwise would have been addressed?

Response: The Agency would be forced to speculate about what may happen should unanticipated challenges or deficiencies be reported outside the regulatory or permitting process.

35. How does the Agency plan to allow for public input into whether closure is properly implemented? Please identify where that is specified in the Proposed Rules.

Response: The public can review inspection reports and monthly and annual reports for closure on the publicly available internet site. Complaints about site activities can by submitted to the Agency's field office.

Post-Closure Care:

36. The proposed regulations describe post-closure care, which they define to include, among other things, "[m]aintaining the groundwater monitoring system and monitoring the groundwater in accordance with the requirements of Subpart F." Subpart F includes not only groundwater monitoring, but also corrective action requirements.

Response: The above does not appear to pose a question.

37. Does the Agency understand Proposed Section 845.780(b)(3) to also require compliance with the corrective action components of Subpart F?

Response: Yes, to the extent that the requirements of Subpart F are not exempt by Section 845.170.

a. If not, please explain why the Agency believes that compliance with the corrective action components of Subpart F are not required during the post- closure care period.

38. The proposed regulations at Proposed Section 845.780(c)(2) provide that an owner or operator of a CCR surface impoundment that closed by cover "must continue to conduct post-closure care until the groundwater monitoring data shows the concentrations are: (A) below the groundwater protections standards in Section 845.600; and (B) not increasing for those constituents over background, using the

statistical procedures and performance standards in Section 845.640(f) and (g), provided that: i) concentrations have been reduced to the maximum extent feasible and ii) concentrations are protective of human health and the environment."

a. What does the Agency mean by "the maximum extent feasible"?

Response: See Response to question #10(b)

b. What information will be considered in determining what is "feasible"? Please identify the regulatory provision(s) where that is specified.

Response: Feasibility will be based on the modeling required by the closure alternatives analysis in Section 845.710(d) and the statistical analysis requirements of Section 845.640.

c. Is there any sort of information that the Agency will not consider in determining what is "feasible"? Please explain and identify the regulatory provision(s) where that is specified.

Response: Please see Response 38(b).

39. At closed-in-place CCR surface impoundments where groundwater protection standards have been achieved, are there circumstances in which leaching of CCR constituents could increase, leading to renewed exceedances of groundwater protection standards at CCR units that have completed post-closure?

Response: Yes.

a. If so, what are those circumstances?

Response: The Agency would be forced to speculate.

b. If not, please provide the basis for your statement.

DARIN LECRONE

1. In your testimony, you state that, "[i]n accordance with the Act, any rules adopted by the Board must at a minimum . . . specify which types of permits are required for certain activities " Which activities are those? Please provide the basis for your answer.

Response: Section 845.200(a) describes the activities related to CCR surface impoundments, which require a permit pursuant to these rules. Subsection 845.200 (a)(1) establishes which activities require a construction permit. These activities include the construction, installation, or modification of a CCR surface impoundment or related treatment or mitigation facilities related to a corrective action. Subsection 845.200 (a)(2)

establishes that the operation of a CCR surface impoundment requires an operating permit.

2. **In your testimony, you state that "SB9", also known as the Coal Ash Pollution Protection Act, created the challenge of "adapt[ing] a program intended to be self-implementing, into a permit program with Agency oversight." What is the purpose of Agency oversight?**

   Response: The Agency is tasked with implementing rules adopted by the Board pursuant to the regulation of CCR surface impoundments. This oversight role includes the receipt and review of permit applications, the issuance of permits, the tracking of compliance and conducting field inspections.

3. **In your testimony, you state that "[m]any of the proposed components of either a construction permit application or an operating permit application, were certifications, demonstrations, or reports required by 40 C.F.R. § 257."**

   a. **Regarding the requirement that impoundments have a composite liner, as defined in the federal rules: Are permit applicants required to submit any documentation aside from the certification that the impoundment has a liner, or statement that it does not have a liner that meets the minimum standards, to support that certification or statement? If so, please identify the provision(s) that so require.**

   Response: 845.220(b)(2)(A) requires plans and specs that demonstrate compliance with liner requirements of 845.400(b) or (c) for new construction permit applications. For operating permits, Section 845.230(a)(2) requires that a certification from a qualified professional engineer that the composite liner or if applicable, the alternative composite liner, has been constructed in accordance with the requirements of this Section 845.400(b) or (c). This section sets forth the minimum design criteria that the liner must meet and requires certification by a professional engineer that these standards have been met. There is not a requirement to submit any other specific documentation beyond the certification.

   b. **Regarding the requirement that CCR surface impoundments conduct a hazard potential classification assessment under Proposed Section 845.440:**

      i. **Are permit applicants required to submit the certification of that assessment in a permit application? If so, please identify the provision(s) that so require.**

   Response: Section 845.440 (a)(3) requires that the owner or operator of a new CCR surface impoundment must submit the initial hazard potential classification assessment certification with the initial operating permit application, prior to the initial receipt of CCR. The owner operator of an existing CCR surface impoundment must submit the

initial hazard potential classification assessment certification with its first annual inspection report required by Section 845.540(b).

ii. Are permit applicants required to submit that assessment in a permit application? If so, please identify the provision(s) that so require.

Response: Permit applicants are required to submit the assessment certification as part of a permit application. They are not required to submit any other specific documentation beyond the certification.

iii. Are any revisions to the hazard potential classification assessment required to be submitted in permit applications? If so, please identify the relevant provision(s).

Response: Pursuant to Section 845.440(a)(3)(C) permittees are required to submit annual hazard potential assessment certifications each year with the annual inspection report required by Section 845.540(b).

c. Regarding the Emergency Action Plan required by Proposed Section 845.520:

i. Are permit applicants required to submit the Emergency Action Plan in a permit application? If so, please identify the provision(s) that so require.

Response: Pursuant to Section 845.230, applicants are required to submit Emergency Action Plan Certifications, but are not required to submit the plan itself. The owner or operator of a CCR surface impoundment must maintain the most recent Emergency Action Plan in the facility's operating record pursuant to Section 845.800(d)(9).

ii. Are any revisions to the Emergency Action Plan required to be submitted in a permit application? If so, please identify the provision(s) that so require.

Response: Applications for renewal of an initial operating permit, are required to submit Emergency Action Plan certification if the plan was amended as required by Section 845.520.

d. Regarding the structural stability assessment required under Proposed Section 845.450:

i. Are permit applicants required to submit the certification of that assessment in a permit application? If so, please identify the provision(s) that so require.

Response: Section 845.230(a)(8) requires the submittal of the initial structural stability assessment certification required by Section 845.450(c) with the operating permit application for new CCR surface impoundments. The structural stability assessment certification for existing CCR surface impoundments must be submitted with the annual inspection reports.

ii. Are permit applicants required to submit the structural stability assessment in a permit application? If so, please identify the provision(s) that so require.

Response: Applicants are only required to submit the certification of the assessment. Pursuant to Section 845.450(d)(4), the owner or operator of a CCR surface impoundment must place each safety factor assessment in the facility's operating record as required by Section 845.800(d)(5).

iii. Are any revisions to the structural stability assessment required to be submitted in a permit application? If so, please identify the provision(s) that so require.

Response: Permittees would be required to submit an updated certification annually as part of their annual inspection report.

e. Regarding the safety factor assessment required under Proposed Section 845.460:

i. Are permit applicants required to submit the certification of the safety factor assessment in a permit application? If so, please identify the provision(s) that so require.

Response: Section 845.460(c) states that the owner or operator of a new CCR surface impoundment must submit the initial safety factor assessment certification with the initial operating permit application prior to the initial receipt of CCR. The owner or operator of an existing CCR surface impoundment must submit the initial safety factor assessment certification with its first annual inspection report.

ii. Are permit applicants required to submit the safety factor assessment in a permit application? If so, please identify the provision(s) that so require.

Response: Applicants are only required to submit the safety factor assessment certification. Pursuant to Section 845.460(c)(4), the owner or operator of a CCR surface impoundment must place each safety factor assessment in the facility's operating record as required by Section 845.800(d)(6).

iii. Are any revisions to the safety factor assessment required

to be submitted in a permit application? If so, please identify the provision(s) that so require.

Response: Permittees would be required to submit an updated certification annually as part of their annual inspection report.

f. Regarding the fugitive dust control plan required under Proposed Section 845.500(b):

i. For existing CCR surface impoundment, are permit applicants required to submit the fugitive dust control plan in a permit application? If so, please identify the provision(s) that so require.

Response: Section 845.220(b)(3) requires the fugitive dust control plan be submitted in the permit applications for new construction. Section 845.230(a)(10) requires that a fugitive dust control plan certification be submitted with the initial operating permit application for a new CCR surface impoundment. Section 845.230(d)(2)(G) requires that a fugitive dust control plan certification be submitted with the application for an initial operating permit for an existing CCR surface impoundment. The actual fugitive dust control plans are to be placed in the facility's operating record as required by Section 845.800(d)(7).

ii. Are any revisions to the fugitive dust control plan required to be submitted in a permit application? If so, please identify the provision(s) that so require.

Response: 845.500(b)(6) requires that the initial and any amendments to the fugitive dust control plan be placed in the facility's operating record.

g. Regarding the inflow design flood control system plan required by Proposed Section 845.510(c):

i. For existing CCR surface impoundments, are permit applicants required to submit the certification of the inflow design flood control system plan in a permit application? If so, please identify the provision(s) that so require.

Response: Section 845.230(a)(11) requires submittal of the initial inflow design flood control system plan certification for new CCR surface impoundments. The owner or operator of an existing CCR surface impoundment must submit the initial design flood control system plan certification with its first annual inspection report.

ii. For existing CCR surface impoundments, are permit applicants required to submit the inflow design flood control system plan in a permit application? If so, please identify the provision(s) that so require.

Response: Applicants are only required to submit the certification of the plan. The permittees are required to place the design flood control system plan in the facility's operating record pursuant to Section 845.800(d)(8).

iii. Are any revisions to the inflow design flood control system plan required to be submitted in a permit application? If so, please identify the provision(s) that so require.

Response: Any revisions to the plan would be accounted for with the facility's annual certification as part of the annual inspection report, and the amended plan would be placed in the facility's operating record.

h. Regarding the safety and health plan required by Proposed Section 845.530:

i. Are permit applicants required to submit the safety and health plan in a permit application? If so, please identify the provision(s) that so require.

Response: No, the safety and health plan is not required to be submitted as part of a permit application. The plan and all amendments need to be placed in the facility's operating record, the contents of which are publicly available, pursuant to Sections 845.530(a) and 845.800(d)(12).

ii. Are any revisions to the safety and health plan required to be submitted in a permit application? If so, please identify the provision(s) that so require.

Response: No, the safety and health plan is not required to be submitted as part of a permit application. The plan and all amendments need to be placed in the facility's operating record, the contents of which are publicly available, pursuant to Sections 845.530(a) and 845.800(d)(12).

4. **Why did the Agency propose regulations that do not require the certifications, assessments, and plans referenced in the subparts to question 3 above to be submitted in permit applications?**

Response: 40 CFR Part 257 requires the owner or operator of CCR surface impoundments to prepare these plans and assessments referenced in the subparts to question 3, and to include a certification that these assessments met the requirements of the rule. These certifications would then be placed in the facility's operating record. Section 845 requires the applicants to submit the certifications to the Agency as part of the application, so that the Agency has record that those certifications were completed.

5. **Do the proposed regulations require submission of supporting documentation that provides the basis for the certifications, assessments, and plans referenced in the**

subparts to question 3 above to be submitted in a permit application? If so, please identify the specific provision(s).

Response: No, the documentation for those certifications are to be placed in the facility's operating record. Except that 845.220(b) requires plans and specs showing liner compliance (Question 3(a) above) and the fugitive dust control plan (Question 3(f) above) for new construction permit applications.

For new construction, Section 845.220(b)(2)(A) requires plans and specifications demonstrating compliance with liner requirements and Section 845.220(b) requires the fugitive dust plan be submitted with the permit application. Otherwise, the documentation for the other certifications and plans referenced in question 3 above do not need to be submitted in a permit application.

6. **Do the proposed regulations require submission, in permit applications, of supporting documentation that provides the basis for plans, certifications and other documents which are required to be submitted in permit applications? If so, please identify the specific provision(s) that so require and the plan, certification, or document for which underlying documentation is required to be submitted.**

Response: In addition to the plans and specifications listed in question 5 above in reference to the plans and certifications subject of question 3 above, for new construction applications, written closure plans must be included and plans and specifications must be submitted to support compliance with location restriction demonstrations, leachate collection system requirements, and slope protection requirements. Corrective action plans, closure plans and post-closure permits must be submitted with their respective construction permits. For operating permit applications, locations restrictions demonstrations must be included, as well as documentation of appropriate slope protection, and the written closure and post-closure plans.

7. **How will the Agency ensure that surface impoundments have developed plans and assessments that meet applicable requirements if those plans and assessments are not required to be submitted to, and approved by, the Agency?**

Response: As with 40 CFR 257, in some cases, the Agency is relying on a certification by a qualified professional engineer that the required plans or assessments meet the requirements of the rule. Issues may arise that warrant Agency review of relevant plans, such as in the occasion of complaints received or other suspected non-compliance with the regulations.

8. **Will any Agency staff be tasked with reviewing the required plans and assessments that are not required to be submitted to, and approved by, the Agency? If so:**

Response: No. Agency staff will not be reviewing any plans or assessments, which only require submittal of a certification, as part of the permit review and issuance process. Plans and certifications that are required to be submitted will be reviewed by Agency staff.

a. Is that review required by the proposed rules? If yes, please identify the relevant provision(s).

Response: There is no requirement in the proposed rules for the Agency to review the required plans and assessments that are not required to be submitted to and approved by the Agency.

b. Could you please identify specifically which Agency staff will review plans and assessments not required to be submitted to, or approved by, the Agency?

Response: Agency compliance inspections may include a review of records to determine whether the plans and assessments not required to be submitted to or approved by the Agency, are located in the facility's operating record, as required.

c. How many Agency staff members will be tasked with reviewing plans and assessments not required to be submitted to, or approved by, the Agency?

d. How often will those plans and assessments be reviewed by the Agency?

e. How much time does it take to review the various plans and assessments referenced in the subparts to question 3 above?

f. If the plans and assessments do not meet applicable requirements, what is the Agency's plan to remedy those deficiencies?

9. Does the Agency have personnel on staff that are qualified to evaluate structural stability and/or safety factor assessments and will be tasked with reviewing those assessments?

Response: No. The Agency does not have personnel on staff that are qualified to evaluate structural stability and/or safety factor assessments.

a. If so, could you please specifically identify those staff members and provide the credentials that qualify them to evaluate structural stability and/or safety factor assessments?

b. If not, does the Agency have a plan to ensure that structural stability and safety factor requirements are met? If so, please describe that plan, including the specific provision(s) of the proposed regulations where it is set forth.

Response: Dam safety is regulated in Illinois by the Illinois Department of Natural Resources pursuant to 17 Ill. Adm. Code Part 3702

10. Does the Agency have personnel on staff that are qualified to evaluate fugitive

dust control plans and will be tasked with reviewing those plans?

Response: Yes, the Agency will have appropriate technical staff to review plans or assessments which are required to be submitted to the Agency pursuant to Part 845.

a. If so, could you please specifically identify those staff members and provide the credentials that qualify them to evaluate fugitive dust control plans?

Response: See Response to number 10 above.

b. If not, does the Agency have a plan to ensure that fugitive dust control requirements are met? If so, please describe that plan, including the specific provision(s) of the proposed regulations where it is set forth.

Response: See Response to number 10 above.

Are there any other permitting programs that the Agency administers that require submission of "certifications" or "demonstrations" provided by a third party, without submission of the underlying documents that "certification" or "demonstration" pertains to? If so, please identify the program and the referenced certification or demonstration.

Response: No, not in the manner proposed in this Section. The scope of Part 845 covers a broad array of topics, such as hazard potential classification, structural stability, safety factor assessment, and emergency action plans, which are typically not part of a Bureau of Water construction, operating, or NPDES permit.

11. Regarding the plans referenced in the subparts to question 3 above, will compliance with those plans be a required condition of a permit?

Response: Completion and certification of the plans is a requirement of the proposed rule. Failure to do so would be a violation of the regulations and would be subject to enforcement. The certifications are required as part of the applications, but the incorporation into the permit of one or more of the plans, or a portion of one or more of the plans, would be determined on a case by case basis.

a. If so, please identify which plans will be required conditions of permits and state which type of permit they will be a required condition of.

b. If not, please explain why not.

Response: See above.

12. Regarding any plans or programs that are required to be submitted in permit applications, will compliance with those plans or programs be a required condition of a permit?

Response: Completion and certification of the plans is a requirement of the proposed rule. Failure to do so would be a violation of the regulations and would be subject to enforcement. The certifications are required as part of the applications, but the incorporation of one or more of the plans, or a portion of one or more of the plans, would be determined on a case by case basis.

a. If so, please identify which plans or programs will be required conditions of permits and state which type of permit they will be a required condition of.

b. If not, please explain why not.

Response: See above.

13. Regarding proposed 35 Ill. Adm. Code 845.210(d), why do the rules not require a qualified professional engineer certification for previous assessments, investigations, plans and programs?

Response: If an applicant requests that a previous assessment, investigation, plan, or program be used to satisfy the requirements of this Part, that request will be reviewed by the Agency on a case by case basis as part of the permit application review.

a. Will the Agency verify whether these previous assessments, investigations or plans continue to accurately reflect conditions at the impoundments? If so:

Response: If an applicant requests that a previously completed assessment, investigation or plan be used to comply with the requirements of this Part, the applicant would need to provide justification that the information in the assessment, investigation, or plan is till applicable and meets the requirements of this Part. Many of these assessments, investigation, or plans were prepared in accordance with 40 CFR Part 257.

i. Is that verification required by the proposed rules? If yes, please identify the relevant provision(s).

Response: The proposed rules provide the Agency discretion in approving the use of previous assessments, investigations or plans. Section 845.210(d)(1) states that the Agency MAY approve the use of any hydrogeologic site investigation or characterization, groundwater monitoring well or system, or groundwater monitoring plan completed prior to the effective date of the rule. Section 845.210(d)(2) states that the owner or operator may use a previously completed location demonstration if it meets applicable requirements, Section 845.210(d)(3) state that the owner or operator may use a previously completed hazard potential assessment, structural stability assessment or safety factor assessment provided it was not completed more than five years ago, and that it meets applicable requirements of this Section.

ii. When will that verification be done?

Response: Review of whether the appropriate and sufficient justification has been provided for use of previous assessments, investigations or plans will occur during the application review process.

iii. Will that verification be conducted prior to making permitting decisions about the site, including permitting decisions concerning corrective action or closure?

Response: Yes.

iv. Could you please specifically identify the Agency staff who will verify whether the previous assessment, investigation, or plan continues to accurately reflect conditions at the impoundment?

Response: Agency technical staff from either the Division of Public Water Supplies Groundwater Section, or the Division of Water Pollution Control Permit Section will review a request to use a previous assessment, investigation or plan to satisfy regulatory requirements as part of the permit application review process.

14. Regarding proposed 35 Ill. Adm. Code 845.220, why do the rules not require cost estimates be provided as part of a construction permit?

Response: Section 845.220 contains the technical requirements which must be provided in a construction permit application. These include location restrictions, design criteria, and other technical information which must met to receive a construction permit. This information is necessary to determine compliance with the technical performance requirements of the proposed rule. These technical requirements do not allow cost to be considered.

15. Regarding proposed 35 Ill. Adm. Code 845.220(b):

a. Why do the rules not prohibit new construction of a surface impoundment in floodplains?

Response: In Illinois, construction activities in a floodplain are governed by the Rivers, Lakes, and Streams Act (615 ILCS 5/5 through 29a) and 17 Ill. Adm. Code Part 3700 as administered by the Illinois Department of Natural Resources.

b. Why do the rules not prohibit new construction of surface impoundments in areas with environmental justice concerns?

Response: Environmental justice policies and regulations do not prohibit construction or development in areas with environmental justice concerns. The goal of environmental justice is to ensure that communities are not disproportionately impacted by degradation of the environment or receive a less than equitable share of environmental protection and

benefits, and to strengthen the public's involvement in environmental decision-making, including permitting and regulation, and where practicable, enforcement matters.

16. Regarding proposed 35 Ill. Adm. Code 845.220(c)(2) and (d)(3):

a. Why do the rules not require a demonstration of achieving compliance with applicable groundwater standards within thirty years?

Response: 40 CFR Part 257 does not require compliance with applicable groundwater standards within thirty years. (Agency Response)

b. Do the proposed rules require modeling groundwater with consideration of seasonal variation of groundwater elevations? If so, please specify the relevant provision(s) and answer the following questions.

Response: The proposed rules do require groundwater modeling take into account seasonal variation. It is specifically mentioned in Section 845.710(d)(3) under Closure Alternatives: "include a description of the fate and transport of contaminants with the closure alternative over time including consideration of seasonal variations." (Agency Response)

i. How does the Agency define seasonal variation?

Response: A seasonal variation is repeated and expected changes in a value of a parameter over time periods of one year or less. (Agency Response)

ii. How will the modeling consider seasonal variation?

Response**:** Transient groundwater modeling will need to be conducted to determine the effect of seasonally varying parameters on the outcome of the model(s). (Agency Response)

c. If the proposed rules do not required modeling groundwater with consideration of seasonal variation of groundwater elevations, why not?

Response: See response to 17(b).

17. Regarding proposed 35 Ill. Adm. Code 845.230(a), why do the rules not prohibit existing surface impoundments in floodplains?

Response: Most existing CCR surface impoundments are located at a coal fired power station on the banks or either a river or lake. The power stations were located near a body of water that is normally used to provide a water source for facility operations. Neither 40 CFR 257 nor the proposed Part 845 require automatic closure by removal for surface impoundments which may be located in a floodplain. Existing surface impoundments must meet the location restrictions of Section 845 Subpart C to continue to operate. Pursuant to Section 845.350(a), an owner or operator of a CCR surface impoundment who fails to demonstrate compliance with the requirements of Subpart C, is subject to the requirements of Section 845.700: Required Closure of Retrofit if CCR Surface Impoundments.

18. Regarding proposed 35 Ill. Adm. Code 845.230(a)(1) to (a)(11):

a. Why do the rules not require the certifications be provided by a professional engineer?

Response: Section 845.230(a)(1), (6), (7), (8), (9), (10), and (11) do not specifically mention certification by a professional engineer, however, they do reference the subsections which specifically address those assessments. Those referenced subsections contain the requirement for certification by a qualified professional engineer.

b. Why do the rules not require the permit applications include all documents supporting certifications pursuant to (a)(1) to (a)(11) or relied on be providing such certifications?

Response: Most of these certifications were also required by 40 CFR Part 257, which required the certifications and documentation to be either available on the owner or operators website, or placed in their operating record. The Agency is proposing to require certification that these activities were completed and that the certifications along with the associated plans and documentation be provided in the facility operating record and available on the facility website.

19. Regarding proposed 35 Ill. Adm. Code 845.230(b), why do the rules not require providing documents supporting certified plans pursuant to (b)(1), (b)(2), and (b)(5)?

Response: Section 845.23(b)(1) does require documentation of slope protection. Section 834.230(b)(2) requires a certification only if the Emergency Action Plan was amended, and (b)(5) is a simple statement concerning groundwater monitoring.

20. Regarding proposed 35 Ill. Adm. Code 845.230(d)(3):

a. Why do the rules not require certification for whether the surface impoundment has a liner that meets the requirements of proposed 35 Ill. Adm. Code 845.400(b) or 845.400(c)?

Response: Section 845.230(d)(3) applies to impoundments which have been removed from service and are being closed prior to July 30 2021. These facilities are being closed in accordance with a previously approved closure plan. In these cases, a certification of the liner specifications is unnecessary, since the Agency has already reviewed and approved of the owner or operator's proposed closure activities.

b. Why do the rules not require providing documents supporting the Emergency Action Plan certification required by (d)(3)(D)?

Response: The proposed rules require that an Emergency Action Plan be developed, and to certify that it has been done. The Emergency Action Plan itself must be placed in the facility's operating record and made publicly available on its CCR website. The Emergency Action Plan is for the owner or operator to use in conjunction with local authorities should the need arise.

21. Regarding proposed 35 Ill. Adm. Code 845.240(a):

a. Do the rules require a pre-application public meeting for joint construction & operating permit applications? If so, please specify the provision(s) that so require.

Response: Yes. A joint construction and operating permit is still a construction permit that also happens to cover operation. Section 845.240(a) requires at least two public meetings at least 30 days before submittal of a construction permit application.

b. Why do the rules not require an interpreter at public meetings if the public notice is sent out in a non-English language pursuant to proposed 35 Ill. Adm. Code 845.240(c)?

Response: The Agency's Environmental Justice Public Participation Policy (Section V (D)(1)) encourages applicants to provide meaningful public outreach in pre-application outreach this would include, as a consideration, translation during public hearings. (Agency Response)

c. How does the Agency plan to make the public meeting a "meaningful" opportunity for public participation for non-English speaking populations? Please identify where that is specified in the proposed rules.

Response: As required by 22.59(g)(6) of the Act, provisions in the Agency's required outreach, 845.260, outline the requirements for meaningful public outreach. The Agency's outreach will comport with the Agency's EJ Public Participation Policy including guidance on the availability of translation.

Based on this question, if the Board believes a revision is warranted, the Agency suggests that the Board add the following requirement to Section 845.240(c):

"C) When a proposed construction project or any related activity is located in an area with a significant proportion of non-English speaking residents, the notification must be circulated, or broadcast, in both English and the appropriate non-English language, and the owner or operator must provide translation services during the public meetings required by Section 845.240(a), if requested by non-English speakers." (Agency Response)

22. Regarding proposed 35 Ill. Adm. Code 845.240(b):

a. How far in advance of the public meeting must the owner or operator provide the notices specified in proposed 845.240(b)? Please identify where that is specified in the rules.

Response: Section 845.240(b) does not specify how far in advance the notice of the public meeting must be given. Section 845.249(e) specifies that the owner or operator must post the documentation on their website 14 days prior to the meeting.

b. If the proposed rules do not require that the notice in 845.240(b) be provided in advance of the pre-application meeting, why do they not require that?

Response: In light of the question, the Agency would not be opposed to revising Section 845.240(b) to state: "The owner or operator must prepare and circulate a notice explaining the proposed construction project and any related activities and the time and place of the public meeting. Such a notification must be mailed, delivered or posted at least 14 days prior to the public meeting. The owner or operator of the CCR surface impoundment must:"

c. Does the Agency intend for the owner or operator's CCR website address to be included in the pre-application public meeting notice?

i. If so, why did the Agency not specify that in the proposed rules?

ii. If not, why not?

iii. Given that the owner or operator's CCR website is where application materials must be posted fourteen days before the public meeting under Proposed Section 845.240(e), if the public notice does not include the owner or operator's CCR website, how does the Agency intend to ensure the public can find the relevant materials in advance of the meeting?

Response: Yes, the Agency did intend for the owner or operator to include their CCR website in the notification. The Agency would suggest modifying Section 845.240(b) to include: "4) All notifications of the pre-application meeting must include the address of the owner or operator's CCR webpage, so that the public may have available all related documentation prior to the meeting."

d. Why do the rules not require posting public notice in the local newspaper or on the owner or operator's CCR website?

Response: The Agency decided that direct mailing or hand delivery, usage of social media, and public posting in multiple locations was likely more effective than a newspaper notice. The owner or operator's CCR website is useful for finding the

documentation required, but the Agency felt that other methods of notification were more likely to be seen initially.

e. Given the length and complexity of permit application materials, did the Agency consider requiring that the draft application materials be available on the publicly available website at least thirty days before the pre-application meeting, in order to allow the public to be better informed and prepared for the meeting?

Response: The Agency made the initial determination that 14 days was enough time to review materials prior to the pre-application public meetings. Additional information could be obtained at the public meeting. During the permit issuance process, the public will have a 30-day public notice period to make comments, ask questions, and request a public hearing if necessary.

i. If so, why did the Agency not propose to require those materials to be posted at least thirty days before the public meeting?

Response: See above.

ii. If the Agency did not consider that, why was it not considered?

Response: See above.

f. Why do the rules not require notice to the clerk of the nearest city, town or village requesting further posting in conspicuous locations throughout the city, town, or village?

Response: A municipal clerk could decide to post the notification themselves, but the owner or operator is already required to post the notice in conspicuous locations throughout village, towns, or cities within 10 miles of the facility, mail or hand deliver notice to all residents within one mile of the facility, and post the notice on the owner or operator's social media outlets.

g. Why do the rules require a pre-application public meeting?

Response: A pre-application public meeting was required by 40 CFR Part 257, and the Agency was required to be at least as protective, and to provide meaningful public participation.

23. Has the Agency received information from the public on proposed regulations or a proposed permit that has led the Agency to strengthen protections in the proposed regulations or permit? If so, please provide examples.

Response: The NPDES permit program includes public notice of a draft permit, as well as

the opportunity for the public to request a public hearing. The Agency frequently receives comments from third parties that result in either new or more stringent permit conditions, or additional limitations and monitoring.

24. Regarding proposed 35 Ill. Adm. Code 845.240(e), why do the rules not require a fact sheet of the facility and the tentative permit application?

Response: Section 845.240(e) requires the owner or operator to post on their website all documentation relied upon in making their tentative construction permit application. Section 845.240(f) requires the owner or operator to outline its decision-making process for the construction permit application. This should provide equivalent information to the public.

25. Regarding proposed 35 Ill. Adm. Code 845.260(b):

a. Why do the rules not require instructions on how to request a public hearing?

Response: Section 845.260(d)(2) states that within the 30-day public notice period, any person, including the applicant, may submit to the Agency a request for a public hearing which must include reasons why a hearing is warranted. Each notice will provide contact information for the Agency but the Agency does not believe that the rule should be prescriptive and limit how requests must be received. (Agency Response)

b. Why do the rules not require instructions on how to be added to the agency's listserv?

Response: Instructions of signing up for the listserv should not be in the rule as the technical or instructive details of signup may change with new technologies or changes to the Agency website or procedures. (Agency Response)

c. Why do the rules not require instructions on how to request technical assistance funding from U.S. EPA?

Response: The Agency requires additional information concerning this question, and is unclear what technical assistance funding the question refers to.

d. Does the Agency intend for all application materials, the draft permit, and the tentative permit determination be posted on the permit applicant's CCR website by the date by which the notice of the tentative determination must be circulated?

Response: No, the Agency did not.

i. If not, why not?

Response: Once the Agency has received an application, the Agency will post a notification on its webpage that contains information on how to request a copy of the permit application and related documents, and will e-mail the listserv for that facility to notify interested parties that an application has been received. The Agency will also post the draft permit to the Agency's website during the public notice period.

ii. If so, do the proposed rules so require? Please identify the relevant provision(s).

iii. Why do the proposed rules not require that the website on which the relevant application materials, draft permit, and tentative permit decision are posted be included in the notice?

Response: The Agency's tentative decision and the draft permit will be posted on the Agency's website.

iv. Does the Agency intend to require community members to have to go to Springfield or other physical locations in order to review applications materials, the draft permit, and the tentative determination?

Response: This public notice process is modeled after the NPDES public notice process. Interested parties can request copies of the application during the public notice period. They do not have to physically travel to IEPA offices to obtain a copy.

26. Regarding proposed 35 Ill. Adm. Code 845.260(c):

a. Why do the rules require a 30-day comment period and not a 45-day comment period?

Response: The Agency chose the 30-day timeframe for public notice to be consistent with the NPDES public notice timeframe.

b. Will all application materials, the draft permit, and any accompanying documents be posted on a public website by the start of the comment period? If so, please identify the relevant provision(s).

Response: Section 845.260 contains the procedures for conducting a public notice of a tentative Agency decision. Modeled after the NPDES public notice process, the Agency will post on its website and Agency social media outlets, notify the municipal clerk of the nearest city, town, or village for public posting, require the applicant to post on its premises, and the Agency will e-mail the notice to the Agency listserv. This notification will consist of a fact sheet and the Agency's tentative decision or draft permit.

c. Why do the rules not require posting all comments received on a publicly available website?

Response: Consistent with the NPDES program, all comments received become part of the permit record and are available through the Freedom of Information Act.

27. Regarding proposed 35 Ill. Adm. Code 845.260(d):

a. Why do the rules not require the agency to hold a public hearing if the agency determines that there exists a significant degree of public interest, even though it is called for by the Statement of Reasons?

Response: The intent was to convey the same determination process as for NPDES permits. If the Board chooses to revise the language, the Agency would agree with substituting the same language used in the NPDES regulations at 35 Ill. Adm. Code 309.115(a)(1) which states: " The Agency shall hold a public hearing on the issuance or denial of the an NPDES Permit or group of permits whenever the Agency determines that there exists a significant degree of public interest in the proposed permit or group of permits (instances of doubt shall be resolved in favor of holding the hearing), to warrant the holding of such a hearing."

b. What does a "significant degree of public interest" mean?

Response: The term "significant degree of public interest" is not defined in either 35 Ill. Adm. Code Part 309, or proposed Part 845

i. Is that specified in the proposed rules? If so, please specify the relevant provision(s).

Response: Significant degree of public interest is something the Agency looks at on a case by case basis. If there is any doubt whether to hold a hearing or not, the Agency favors holding the hearing.

c. Why do the rules not provide the option to request interpretive services in a non- English language?

Response: As required by 22.59(g)(6) of the Act, provisions in the Agency's required outreach, 845.260, outline the requirements for meaningful public outreach. The Agency's outreach will comport with the Agency's EJ Public Participation Policy including guidance on the availability of translation. (Agency Response)

28. Regarding proposed 35 Ill. Adm. Code 845.280(d)(c), do the requirements of proposed 35 Ill. Adm. Code 845.260 apply to modification applications submitted by the owner or operator of a surface impoundment?

Response: Yes. The modification of a permit must follow the public notice process outlined in Section 845.260, UNLESS the modification meets the definition of a "minor modification" pursuant to Section 845.280(d)

29. Regarding proposed of 35 Ill. Adm. Code 845.280(e)(2), what is a reasonably justifiable cause for which a waiver will be granted when a permittee does not meet the 180-day requirement for permit renewal filing?

Response: This section also comes from the NPDES regulations, and allows for the waiver of a re-application deadline for circumstances out of the control of the permittee. This could result from among other things, the accidental contamination of samples by the lab or lab errors resulting in the in ability to report sampling data, operational issues or extended plant shut-down, severe storms or other acts of God which may prevent the collection of data needed as part of the application, and other similar causes.

30. Regarding proposed of 35 Ill. Adm. Code 845.260(f), why do the rules not require posting the agency's responsiveness summary on a publicly available website?

Response: In practice, the Agency intends to post the responsiveness summary and the Agency's final permit determination on the Agency's website. This is the current practice of the NPDES program. The Agency would not object to the revision of Section 845.270(c) to require the posting of the Agency's final determination as well as the responsiveness summary if applicable, to the Agency's website. Should the Board deem a revision appropriate, the Agency would suggest the following language:
"The Agency shall provide a notice of the issuance or denial of the permit to the applicant, to any person who provides comments or an email address to the Agency during the public notice period or a public hearing, and to any person on the Agency' listserv for the facility. Such notice shall briefly indicate any significant changes which were made from terms and conditions set forth in the draft permit. The Agency shall post its final permit determination and if a public hearing was held, the responsiveness summary, to the Agency's website."

CHRIS PRESSNALL

1. Regarding proposed 35 Ill. Adm. Code 845.700(g):

a. Why do the criteria for an area of environmental justice (EJ) concern only rely upon income below poverty and/or minority population greater than the statewide average?

Response: The Illinois EPA proposed utilizing the existing demographic screening tool for consistency in application of EJ concepts across Agency programs.

b. Are there other factors that IEPA would agree are relevant for the purposes of identifying areas of environmental justice concern?

Response: No. The Illinois EPA utilizes the term "area of EJ concern" to acknowledge that it is a demographic screening tool and does not attempt to incorporate environmental or other indicators.

c. Why does IEPA not consider environmental indicators, such as exposure to PM 2.5, when determining if an area is an area of EJ concern?

Response: As mentioned above, Illinois EPA's EJ Start is a demographic screening tool utilized to identify "areas of EJ concern" and does not seek to incorporate environmental or other indicators.

d. Why does IEPA not consider environmental justice indexes, such as cancer risk, when determining if an area is an area of EJ concern?

Response: As mentioned above, Illinois EPA's EJ Start is a demographic screening tool utilized to identify "areas of EJ concern" and does not seek to incorporate environmental or other indicators.

e. Are there instances where part of a community does not fall into Category 3, but would ordinarily be recognized as an area of environmental justice concern?

Response: The Agency cannot answer this question without more specificity or clarification on what is meant by ordinarily.

2. Regarding EJ Start, at page 2, continuing to page 3, your testimony indicates that an area qualifies as an EJ area (for either minority or income or both) based on a score of being twice the Illinois average.

a. Would you agree that this is a "bright line rule"? If not, please explain why not.

Response: Yes, it is a "bright line rule".

b. Is drawing the line at twice the Illinois average somewhat arbitrary? If not, please explain why not.

Response: In order to assess the potential for disproportionate impacts on an area, which is a foundational concept in EJ, the Illinois EPA determined that census block groups and areas within one mile of census blocks with twice the statewide average of minority and/or low-income would identify communities with potential for disproportionate impacts given the high percentage of low-income and/or minority persons.

c. For instance, an area could be 1.9 times the Illinois average for minority

and 1.9 times the Illinois average for low-income and not fall within Illinois EPA's classification of EJ, right?

Response: Theoretically yes. However, the Illinois EPA adds a one-mile buffer to each census block group that meets the criteria for an area of EJ concern, which minimizes the chance of failing to identify communities that are close to meeting the screening criteria but do not.

Could an area that is 1.9 times the Illinois average for minority and 1.9 times the Illinois average for low-income still be overburdened, as you use that term in your testimony?

Response: Yes.

d. Do you think that there can be a bright line rule that captures all the EJ areas and excludes all the non-EJ areas?

Response: No, which is why the Illinois EPA utilizes a screening criterion to identify areas of EJ concern.

i. If so, why?

ii. If not, why not?

Response: Determining whether a given area is an "EJ community" requires a more in-depth analysis. In fact, USEPA's EJ Screen explicitly states that it does not identify areas as EJ communities but rather gives interested parties data to perform analyses for the desired purpose such as a grant application.

e. Are there a lot of factors that affect whether an area is EJ? Are there factors beyond minority population and low-income population? If so, what are they?

Response: Potentially yes. USEPA has identified some potential factors here: https://www.epa.gov/ejscreen/overview-environmental-indicators-ejscreen and here: https://www.epa.gov/ejscreen/overview-demographic-indicators-ejscreen. The factors utilized depends on the study area and the purpose of the EJ determination. Furthermore, other factors not utilized by USEPA could conceivably be used if sufficient and accurate data was available.

3. On page 3, your testimony states that "USEPA uses a wide variety of information to 'paint a picture' of the area around a facility in the form of percentiles," correct?

Response: Yes.

a. Why did you include this discussion of how USEPA identifies EJ areas in your testimony?

Response: To contrast USEPA's approach, which does not identify EJ communities, with Illinois EPA's approach, which identifies areas of EJ concern.

b. Did you include it for the purpose of suggesting that you do not agree with the way USEPA does it?

Response: No. As stated previously, it was included to note that USEPA's EJ Screen does not identify EJ communities.

c. What are some of the factors that USEPA considers to "paint a picture" of the area around a facility? Please list all that you are aware of.

Response: The factors utilized by USEPA can be found here: https://www.epa.gov/ejscreen/overview-environmental-indicators-ejscreen and here: https://www.epa.gov/ejscreen/overview-demographic-indicators-ejscreen

i. Why does Illinois not use those factors in determining what areas constitute areas of EJ concern? Please explain.

Response: As discussed elsewhere, the Illinois EPA utilizes percent minority and low-income to perform a demographic screen and identify areas of EJ concern.

ii. Does Illinois use any tool(s) to evaluate pollution burdens on Illinois communities? If so, please identify them and state which types of pollution – e.g., air, water, etc. – they address.

Response: Yes, the Illinois EPA utilizes various tools available to analyze site-specific issues. Examples are USEPA EJ Screen and the Toxic Release Inventory.

4. On page 3 of your testimony, you use the term "overburdened" and indicate that USEPA identifies areas that are "overburdened". You go on to indicate that "overburdened" means "meeting the criteria of an EJ community."

a. Is it the Agency's position that EJ communities are overburdened?

Response: Generally yes, EJ communities by definition are overburdened.

b. If so, can you please identify what EJ communities are overburdened with?

Response: No because that would require a community specific analysis.

5. On page 3 of your testimony, you state that "Prioritization [of] coal ash impoundments located in areas of environmental justice concern is appropriate given the potential impact of coal ash impoundments on overburdened

communities."

a. What is the "potential impact" of coal ash impoundments in areas of environmental justice concern?

Response: Any potential migration of pollution (air, water or land) offsite.

b. Does IEPA have its own definition of "overburdened communities"?

Response: No.

c. The term "overburdened communities" does not appear in IEPA's EJ policy, correct?

Response: Correct.

d. Did you rely on USEPA's definition of overburdened communities?

Response: The Illinois EPA did not rely on USEPA's definition of overburdened communities for the purposes of the coal ash impoundment rulemaking in so far as the Agency is relying on its demographic screening tool EJ Start.

e. USEPA considers factors beyond just minority and low-income in identifying overburdened communities, correct?

Response: Yes.

f. What other factors? Please list all that you are aware of.

Response: USEPA defines "overburdened community" as minority, low-income, tribal, or indigenous populations or geographic locations in the United States that potentially experience disproportionate environmental harms and risks. This disproportionality can be as a result of greater vulnerability to environmental hazards, lack of opportunity for public participation, or other factors. Increased vulnerability may be attributable to an accumulation of negative or lack of positive environmental, health, economic, or social conditions within these populations or places. The term describes situations where multiple factors, including both environmental and socio-economic stressors, may act cumulatively to affect health and the environment and contribute to persistent environmental health disparities. https://www.epa.gov/environmentaljustice/ej-2020-glossary

g. Are these the same factors you identified above when you listed the factors that USEPA consider to "paint a picture" of the area around a facility?

Response: Potentially yes but USEPA's definition of overburdened communities does not identify specific factors.

h. Would you agree that it is appropriate to consider those factors?

Response: It is unclear for what purpose the question refers to.

i. **If not, why not?**

6. **The only way that the Proposed Rule prioritizes coal ash impoundments in EJ communities is through requiring submittal of the closure applications for impoundments in EJ communities to be first, right?**

   Response: Section 845.700(g) prioritizes closure, with Category 1 having the highest priority for closure and Category 7 having the lowest priority for closure. Category 3 includes CCR surface impoundments located in areas of EJ concern. Areas of environmental concern are not referenced outside of Subpart G: Closure and Post-Closure Care. (Agency Response)

   a. **The Coal Ash Pollution Prevention Act requires the prioritization of closure of impoundments in EJ communities that are required to close under Federal Law, right?**

      Response: Section 22.59(g)(9) requires the Agency to propose and the Board to adopt rules that specify a method to prioritize CCR surface impoundments required to close so that CCR surface impoundments with the highest risk to public health and the environment, and areas of environmental justice concern are given first priority. (Agency Response)

   b. **Is there anything limiting Illinois EPA from prioritizing coal ash ponds in EJ areas in a manner not specifically mandated by the Coal Ash Pollution Prevention Act?**

   Response: Regarding issuance of permits, Illinois EPA is limited by its statutory authority in the Act. This question would need to be narrowed for the Agency to provide a more informative answer. (Agency Response)

      i. **If so, what?**

   c. **Is IEPA's EJ policy "evolutionary"?**

Response: Yes.

i. **What does it mean to be "evolutionary"?**

Response: That the policy will be revised based on new information, procedures, etc**.**

ii. **Would one way of being "evolutionary" be to go further than the Coal Ash Pollution Prevention Act's explicit mandates in prioritizing EJ communities?**

Response: This question is beyond the scope of the rulemaking.

d. **Is one of the goals of Illinois EPA's EJ policy to be "responsive" to the communities it serves?**

Response: Yes.

i. **What does it mean to be "responsive to the communities it serves"?**

Response: Provide information, answer questions and resolve issues raised by community members and groups that concern EJ issues.

ii. **What does the "it" refer to in "it serves"? IEPA?**

Response: Yes.

iii. **And what "communities" does this refer to? EJ communities?**

Response: Communities that raise concerns or questions related to EJ issues.

iv. **Would one way of being responsive to the communities IEPA serves under the EJ policy be to close ash impoundments that EJ communities ask to be closed?**

Response: This question is beyond the scope of the rulemaking. Notwithstanding, the EJ policy is just that, a policy and not a law or regulation so inclusion of such a provision would be unenforceable.

v. **Would another way of being responsive to the communities IEPA serves under the EJ policy be to close by removal ash impoundments that EJ communities ask to be closed by removal?**

Response: This question is beyond the scope of the rulemaking.

e. **There are other ways of prioritizing coal ash impoundments in EJ areas, right?**

i. **Did IEPA consider other ways?**

ii. **If so, what ways?**

Response: The Illinois EPA prioritized coal ash impoundments in accordance with Public Act 101-171.

f. **Do you know if it is possible for coal plants to continue operating without coal ash impoundments?**

Response: That determination would be an economic decision which would need to be made by the

owner or operator. (Agency Response)

g. Could not a plant simply convert to dry ash handling?

Response: That determination would be an economic decision which would need to be made by the owner or operator. (Agency Response)

h. Would another way of prioritizing coal ash impoundments in EJ communities be to require all such impoundments to close?

Response: The Agency's statutory directive is to prioritize those surface impoundments required to close based on the highest risks to public health, the environment and areas of EJ concern, which is reflected in the proposed rules. (Agency Response)

i. Did IEPA consider complete closure of all coal ash impoundments in EJ communities as one way of prioritizing EJ communities? If so, please explain why this means of prioritization was not included in the Proposed Rule.

Response: No. Section 22.59(g)(9) requires the rules to prioritize CCR surface impoundments required to close under RCRA. (Agency Response)

7. Regarding proposed 35 Ill. Adm. Code 845.700(g)(1)(C):

a. What steps is IEPA going to take to ensure that the communities that make up Category 3 are notified of their status?

Response: The communities that are near a Category 3 CCR surface impoundment will be notified of the status of the impoundments on the owner or operators' publicly available internet site, since the category is required to be placed in the operating record. It is also required to be placed on the website as part of the pre-application public notification for the public meeting held by the owner or operator for any construction permit application as it is part of the documentation relied upon in making the tentative construction permit application. (Agency Response)

b. Where will this information be publicly available?

Response: It must be placed upon the publicly available internet site 30 days within placement in the operating record, or at least 14 days prior to the above mentioned pre-application public meeting. (Agency Response)

8. Regarding proposed 35 Ill. Adm. Code 845.700(g)(1)(C), what is the timeline for IEPA to make the determination that an area falls into Category 3 prioritization?

Response: In Section 845.700 (c), it states that beginning on the effective date of this

Part, the owner or operator of the CCR surface impoundments required to close under subsection (a) or electing to close under subsection (b) must immediately take steps to categorize the CCR surface impoundment pursuant to subsection (g) of this Section. (Agency Response)

9. **Are you aware of the federal requirements for public participation, e.g., Section 7004 of RCRA (42 U.S.C. § 6974) and 40 C.F.R. § 239?**

   Response: The office of Community Relations in conjunction with the Bureau of Water handles public relations aspects of these programs. (Agency Response)

   a. **How do the Proposed Rules align with the federal rules?**

   Response: Section 22.59 of the Act requires that the Agency propose Part 845 to be as protective and comprehensive as Part 257. (Agency Response)

   b. **How does IEPA go above and beyond the federal rules?**

      Response: See above.

10. **On page 3 of your testimony, you state "lack or opportunity for public participation" as one of the causes of the "disproportional environmental harms and risks" borne by areas of environmental justice concern.**

    a. **Are you familiar with the Coal Ash Pollution Prevention Act's mandate in 415 ILCS 5/22.59(g)(6) that the rules must "specify meaningful public participation procedures"?**

Response: Yes.

i. **What makes public participation meaningful?**

Response: USEPA's definition of "meaningful involvement" is instructive: "Potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health; the public's contribution can influence the regulatory agency's decision; the concerns of all participants involved will be considered in the decision-making process; the decision makers seek out and facilitate the involvement of those potentially affected." https://www.epa.gov/environmentaljustice/ej-2020-glossary

ii. **Would that include the owner or operator of a CCR facility putting out notices in non-English language when there is a significant population that does not speak English? If not, please explain.**

Response: Yes.

iii. Would that also include a requirement for the Agency to put out notices of a public hearing in a non-English language when there is a significant population that does not speak English? If not, please explain.

Response: Yes.

iv. Would that include making key documents available in non-English language when there is a significant population that does not speak English? If not, please explain.

Response: Potentially yes depending on the scope and definition of "key documents" and translating technical documents can be problematic insofar as there may not be direct translations available for certain words or concepts among other issues. Notwithstanding, this could include plain language documents generated for the purpose of public outreach.

v. Would that include the public having access to documents supporting the permit application and supporting certifications and plans? If not, please explain.

Response: Yes.

vi. Would that include giving the public a sufficient amount of time to review any permit application materials before a public meeting? If not, please explain.

Response: It is difficult to quantify what amount of time is "sufficient" for any given member of the public considering varying degrees of knowledge and expertise regarding coal ash impoundments and the regulation thereof. The rules have established a process whereby the public engages in the process at an early point (pre-application) and then is give another opportunity to engage during the Agency application review.

vii. Would that include giving the public a sufficient amount of time to review any permit application materials before a pre-application public meeting? If not, please explain.

Response: It is difficult to quantify what about of time is "sufficient" for any given member of the public considering varying degrees of knowledge and expertise regarding coal ash impoundments and the regulation thereof. The rules have

established a process whereby the public engages in the process at an early point (pre-application) and then is give another opportunity to engage during the Agency application review.

b. Are you familiar with the legislature's finding in the Coal Ash Pollution Prevention Act, at 415 ILCS 5/22.59(a)(5), that "meaningful public participation of State residents, especially vulnerable populations who may be affected by regulatory actions, is critical to ensure that environmental justice considerations are incorporated in the development of decision-making related to, and implementation of environmental laws and rulemaking that protects and improves the well-being of communities in the State that bear the disproportionate burdens imposed by environmental pollution"?

Response: Yes.

i. Why is ensuring meaningful public participation critical to ensure that EJ considerations are incorporated?

Response: So that public input is received and considered by decisionmakers and incorporated into the decision-making process to the extent it is practical, appropriate and legally allowed.

ii. What is the Agency doing to ensure that public participation is meaningful?

Response: The activities that call for public participation have not yet begun.

WILLIAM E. BUSCHER

1. Page 1 of your testimony states "Since the early 1990s, new ash impoundments have been built with low permeability liners."

a. What do you mean by "low permeability liners"?

Response: Liners engineered to minimize movement of liquids from the impoundment.

b. Could you please quantify the permeability of low-permeability liners in terms of hydraulic conductivity?

Response: Liners built of compacted soil with a permeability of $1x10^{-7}$ cm/sec or a geomembrane membrane liner designed to impede flow.

c. Could you please compare the permeability of low-permeability liners to the permeability of the composite liner or alternative composite liner specified in Section 845.400?

Response: Composite and alternative composite liners are low permeability liners composed of to different types of low permeability material as described in Response 1(b)

d. Could you please describe the materials with which low-permeability liners were made?

Response: Low permeability liners were constructed of compacted soil, geomembranes, or a combination of these two liner types.

i. Were any of them 60-mil high-density polyethylene (HDPE)? If so, please identify which CCR surface impoundments have 60-mil HPDE liners.

Response: Yes, 60-mil high-density polyethylene (HDPE) liners were utilized at some locations. I am aware of (HDPE) liners being used, but do not have a comprehensive list of all synthetic liner types or thicknesses.

ii. How do low-permeability liners compare in terms of hydraulic conductivity to 60-mil HDPE?

Response: The hydraulic conductivity of the low permeability liner would depend on the make-up of the liner and the installation of the liner
A liner of 60-mil HDPE is a low permeability liner.

iii. Were any of them "Poz-o-pac" liners? If so, please identify which CCR surface impoundments have "poz-o-pac" liners.

Response: The Groundwater Section does not consider a poz-o-pac liner material to be a low permeability liner.

e. Could you please describe whether the low-permeability liners would qualify as composite liners as specified in Section 845.400? Please explain why or why not.

Response: This determination would need to be made on a case by case basis based on the design of the liner. Because the Agency doesn't consider "Poz-o-Pac" to be a low permeability material, it could not be a low permeability component of a composite liner.

2. Page 2 of your testimony discusses Section 845.400 of the Proposed Rule. Section 845.400 liner design criteria for existing CCR surface impoundments, correct?

Response: Yes.

a. Are you familiar with the 40 C.F.R. § 257.71 which contains the liner design criteria for existing CCR surface impoundments for the Federal CCR Rule?

Response: Yes.

b. Are you able to describe how the liner design criteria in Section 845.400 compare to the liner design criteria contained in the 40 C.F.R. § 257.71 of the Federal CCR Rule?

Response: They are the same.

c. Do you know the reason why IEPA selected the liner design criteria that it selected for existing CCR surface impoundments?

Response: Yes.

i. If so, what was that reason?

Response: The liner design was based on the 40 C.F.R. § 257.71 requirements.

ii. Did IEPA simply include the same liner design criteria as the Federal CCR Rule?

Response: Yes.

iii. Did IEPA consider more stringent liner design criteria than the Federal CCR Rule? If so, please explain any reason for rejecting more stringent criteria.

Response: The Agency did not specifically consider more stringent liner design criteria.

d. Comparing Sections 845.400 and 845.410, the liner design criteria are the same for existing surface impoundments and new surface impoundments, correct?

Response: Yes, however Section 845.420 requires a new CCR surface impoundment to be designed, constructed, operated and maintained with a leachate collection and removal system.

i. If you compare 40 C.F.R. § 257.71 and 40 C.F.R. § 257.72, this is also true for the Federal Rule, correct?

Response: Yes.

3. Page 2 of your testimony discusses Section 845.410 of the Proposed Rule Section.

a. Is it accurate that proposed Section 845.410 requires the certification of a qualified professional engineer at two different times: first, to certify that the design of a liner complies with the requirements of the Section 845.410, and second, to certify that the liner has been constructed in accordance with the requirements of the Section?

Response: Yes.

b. Does this Section require the engineer or owner/operator to provide the basis for either certification?

Response: This section does not specify that a basis be provided.

c. Does this Section require the engineer or owner/operator to provide any documentation supporting the certification?

Response: No.

i. If not, did IEPA consider requiring the basis for or documentation supporting either certification? If so, please explain any reason for rejecting such requirements.

Response: Appropriate documentation supporting the certifications will be provided in the permit applications.

4. On page 3 of your testimony, discussing Section 845.450 of the Proposed Rule, you address construction permits for corrective measures and state that "[n]ecessary permits must be obtained from the Agency as soon as feasible."

a. Does the language "as soon as feasible" come directly from 845.450(b)?

Response: Yes.

b. What does the Agency understand "as soon as feasible" to mean?

Response: The feasibility of obtaining a permit depends on the urgency of the needed corrective measure. Section 845.450 deals specifically with structural stability of a CCR impoundment. In some cases, if a corrective measure needs to be implemented immediately the permit may be obtained after the implementation of the corrective measure. In an instance where immediate corrective measures must to be taken in order to maintain the structural integrity of an impoundment the owner operator may then obtain a permit for the corrective measure after the work was completed.

i. Is that interpretation specified in the Proposed Rule? If so, please specify the relevant provision(s).

Response: No.

c. What information may be considered in determining what timeframe is "as soon as feasible"?

Response: The immediate threat which will be addressed by the corrective action must be considered.

d. Is there any information that may not be considered in determining what timeframe is "as soon as feasible"?

Response: Yes.

i. If so, what is it?

Response: Cost.

ii. Is that specified in the proposed rules? If so, please specify the relevant provision(s).

Response: No.

e. Under the Proposed Rule, who makes the determination as to what timeframe is "as soon as feasible"?

Response: The Agency.

f. What happens if there is a dispute about what timeframe is "as soon as feasible"?

Response: The Agency will work to resolve the dispute and may seek injunctive relief under Section 43(a) of the Act.

g. Did the Agency have a reason for not including a specified time period here? If so, please explain the reason.

Response: Yes, Section 450 deals specifically with structural stability of a CCR impoundment. Corrective measures covered in this section involve maintaining the structural stability of the CCR impoundment. In some instances, immediate corrective measures may be required to address an immediate threat to the structural stability of the CCR impoundment. In these cases, the owner or operator is afforded the flexibility to address the threat by commencing work on the corrective measure and then obtaining the necessary permits.

h. Do you know how long an owner/operator has, pursuant to proposed Section 845.670, to submit construction permit applications with corrective

action plans after completing the assessment of corrective measures? If so, please state how long.

Response: Within one year of completing the assessment of corrective measures.

i. Do you know how long an owner/operator has, pursuant to Section 845.660, to complete the assessment of corrective measures after starting the assessment? If so, please state how long.

Response: The assessment of corrective measures must be completed and submitted to the Agency within 90 days of initiation of assessment of corrective measures, unless the owner or operator demonstrates to the Agency the need for additional time to complete the assessment of corrective measures due to site-specific conditions or circumstances. The owner or operator must submit this demonstration along with a certification from a qualified professional engineer attesting that the demonstration is accurate to the Agency within 60 days of initiating an assessment of corrective measures. The Agency shall either approve or disapprove the demonstration within 30 days. The 90-day deadline to complete the assessment of corrective measures may be extended for no longer than 60 days.

j. Is there any reason that specific timeframes can't be set for the determination as to corrective measures and application for necessary construction permits in Section 845.450 just as they were set in Sections 845.660 and 845.670? Please explain your answer.

Response: Section 845.450 (a) deals specifically with structural stability of a CCR impoundment. Corrective measures covered in this section involve maintaining the structural stability of the CCR impoundment. In some instances, immediate corrective measures may be required to address an immediate threat to the structural stability of the CCR impoundment. In these cases, it would seem prudent to afford the owner or operator the flexibility to address the threat by commencing work on the corrective measure and then obtaining the necessary permits.

5. Page 4 of your testimony discusses Section 845.510 of the Proposed Rule, concerning the inflow design flood control system.

a. One of the requirements regarding the inflow design flood control system is the requirement for an inflow design flood control system plan, correct?

Response: Yes.

b. What is the purpose of the inflow design flood control system plan?

Response: The purpose of the inflow design flood control system plan is to document how the inflow design flood control system has been designed and constructed to meet the requirements.

c. What is the "design flood"?

Response: The inflow design flood, at a minimum, is:
A) For a Class 1 CCR surface impoundment, as determined under Section 845.440(a), the probable maximum flood;
B) For a Class 2 CCR surface impoundment, as determined under Section 845.440(a), the 1,000-year flood; or
C) For an incised CCR surface impoundment, the 25-year flood.

d. Does the inflow design flood control system plan itself get submitted to the agency?

Response: No

e. Must the owner/operator get Agency approval for the inflow design flood control plan?

Response: No

f. Is the inflow design flood control system plan part of the permit application?

Response: No.

g. Is the inflow design flood control system plan placed on the owner/operator's publicly accessible internet site?

Response: Yes.

i. If yes, is it required to be posted before operating or construction permits are issued for the CCR surface impoundment?

Response: Yes it should be posted within 30 days of placement within the operator record. Please see Response 5(f).

1. May any of those permits be issued before the plan is posted? If so, please state which.

Response: Yes. Please see Response 5(f).

h. Can the public get the inflow design flood control system plan from the Agency by FOIA?

Response: Yes, if it has been submitted.

i. Do the Proposed Rules provide the public an opportunity to offer comments on the inflow design flood control system plan?

Response: Yes, relative to construction permits.

i. If so, under the proposed rules, must those comments be considered by the Agency in making any decisions with regard to the CCR surface impoundment? Please explain your answer.

Response: Section 845.260(c)(3) and (5) requires the Agency to consider all comments timely received in formulation of its final determination.

LAUREN MARTIN

Air Criteria:

1. Please list all OSHA worker safety regulations pertaining to air that apply to coal ash impoundments.

Response: Established worker safety regulations pertaining to Air Contaminants are found in 29 CFR 1910 Subpart Z.

2. In your testimony, you refer to the "Preamble to Part 257, Section F Operating Criteria" and relate that it "states that fugitive dust should be limited to 35 μg/m3 per 24-hour period or alternative standard established under a State Implementation Plan."

a. Please provide a citation to this source.

Response: 80 Fed. Reg. 21386, (April 17, 2015).

b. Does the Agency's proposed rule purport to limit fugitive dust to 35 ug/m3 per 24-hour period? If so, where?

Response: Section 845.500(b) requires that the fugitive dust control plan identify and describe the measures used to prevent CCR from becoming airborne at the facility. The Agency's proposed rule directs owners and operators to abide by established worker safety regulations. Established worker safety regulations pertaining to Air Contaminants are found in 29 CFR 1910 Subpart Z.

c. Does the Agency's proposed rule purport to establish or comply with an "alternative standard established under a State Implementation Plan"?

i. If so, where?

Response: The Agency's proposed rule directs owners and operators to abide by established worker safety regulations. Established federal worker regulations are found in 29 CFR 1910 and 29 CFR 1926.

ii. If so, what is the alternate standard?

Response: See previous.

3. **Are there any other Illinois regulations applicable to CCR surface impoundments that limit fugitive dust pollution at those impoundments? If so, please identify them by specific citation.**

   Response: Illinois Bureau of Air has fugitive dust regulations, 35 Illinois Administrative Code Part 212.

4. **Your testimony states, "in 845.500(b) Illinois EPA is addressing specific hazardous substances that are found within the CCR materials. Specifically, these materials are arsenic, beryllium, lead, cadmium, and silica."**

   a. **Please state specifically how Proposed Section 845.500(b) addresses these hazardous substances.**

   Response: Proposed Section 845.500 (b) does not address these hazardous substances specifically. US Department of Labor Occupational Safety and Health Administration is in charge of specifics of hazards to workers and the mitigation of those hazards.

   b. **Does it address them beyond citing to applicable OSHA regulations for each of those substances? Please explain.**

   Response: No. OSHA regulations are fairly comprehensive.

5. **In your testimony, you note that "[t]he onus of proving that the arsenic is not present in quantities and particle sizes that can cause acute or chronic exposure symptoms in workers or the surrounding community is on the owners/operators of the CCR surface impoundment."**

   a. **Please identify where the references burden of proof is specified in regulations applicable to CCR surface impoundments, including the specific citation.**

   Response: It is established by references previously submitted that arsenic may be in CCR material. Please see 29 CFR 1910 Subpart Z for further details on air monitoring, measuring, medical monitoring, hazard mitigation and other details regarding arsenic.

   b. **By what methods must owners/operators prove that arsenic is not present in quantities and particle sizes that can cause acute or chronic exposure symptoms in workers or the surrounding community?**

   Response: Because the owners and operators are required by OSHA regulations to protect their site workers from air or dust hazards, after worker safety and health protective measures have been implemented, there should not be an exposure to the public or surrounding community. In other words, if the dust is controlled, it will not impact workers or the public.

c. Are those methods specified in the proposed rules? If so, please identify the relevant provision(s).

Response: Part 845 does not reiterate existing OSHA regulations.

d. Are those methods specified in other regulations applicable to CCR surface impoundments? If so, please identify the relevant provision(s).

Response: Existing OSHA regulations cover dust hazards to site workers. Please refer to 29 CFR 1910 Subpart Z and 29 CFR 1926.

e. What education or qualifications are needed to verify whether an owner or operator has proven that arsenic is not present in quantities and particle sizes that can cause acute or chronic exposure symptoms in workers or the surrounding community?

Response: There should be a "competent" person on site. Competent person is defined by OSHA. It is someone with the necessary experience in the specific task that is being performed.

f. Will the Agency verify that the owner or operator has proven that arsenic is not present in quantities and particle sizes that can cause acute or chronic exposure symptoms in workers or the surrounding community?

Response: No.

i. If so, could you please specifically identify the Agency staff who have the education or qualifications referenced in question 5(e) above?
Response: See previous.

ii. If the Agency will not verify this information, will any other state agency verify that the owner or operator has met its burden of proof concerning arsenic? If so, please identify which agency.

Response: No. This is within the jurisdiction of OSHA.

6. You state that "[a]rsenic quantities in air within the site operations must be documented by the facility to provide a record for due diligence…."

a. Please identify specific provision(s) of the proposed rules that contain the referenced requirement.

Response: Site working conditions are regulated by OSHA. Please see 29 CFR 1910 Subpart Z.

b. How must the facility document the arsenic quantities in air within the site operations? Please explain.

Response: Please see 29 CFR 1910 Subpart Z.

c. To whom must the facility provide this documentation?

Response: Please see 29 CFR 1910.

d. Is the referenced documentation required to be submitted to the Agency? If so, please identify the provision(s) that so require.

Response: No.

e. Is the referenced documentation required to be submitted to another state agency? If so, please specify which agency and the provision(s) that so require.

Response: No.

7. You state that an owner or operators of CCR surface impoundments must "provide objective data" that shows that "beryllium is not present above 0.1% of the material collected in an air monitoring device, then monitoring is not required".

a. What is the "air monitoring device" you reference?

Response: Any that the owner or operator can prove to the OSHA that it is effectively measuring the air around the CCR surface impoundment to show that air quality has been properly characterized during active site operations.

b. Do the proposed regulations require the use of that "air monitoring device"? if so, please specify the relevant provision(s).

Response: OSHA regulations cover air monitoring.

c. How frequently must the material be collected in the air monitoring device? Please identify the relevant provision(s) that so require.

Response: See previous.

d. How frequently must the content of the material collected in the air monitoring device be tested? Please identify the relevant provision(s) that so require.

Response: See b.

e. Must the material collected in the air monitoring device be tested for any other substances found in CCR, in addition to beryllium?

Response: Yes. Please see 29 CFR 1910 subpart Z.

i. If so, which substances? Please identify the relevant provision(s) that so require.

Response: Please see previous.

ii. If so, how frequently must those other substances be tested for? Please identify the relevant provision(s) that so require.

Response: Please see 29 CFR 1910 Subpart Z.

iii. If so, to whom is the information concerning the content of the material collected in the air monitoring device submitted? Please identify the relevant provision(s) that so require.

Response: Please see 29 CFR 1910 Subpart Z.

f. How frequently must the reference "objective data" be provided?

Response: Please see 29 CFR 1910 Subpart Z.

g. To whom must that referenced "objective data" be provided?

Response: Please see 29 CFR 1910 Subpart Z.

h. Must the "objective data" be submitted to the Agency? If so, please identify the specific provision(s) that so require.

Response: Please see 29 CFR 1910 Subpart Z.

i. What "monitoring is not required" if the owner or operator provides "objective data" showing that beryllium is below the 0.1% threshold?

Response: Please see 29 CFR 1910 Subpart Z.

j. How will the Agency ensure the referenced federal regulations are met?

Response: It is the responsibility of the owner or operator to ensure that federal regulations are met.

8. How will IEPA ensure that a fugitive dust control plan complies with Proposed Section 845.500 and relevant federal rules before approving a permit application?

Response: The IEPA will ensure that the fugitive dust control plan complies with Proposed Section 845.500.

9. **How will members of the public be provided "meaningful" opportunities to provide input into the fugitive dust control plans if they are not submitted as a part of the facility's permit application?**

   Response: Members of the public will be provided "meaningful" opportunities to provide input into the fugitive dust control plans during the construction and/or operating permit process.

10. **Is it correct that, for facilities applying for operating permits only, the first time that the Agency will see a facility's operating record as required by Section 845.800(d)(7), per Proposed Section 845.500(b)(6)? Please explain.**

    Response: Proposed Section 845.230(a)(10) requires operating permit applications contain fugitive dust control plan certification required in 845.500(b)(7). The proposed rules require that information in the operating record be posted to the owner or operator's website, but do not require the operating record be submitted to the Agency.

11. **Does the Agency have personnel on staff who are qualified to evaluate fugitive dust control plans?**

    Response: Yes

    a. **If so, whom?**

    Response: Agency will have appropriately credentialed personnel to review required plans or assessments meeting the requirements of the rule to appropriately administer a permit program for Part 845.

    b. **What are their qualifications?**

    Response: Appropriately credentialed Agency staff will be chosen for reviews of required plans or assessments meeting requirements of the rule to appropriately administer a permit program for Part 845.

    c. **How often does the Agency plan to review fugitive dust control plans to ensure that they meet regulatory requirements.**

    Response: The Agency will review the Fugitive Dust Control Plan during the permitting process and Agency inspections or investigations.

    d. **Is such review mandated the Proposed Rules? If so, where?**

    Response: No.

    e. **If the fugitive dust control plans do not meet regulatory requirements, what is the Agency's plan to address their deficiencies?**

Response: Approval will not be provided until deficiencies are addressed**.**

f. How much Agency time does it take to review a fugitive dust control plan?

Response: The time needed to review the fugitive dust control plans will be determined on a site specific basis and depend on the complexity of the site conditions.

12. How will fugitive dust control plans be enforced by the Agency?

Response: Enforcement will be on a case by case basis using the 35 IAC Section 31(a) process. A large component of details of implementation fall within worker safety and OSHA jurisdiction.

a. What Agency time and resources will be allocated towards enforcement?

Response: Agency time and resources will be allocated on a case by case basis.

b. What will enforcement entail?

Response: Specifics of enforcement will be determined on a case by case basis using 35 IAC Section 31(a) process.

c. Would initial review of plans during permitting be less resource intensive than after-the-fact enforcement and review?

Response: Not necessarily.

13. Please refer to Proposed Section 845.500(b)(1).

a. What does "minimize CCR from becoming airborne at the facility" mean?

Response: It means use of dust suppression methods per 29 CFR 1910 and 29 CFR 1926, as applicable.

b. Will the Agency review owners' and operators' choice of fugitive dust control measures to ensure that the measures actually "minimize CCR from becoming airborne at the facility"?

Response: The Agency will review Fugitive Dust Control Plans for compliance with Part 845. Specifics related to worker safety are the jurisdiction of OSHA.

c. Will the Agency review owners' and operators' explanation of how the measures selected as applicable and appropriate for site conditions?

Response: The Agency will review Fugitive Dust Control Plans for compliance with Part 845. Specifics related to worker safety are the jurisdiction of OSHA.

d. If the Agency does plan to review the choice of measures and/or explanation, how will the Agency address any deficiencies it finds?

Response: The Agency has a number of tools available to it for addressing non-compliance with Board regulations, including enforcement through the Section 31 process.

e. Did the Agency conduct any review of the efficacy of the various fugitive dust control measures listed as examples in 845.500(b)(1)?

Response: No.

i. If so, please explain what that review entailed.

Response: Please see previous.

ii. If not, why not?

Response: The examples are current accepted hazard mitigation procedures for reducing dust in the air. Each owner/operator will be responsible for ensuring that the hazard mitigation systems implemented are effective for the work being performed. If the hazard mitigation system is not effective, then the owner/operator are directly violating federal worker safety regulations under OSHA and can be penalized by the US Department of Labor Occupational Safety and Health Administration.

iii. If so, did the Agency discover that any of the listed measures reduce fugitive dust in all or most circumstances?

1. If so, please provide the basis for this finding.

f. Has the Agency evaluated the efficacy of fugitive dust control measures in other contexts (e.g. petcoke piles or coal refuse piles)?

Response: The examples are current accepted hazard mitigation procedures for reducing dust in the air. Each owner/operator will be responsible for ensuring that the hazard mitigation systems implemented are effective for the owner/operator are directly violating federal worker safety regulations under OSHA and can be penalized by the US OSHA or IL OSHA.

i. If so, what contexts?

Response: See previous.

ii. What control measures did the Agency find to be effective?

Response: See previous.

g. Did the Agency consider specifying certain minimum control measures to be required for all sites?

Response: No. The examples are current accepted hazard mitigation procedures for reducing dust in the air. Each owner/operator will be responsible for ensuring that the hazard mitigation systems implemented are effective for the work being performed. If the hazard mitigation system is not effective, then the owner/operator are directly violating federal worker safety regulations under OSHA and can be penalized by the US Department of Labor Occupational Safety and Health Administration.

i. If so, why did the Agency not require certain minimum control measures?

Response: See previous.

ii. If not, why not? Please explain.

Response: See previous.

14. Regarding proposed Section 845.500(b)(2), requiring "procedures to log citizen complaints received by the owner or operator involving CCR fugitive dust events at the facility."

a. What is a "citizen complaint"?

Response: A complaint brought to the owner/operator's attention regarding operations at the CCR surface impoundment.

b. Who can make a "citizen complaint"?

Response: Anyone

c. Must a person be a citizen to make a "citizen complaint"?

Response: No.

d. Do the Proposed Rules require owners or operators to investigate citizen complaints? Please explain.

Response: No.

e. Do the Proposed Rules require owners or operators to respond to citizen complaints? Please explain.

Response: The Proposed Rules require that the owners or operators keep a log of citizen complaints and summary of corrective actions taken in the annual fugitive dust control report.

f. Do the Proposed Rules require owners or operators to address the factors underlying citizen complaints?

Response: No.

i. If so, in what circumstances? Please identify the relevant provision(s). Response: In all circumstances, any individual bringing a complaint to the attention of the owner or operator can also bring the complaint to the attention of OSHA by online submission or calling OSHA.

ii. If not, do the Proposed Rules provide for other mechanisms to address citizen complaints?

Response: No. However, OSHA provides an online tool for complaints and is tasked with investigating complaints and providing follow up with the individual.

g. Do the Proposed Rules require owners or operators to report citizen complaints to the Agency? Please explain.

Response: Citizen complaints are reported in the Annual Fugitive Dust Control Report that is submitted to the Agency.

h. Will the Agency review the citizen complaint log?

Response: That will be determined on a case by case basis.

i. If so, how often will the Agency review a facility's citizen complaint log?

Response: That will be determined on a case by case basis.

j. Does the Agency plan to take any action based on the citizen complaint logs?

Response: That will be determined on a case by case basis.

k. If so, what action(s) would the Agency take?

Response: It would depend on the nature of the complaint and whether there has been follow up from other state or federal agencies.

15. Do the Proposed Rules require any air monitoring ensure the fugitive dust plan is actually working to minimize dust?

Response: Please see 29 CFR 1910 Subpart Z.

a. If so, where?

Response: 29 CFR 1910 Subpart Z.

b. If not, how will the Agency know if fugitive dust plans are implemented and working?

Response: The US Department of Labor Occupational Safety and Health Administration has jurisdiction over the laws and regulations set forth in 29 CFR 1910 and 29 CFR 1926 which determine the entirety of the laws and regulations providing workers safe work environments in the USA.

c. If not, did the Agency consider requiring air monitoring as a part of fugitive dust plans?

Response: The US Department of Labor Occupational Safety and Health Administration has jurisdiction over the laws and regulations set forth in 29 CFR 1910 and 29 CFR 1926 which determine the entirety of the laws and regulations providing workers safe work environments in the USA.

d. If the Agency did consider requiring air monitoring as part of fugitive dust plans but ultimately did not include requirements for air monitoring, on what basis did the Agency make that decision?

Response: The US Department of Labor Occupational Safety and Health Administration has jurisdiction over the laws and regulations set forth in 29 CFR 1910 and 29 CFR 1926 which determine the entirety of the laws and regulations providing workers safe work environments in the USA.

16. Do the Agency‘s proposed regulations include any means for monitoring whether the volume of CCR dust in the air at the impoundment remains within safe levels? If so, please specify the relevant provision(s).

Response: Please see 29 CFR 1910 Subpart Z Toxic and Hazardous Substances.

Safety and Health Plans:

17. Please list all OSHA worker safety regulations that apply to coal ash impoundments, to the Agency’s knowledge.

Response: General Industry OSHA regulations are found in 29 CFR 1910. All private industry construction regulations are in the Safety and Health Regulations for Construction, 29 CFR 1926.

18. You state that “owner operators are allowed to create their own safety data sheets for their individual sites.”

a. On what basis did the Agency decide to allow owner/operators to make their own safety data sheets?

Response: 29 CFR 1910.1200 is the federal regulation for safety data sheets. Each owner/operator is responsible for implementing 29 CFR 1910.1200 as it directs in 29 CFR 1910.1200.

b. Will IEPA verify that any owner/operator-created data sheets:

i. Are at least as comprehensive and accurate as the ones adopted by OSHA?

Response: The Agency is not responsible for safety data sheets. US Department of Labor Occupational Safety and Health Administration is responsible for enforcement of its own regulations.

ii. Cover all hazardous chemical constituents found in the CCR?

Response: Safety data sheets are required to identify the chemical make up of the material listed on the SDS. See 29 CFR 1910.1200 App D.

iii. Are "based on analytical data for airborne dust constituents, leachate constituents, groundwater chemicals and CCR materials found in the CCR surface impoundment," as described in your testimony?

Response: Safety data sheets are required to identify the chemical make-up of the material listed on the SDS. See 29 CFR 1910.1200 App D.

c. If the Agency does not verify any of the above items (b)(i-iii), will anyone verify those items under the proposed regulations?

i. If so, who will do so?

Response: Per 29 CFR 1910.1200 App D, the owner/operators are required to identify the chemicals found within the material they are characterizing for the safety data sheet. OSHA is required to enforce their own regulations by the means and methods they have deemed appropriate. Please refer to osha.gov for further details on OSHA enforcement of their rules and regulations.

ii. Is the verification specified in the proposed regulations? If so, please identify the relevant provision(s).
Response: The verification is not specified in the proposed regulations because it is specified and implemented by OSHA.

d. Will the Agency verify that the owner/operator-created data sheets meet regulatory requirements?

Response: No. OSHA is responsible for verifying safety data sheets meet regulatory requirements.

i. If not, will anyone verify that the sheets meet regulatory requirements?

Response: OSHA is responsible for enforcement of their own regulations, not the Agency.

ii. If so, please explain who will do so and identify the provision(s) in the proposed rules that so require.

Response: Please see OSHA regulations, 29 CFR 1910.

19. The following questions refer to changes between the Stakeholder Draft circulated by IEPA in December 2019 and the Draft currently before the Board.

a. In Proposed Section 845.530(b)(1), why did the Agency change the word "implement" to the word "consider" before the phrase "the recommendations in the most recent NIOSH Pocket Guide"?

Response: The NIOSH Pocket Guide is revised fairly often and is meant for consideration in safety hazard mitigation. It is not the Federal regulation and should be considered but is not the final word on implementation.

b. In Proposed Section 845.530(b)(2), why did the Agency add the phrase "for all hazards not otherwise classified as defined in 29 CFR 1910.1200(c)" after "implement the Occupational Safety and Health Administration regulations in Chapter 17 of Title 29 of the Code of Federal Regulations"?

Response: The Agency added the language to be clear that the Agency considers all work that occurs as a result of the WIIN Act (an amendment to RCRA) to be a part of RCRA and most of the hazards do fall outside of the traditional "hazardous waste" definition. The CCR material can be dealt with as an individual material per the site with a site specific characterization most likely falling within the "hazards not otherwise classified" or the hazardous constituents in the site specific CCR material can be identified these include, but are not limited to, arsenic, cadmium, and silica. The Agency is just pointing out the two ways in which to comply with the federal regulation.

c. In Proposed Section 845.530(c)(1), why did the Agency change the requirement to maintain an "outline of the training program….and a brief description of how the training program is designed to meet actual job tasks" to "outline of the training program…and a brief description of how the training program updates"? (emphasis added)

Response: 29 CFR 1910.120 requires these items already. In the training portion of 1910.120 which is non-mandatory, it is explained that each training program is site-specific. For effective training programs to be implemented, 29 CFR 1910 has to be followed. If it is followed then site-

specific training is implemented appropriately. Because Part 257 and now 845 are amendments to RCRA, 29 CFR 1910.120 is applicable for work with the CCR material. This means that each individual will have OSHA HAZWOPPER training which is required in 29 CFR 1910.120(e).

d. In Proposed Section 845.530(c)(2), why did the Agency delete the phrase "emergencies by familiarizing them with" from the phrase, "At a minimum, the training program must be designed to ensure that facility personnel….are able to respond effectively to the following emergencies by familiarizing them with; A) procedures….B) communications, …." Etc. (emphasis added). It now reads, "ensure that [facility personnel] are able to respond effectively to the following: A) procedures…B) communications, …. Etc."

Response: Owners and operators are required by federal law to adhere to 29 CFR 1910.120 which includes the requested emergency response requirements.

e. Why did the Agency decline to add a requirement, suggested by ELPC, Prairie Rivers Network, and Sierra Club, that the owner or operator provide certain measures for workers, including onsite changing rooms with regularly maintained lockers and showers for workers engaged in the handling, movement, cleanup or excavation of CCR; reasonable time for workers to shower and change into or out of work clothes and protective gear; and onsite enclosed areas or areas shielded from CCR fugitive dust for workers to take breaks and eat meals?

Response: It is already required in 29 CFR 1910.141–Sanitation.

20. Do the Agency's proposed regulations require any personal protective equipment for workers handling CCR? If so, please identify the relevant provision(s).

Response: PPE for workers handling CCR is covered by federal OSHA regulations. Please see 29 CFR 1910 Subpart I.

21. Do the Agency's proposed regulations include any barriers or other physical protections to separate workers from CCR dust while they are on breaks? If so, please specify the relevant provision(s).

Response: The Agency's proposed regulations do not include any barriers or other physical protections to separate workers from CCR dust while they are on breaks because it is already covered by existing OSHA regulations. Please see 29 CFR 1910.141 Sanitation.

22. Does the Agency require submission of any facility's Safety and Health Plan?

Response: No. The owners and operators are required to post the safety and health plans in the facility operating documents online.

a. If so, where?

Response: No. See previous.

b. If not, how will the Agency determine Safety and Health Plans meet regulatory requirements?

Response: At times of review, the Agency will compare the safety and health plan to the requirements outlined in Part 845.

c. Who will do so?

Response: The Agency is charged with enforcing Part 845. US OSHA and IL OSHA also have jurisdiction over safety and health plans.

d. Is such review mandated by the rules? If so, where?

Response: No.

e. How will interested members of the public and/or workers gain access to facility Safety and Health Plans?

Response: Under Part 845, the Safety and Health Plan is required to be posted online with the facility's operating documents. Also, under existing US OSHA regulations, workers have a right to access to the facility Safety and Health Plans. Any violation of that should be reported to the US Department of Labor OSHA for further investigation and enforcement.

f. If plans do not meet regulatory requirements, what is the Agency's plan to address the plans deficiencies?

Response: The Agency is charged with enforcing Board regulations. The Agency has various methods for addressing deficiencies or alleged non-compliance including Section 31 of the Act.

23. Does the Agency have occupational safety experts on staff?

Response: The Agency does not have safety experts on staff as safety expertise is housed in the enforcement, reporting and contact information at https://www2.illinois.gov/idol/Laws-Rules/safety/Pages/default.aspx

a. Will people with occupational safety expertise be asked to review facility Safety and Health Plans?

Response: Please see the previous answer for the link to the Illinois OSHA website.

b. How much Agency staff time and resources will be dedicated to reviewing facility Safety and Health Plans?

Response: The Agency will not be providing staff and resources for facility Safety and Health Plans.

24. Will facility Safety and Health Plans be enforced?

Response: The facility Safety and Health Plans will be enforced per US Department of Labor and Illinois Department of Labor procedures and protocol.

a. What will enforcement of Safety and Health Plans entail?

Response: Details of enforcement are subject to the interpretation and implementation procedures conducted by the US Department of Labor and Illinois Department of Labor.

b. How much Agency staff time and resources will be dedicated to enforcing the worker protections found in Safety and Health Plans?

Response: The Agency is not in charge of worker safety because this function is already covered by the US Department of Labor and Illinois Department of Labor.

ROBERT MATHIS

1. On page 1 of your testimony, you refer to the Financial Assurance Program ("FAP"):

a. How many people are staffed in the FAP?

Response: Three staff members comprise the Bureau of Land FAP staff, in coordination with Bureau of Water program staff.

b. Will any FAP staff be dedicated to the financial assurance requirements of the Proposed Rule?

Response: Staff will be assigned and work with program staff as part of their respective duties.

c. How will responsibilities be divided among the FAP staff?

Response: Typically work in the FAP is divided by Agency Region. Although, that may change to ensure successful review and coordination of this program with Bureau of Water program staff.

2. On page 1 of your testimony, you refer to Standard Operating Procedures for the FAP:

a. What is the purpose of the Standard Operating Procedures?

Response: The Standard Operating Procedures provides continuity in how staff members perform their duties.

b. What are the Standard Operating Procedures' requirements?

Response: The Standard Operating Procedures essentially provide guidance to the staff members in reviewing financial assurance mechanisms, documenting findings, in required reporting to U.S. EPA and if needed preparing enforcement documents.

3. On page 2 of your testimony, you state that "[t]he Agency may sue in any court of competent jurisdiction to enforce its rights regarding financial assurance."

a. Is this true of other programs beside the Proposed Rule?

Response: Yes

b. If so, how often has the Agency sued to enforce its rights regarding financial assurance?

Response: Financial assurance is required by a number of programs and the Agency does not have that data readily available.

i. Can you describe the circumstances?

Response: The Agency has enforced the right of the State to access financial assurance monies to respond to issues for which those funds are pledged. Regarding failure to maintain sufficient financial assurance or compliance with applicable law, any alleged violation that the Agency believes cannot be resolved without the involvement of the Office of the Attorney General or other prosecutorial authority, the Agency may refer the matter for, among other purposes, the imposition of statutory penalties.

c. Can the Attorney General sue on behalf of the Agency to enforce the Agency's rights regarding financial assurance?

Response: Yes.

i. If so, how often has the Agency referred such cases to the Attorney General?

Response: Financial assurance is required by a number of programs and the Agency does not have that data readily available.

ii. Can you describe the circumstances?

Response: If a person does not comply with the applicable regulations and does not receive a CCA from the Agency, or if the Agency believes that the matter cannot be resolved without the involvement of a prosecutorial authority, the matter may be referred.

4. On page 2 of your testimony, you discuss 35 Ill. Adm. Code 845.910, which addresses Upgrading Financial Assurance.

a. Are there other programs beside the Proposed Rule that provide for upgrading financial assurance?

Response: Yes, other programs provide for updating financial assurance.

i. If so, what other programs are there? Please describe those programs.

Response: 35 Ill. Adm Code 811.701 (New Solid Waste Landfills) requires that the financial assurance shall be increased to equal the current cost estimate within 90 days. 35 Ill. Adm. Code 807.603 (Solid Waste) requires that the financial assurance shall be increased to equal the current cost estimate within 90 days. 35 Ill. Adm. Code 848.401 (Management of Used and Waste Tires) the financial assurance must be increased to equal the current cost estimate within 60 days. 35 Ill. Adm. Codes 724.243 and 245 and725.243 and 245 the requirement to upgrade the financial assurance is in the specific financial assurance mechanisms. This allows 60 days.

b. Have regulated entities generally upgraded financial assurance as required?

Response: The regulated community has generally upgraded financial assurance as required.

i. If so, have they done so within the required timeframe?

Response: A high majority of the regulated entities have done so within the required timeframe.

c. How often have regulated entities failed to upgrade financial assurance as required?

i. Can you describe the circumstances?

Response: No circumstances to describe.

5. Regarding proposed 35 Ill. Adm. Code 845.930, you indicate that these

provisions contain the requirements for Cost Estimates.

a. Are there other programs beside the Proposed Rule that provide for cost estimates similar actions (i.e., corrective action)?

Response: Yes.

i. If so, what other programs are there? Please describe those programs.

Response: Solid waste programs under 35 Ill. Adm. Codes 807 and 811. Hazardous waste programs under 35 Ill. Adm. Codes 724 and 725. Used tire program under 35 Ill. Adm. Code 848.

b. Does the Agency verify cost estimates?

Response: Yes.

i. If so, how does it do so?

Response: Initial costs are submitted to the Permit Section for approval. Then annual or Biennial cost estimates are submitted to keep the cost estimate current. If proposed changes to the already approved systems/costs are desired, then these changes are submitted to the Permit Section.

c. Has the Agency ever disagreed with a cost estimate provided in another program?

Response: Yes.

i. If so, can you describe the circumstances?

Response: When the cost estimate does not include all the required costs, or the Agency disagrees with the values assigned.

ii. Can you describe how this situation was resolved?

Response: Usually by contacting the facility or consultant and request changes to the cost estimate.

6. Regarding proposed 35 Ill. Adm. Code 945.940(b), did the Agency consider making cost estimate revisions for modifications to corrective action, closure plan, or post-closure plan a required part of the application to modify a corrective action, closure plan, or post- closure plan?

Response: No, the Agency did not consider requiring inclusion of cost estimates in requests to modify the mentioned plans because cost estimates are related to financial assurance, which is outside of the permit process. 35 Ill. Code 845.940(b) instructs the owner/operator must revise the cost estimate after the Agency approves the request to modify the closure, post-closure or corrective action plan. This implies that the cost estimate submission and review is separate from the permit process. (Agency Response)

a. If so, why were these requirements rejected?

b. If not, why not?

Response: Since the plans are subject to revision until they are approved by the Agency, it is more appropriate to have cost estimates updated following approval. Section 845.940(b) requires cost estimates to be revised within 30 days of Agency approval. However, if a selected closure method increases the estimated closure or post-closure costs, the cost estimate must be revised at least 60 days prior to submitting any closure plan to the Agency. The most current cost estimates have to be placed in the operating record and made available on the publicly available CCR website. The owner/operator must adjust the cost estimates closure, post-closure and corrective action for inflation on an annual basis. Such adjustments shall occur within 60 days prior to the anniversary date of the establishment of the financial instruments pursuant to Section 845.940(a). (Agency Response)

7. Regarding proposed 35 Ill. Adm. Code 945.960(h)(2):

a. Why did the Agency select a time period for reimbursement as within sixty days of receiving the itemized bill?

Response: 35 Ill. Adm Codes 724.243(a)(10), 724.245(a)(11), 725.243(a)(10), 725.245(a)(11), 807.661(g)(2) and 811.710(h)(2) all provide for 60 days. The Agency chose this date to standardize the different programmatic regulations.

8. Regarding proposed 35 Ill. Adm. Code 945.960(h)(3):

a. Are there similar withholding provisions for trust funds in other programs with financial assurance regulations?

Response: 35 Ill. Adm Codes 724.243(a)(10), 724.245(a)(11), 725.243(a)(10), 725.245(a)(11), 807.661(g)(3) and 811.710(h)(3) all provide for withholding reimbursement if the Agency determines that after reimbursement the cost estimate will be greater than the value of the trust.

i. If so, have there been instances in the last ten years where the FAP or the agency withheld reimbursement?

Response: I cannot recall an instance where this has occurred. But the Agency has the authority to withhold reimbursement.

ii. Can you describe the circumstances?

Response: Each matter would be reviewed on a case by case, fact specific basis.

b. What is the procedure for making the determination whether withholding is permissible?

Response: FAP staff compares the current costs estimates in the latest approved permit to the latest valuation of the trust fund. If the trust fund valuation less the requested reimbursement is less than the current cost estimates, then reimbursement will be withheld.

i. Are there Agency staff who make that determination?

Response: Yes, the FAP staff, in consultation with the Bureau of Water program staff

ii. If so, who are the staff?

iii. What are their titles?

Response: At present staffing levels, within the Bureau of Land: Robert Mathis, Jr. – Accountant Advanced; Shannon Mallaney – Accountant; and Victoria Slayton – Accountant. Bureau of Water program staff may also be involved.

iv. How do they make the determination?

Response: FAP staff compares the current costs estimates in the latest approved permit to the latest valuation of the trust fund. If the trust fund valuation less the requested reimbursement is less than the current cost estimates, then reimbursement will be withheld.

v. What criteria does the Agency consider?

Response: The Agency considers the current trust fund valuation, the current cost estimate approved in the latest permit, the Regulations and the reimbursement request.

vi. Has this determination ever been legally challenged by a regulated entity?

Response: I cannot recall an instance where this has occurred.

1. If so, can you describe the circumstances?

2.

vii. Does FAP review any specific documents in order to determine whether withholding is permissible?

Response: The Agency considers the current trust fund valuation, the current cost estimate approved in the latest permit, the Regulations and the reimbursement request.

1. If so, what documents?

Response: The Agency considers the current trust fund valuation, the current cost estimate approved in the latest permit, the Regulations and the reimbursement request.

c. Has a 60-day time period for reimbursement or withholding been used in other FAP contexts?

Response: 35 Ill. Adm Codes 724.243(a)(10), 724.245(a)(11), 725.243(a)(10), 725.245(a)(11), 807.661(g)(2) and 811.710(h)(2) all provide for 60 days. The Agency chose this time frame to standardize the different programmatic regulations.

i. If so, have there been instances in the last ten years where FAP was unable to conduct the analysis necessary to determine whether withholding would be permissible due to the 60-day time limit?

Response: Not that I recall.

d. If a different time period has been used in other FAP contexts, what was the time period?

Response: I cannot recall any other time frame being used.

CWLP

Questions for William E. Buscher

1.) On page 3 of your testimony you mention that Sections 845.450 and 845.460 require an initial and annual Structural Stability Assessment and Safety Factor Assessment, respectively.

a. What was the Agency's basis for requiring a Structural Stability Assessment and Safety Factor Assessment to be conducted annually?

Response: These assessments would then be completed on the same schedule as the annual inspections required by Section 845.540 and could take into account any changes in conditions revealed by the annual inspections.

b. Is it correct that the federal Coal Combustion Residual ("CCR") rule in Part 257 requires these to be conducted initially and every five years?

Response: It is correct that the federal Coal Combustion Residual ("CCR") rule in Part 257 requires these to be conducted initially and every five years.

c. What increase in cost does the Agency expect from increasing this requirement to annually?

Response: It is anticipated that there would be an increase in cost if conditions changed to the point that significant changes in the assessments were required.

2. On page 3 of your testimony, you mention that Section 845.440 requires a Hazard Potential Classification assessment.

a. Do you agree that the Agency's proposal requires this to be conducted initially and annually?

Response: Yes

b. Does the federal CCR rule have a requirement to conduct this assessment annually?

Response: No

c. Do you expect an impoundment's Hazard Potential Classification to change from year to year? What circumstances would cause the classification to change?

Response: The development of the area surrounding the impoundment could have an effect on the hazard potential classification.

d. What increase in cost does the Agency expect from increasing this requirement to annually?

Response: The Agency does not anticipate the cost to increase.

3. On page 4 of your testimony, you mention that Section 845.510 specifies the requirements for inflow flood control systems for surface impoundments. You state: "The requirements for the inflow flood control system include design, construction, operation, maintenance and submission of system plans and plan amendments to Illinois EPA."

a. Do you agree that the hydrologic and hydraulic capacity requirements in the Agency's proposal requires inflow flood control system plans to be conducted initially and annually?

Response: Yes

b. Does the federal CCR rule have a requirement to conduct this assessment annually?

Response: No

c. Can you explain the Agency's basis for requiring these plans to be reassessed annually?

Response: The purpose of requiring these plans to be reassessed annually is make sure the there are no changes in the operation of the impoundment which would cause the impoundment to be overtopped.

d. In addition to updating these plans annually, do you agree that the plans also must be formally amended when there is a change?

Response: Yes

e. What is an example of a change between the initial and subsequent annual plans that would not require an amendment to the plan under Section 845.510(c)(2)?

Response: A power plant could bring on-line a new unit requiring an increase in the volume of liquids and CCR going to an impoundment.

Questions for Lynn E. Dunaway

4. On page 7 of your testimony you state "because post-closure care for CCR surface impoundments closing by removal may cease being subject to Proposed Part 845 in a relatively short time frame, while the completion of post-closure care for CCR surface impoundments closing with a final cover is many years in the future."

a. Do you have an estimate of how long the period of closure plus post-closure will be for closure by removal and closure by final cover at a typical facility?

Response: The Agency does not have an estimate of the amount of time required to complete closure and post-closure care. However, for closure with a final cover the post-closure period will always be a minimum of 30 years. For closure by removal the time period will be site specific, depending on the length of time required to meet GWPS.

b. Does the Agency's proposal allow for a hybrid approach?

Response: As proposed, Part 845 does not require an owner or operator to have separate closure plans for each CCR surface impoundment. While the means of closure could be different for each CCR surface impoundment, one CCR surface impoundment cannot close by removal and with a final cover system.

5. In what year will the first annual reports be due under the Agency's proposal?

Response: Based on the requirements of Section 845.550, the first Annual Consolidated Report will be due January 31, 2022.

6. On page 11 of your testimony you state that "quarterly samples will reflect seasonal variations in groundwater quality and four sampling events per year is not overly burdensome for owners and operators of CCR surface impoundments."

a. Explain why monthly monitoring of groundwater elevation is required by Section 845.650(b)(2)?

Response: Public comments received by the Agency suggested daily groundwater elevation monitoring. The Agency believes that frequency would result in unmanageably large data sets for reporting, while monthly monitoring significantly reduces the data burden, but provides additional groundwater flow

direction data points between the quarterly analytical chemistry monitoring events.

b. How did the Agency determine this frequency was not overly burdensome or economically unreasonable?

Response: Groundwater monitoring at Bureau of Water permitted sites such as mine refuse disposal areas and other waste water treatment impoundments utilize a quarterly frequency, as well as Bureau of Land cleanup programs, such as the Site Remediation Program, use quarterly groundwater monitoring frequencies.

c. Is there a less burdensome method for accomplishing the Agency's intent behind this provision?

Response: When drafting Part 845 the Agency determined that a quarterly monitoring frequency would meet the requirements of Section 22.59 of the Act, while being similar to many other groundwater monitoring programs within the Agency. If the Board were to propose an alternative to quarterly chemical or monthly elevation monitoring schedules the Agency would consider the alternatives.

7. How was 30 years selected as the post-closure period for CCR surface impoundments closing with a final cover?

Response: Thirty years is the minimum post-closure care period allowed by Part 257 for closure with a final cover system. However, the post-closure care period does not end for closure with a final cover system until the GWPS have been met.

Questions for Darin E. Lecrone

8. Given the relatively short application deadlines for certain facilities under the Agency's proposal, will the Agency attempt to make permit application forms available before the Board rulemaking is final?

Response: The Agency will make every effort to have CCR permit specific application forms available by March 31, 2021.

9. You explain on page 6 of your testimony that "The duration of a permit for closure or retrofit construction shall not exceed 5 years." Do you believe most closures will be completed within 5 years? Will operating

permits have an expiration date?

Response: The five year permit term is typical of Agency permitting programs, such as the existing NPDES and operating permit programs under 35 Ill. Adm. Code Part 309. It is unclear at this time, how long the average construction period will be for closure activities conducted in accordance with this rule. As proposed in 845.220(f)(2), if closure activities are not completed within the term of the original construction permit, the Agency may renew a construction permit in two year increments. As proposed in 845.230(e), operating permits will be issued for fixed terms not to exceed five years, so they will have expiration dates.

10. Are construction permit renewals subject to the pre-application public meetings in Section 845.240?

Response: As proposed, the pre-application public notification and public meeting requirements do not differentiate between an original construction permit and a construction permit renewal. Section 845.240(a) as proposed applies to the submission of any construction permit application.

11. Explain the difference between Sections 845.260(c)(3) and (c)(5) or why both Sections are necessary.

Response: Subsection (c)(3) only addresses comments received within the 30-day comment period. Subsection (c)(5) requires the Agency to consider all timely submitted comments, which could include comments received during an extension of time granted by the Agency in (c)(4). Since differentiation is not necessary and the Agency would treat all timely submitted comments the same in terms of retention and consideration, the Agency supports deletion of (c)(5) and revision of (c)(3) to say: "The Agency shall retain all timely submitted comments and consider them in the formulation of its final determination with respect to the permit application."

12. What does "related treatment or mitigation facilities" mean in Section 845.200(a)? Can you provide some examples?

Response: The intent of this section was to make it understood that construction permit requirements applied not only to the construction, installation, or modification of a CCR surface impoundment, but also to construction related to any treatment or other related construction activities. This could include such activities as retrofits, pump and treat of impacted groundwater, construction of treatment wetlands or other construction activities related to a corrective action which is not the construction, installation or modification of the affected CCR surface impoundment itself.

13. Explain why the complete list of information requirements provided in 845.220(a) will be needed for all construction permit renewal and modification

applications?

Response: Construction permit applications filed pursuant to Section 845.220 must contain all the information necessary for the Agency to make an informed determination on the issuance of a permit. Each permit decision or determination must be made based on the information in the application pending before the Agency. Each permit decision is a separate action and must be made based on the information contained in the Agency record for that permit action, be it for new construction, corrective action, a modification of a previously permitted facility, or the renewal of a previously permitted construction activity.

Question for Lauren Hunt Martin

14. Explain what is meant by the language in Section 845.530(b)(3) "provide employees with safety data sheets"? Will inclusion of this information in required training program be adequate? What about posting them at the facility?

Response: Current federal OSHA regulations, adopted for public employees by the State of Illinois in September 2009, require that safety data sheets be available to all employees that will be dealing with the chemicals that are the subject of the safety data sheet. The manner in which the facility makes those available to the employees is up to the individual facility.

Questions for Chris Pressnall

15. When will the Agency's Environmental Justice mapping tool be updated to reflect the 2020 census?

Response: The Illinois EPA utilizes American Community Survey 5-year data, which is updated yearly. The Illinois EPA most recently updated EJ Start with 2019 data on July 9, 2020.

16. ls it possible that a facility could be defined as being within an EJ area but still be located greater than 1 mile from a residential home in a low income or minority area?

Response: Yes.

Question for Melinda K. Shaw

17. For the publicly accessible internet site requirements in Section 845.810, you testify on page 7 that "[i]t was written to include all of the requirements of 40 CFR 257.107." Can a facility use the same webpage for both sets of information?

Response: The Agency intended the CCR website be dedicated to only the information required by 35 IAC 845 and should be clearly labeled as such. The Agency would propose the Board makes the following revision, "The owner or operator's website must be titled, 'Illinois CCR Rule Compliance Data and Information'".

Questions for Amy L. Zimmer

18. You testify that "The final cover system must be designed to accommodate settling and subsidence to minimize disruption of the integrity of the final cover system."

a. Can you explain what causes settling and subsidence at a closed CCR impoundment?

Response: Any settling at a closed surface impoundment would be caused by loss of pore water as the impoundment gradually dewaters following installation of the final cover system. Subsidence could be caused by the location of the impoundment over previous areas of subsurface mining. The additional weight of the material within the impoundment could possibly cause collapse of a mine void. Identification of mine voids is required before a permit is issued, and structural stability of the impoundment in relation to subsidence is regulated by Illinois DNR. One of the primary reasons for a post-closure care period, is to monitor the closed impoundment for the potential development of settling, subsidence, or any other issue requiring maintenance, repair, or corrective action.

b. How does this compare to settling and subsidence at a municipal solid waste landfill generally?

Response: Settling at a municipal solid waste landfill would generally be greater. This is due to the greater height and amount of the material and the fact that the material placed within the landfill is much more compactible. Therefore, settling of the surface of the landfill would be much greater compared to a CCR

surface impoundment. The risk of subsidence would be greater for the same reason.

19. **You state on pages 15-16 of your testimony that: "Use of the property during the post-closure care period shall not disturb the cover, liner, the containment system, of [sic] the monitoring system unless necessary to comply with the requirements of this Part. Any other disturbance is allowed if the owner or operator demonstrates that it will not increase the potential threat of human health or the environment. The demonstration must be certified by a professional engineer."**

    a. **Explain how the process for making such a demonstration will work and how long it would take to obtain Agency approval or a permit amendment?**

    Response: The owner or operator would need to submit a demonstration outlining the use of the property during the post-closure care period and the specifics of how the use would not disturb any of the outlined items. The post closure care plan and demonstration should include a description of any planned post closure usage for the property, along with any deed restrictions which will be recorded for the property. The plan must demonstrate how these activities on the property would be undertaken without disturbing the cover, liner, containment system or monitoring system. The initial written post-closure care plan must be submitted with the initial operating permit application. The approval of the initial post-closure care plan would come with the approval of the initial operating permit. An amendment to the post-closure care plan would require an amended operating permit modification application. The timeframe would follow that for other operating permits under this Part.

    b. **How will the process differ for changes submitted to the Agency within 60 days of implementation following an unanticipated need for revision?**

    Response: The process would not significantly differ under the process or timeframe.

20. **Has the Agency considered any alternatives to a one-size-fits-all post-closure care period of 30 years?**

Response: No.

IERG

IERG posed questions to Lynn Dunaway and Amy Zimmer. All the below responses were provided by Lynn Dunaway.

1. **Are provisions not explicitly listed in proposed Section 845.170 applicable to inactive closed surface impoundments?**

Response: Only the Subparts, Sections and subsections listed in Section 845.170 are applicable to inactive closed surface impoundments.

2. If not, would it be appropriate to insert clarifying language into Sections 845.250, 845.270, 845.290, and 845.780, as laid out below?

a. **Add "if applicable" at the end of Section 845.250(b)(1) so that it would read as follows: "If the determination is to issue the permit, the Agency must notify the applicant in writing of the content of the tentative determination and draft permit and of its intent to circulate public notice of issuance in accordance with Section 845.260, if applicable."**

Response: This proposed revision is not needed. Please see Response 1.

b. **Add "if applicable" to Section 845.250(b)(2) so that it would read as follows: "If the determination is to deny the permit, the Agency must notify the applicant in writing of the tentative determination and of its intent to circulate public notice of denial, in accordance with Section 845.260, if applicable. . . . "**

Response: This proposed revision is not needed. Please see Response 1.

c. **Add "if applicable" to Section 845.270(a) so that it would read as follows: "The Agency shall not make a final permit determination until the public participation process in Section 845.260, if applicable, has concluded."**

Response: This proposed revision is not needed. Please see Response 1.

d. **Revise Section 845.290(b) so it would read as follows: "The CQA program must meet the following requirements or the requirements of plans approved by the Agency prior to the effective date of these rules, whichever is applicable:"**

Response: This proposed revision is not needed. As written, the CQA program requirements of Section 845.290 apply only when a specified activity occurs at a facility. Therefore, if none of the activities listed in Section 845.290, which require a CQA plan are initiated after the effective date of this rule, no CQA program would be required.

e. **Revise Section 845.780(b)(3) so it would read as follows: "Maintaining the groundwater monitoring system and monitoring the groundwater in accordance with the requirements of plans approved by the Agency prior to the effective date of these rules or Subpart F, whichever is applicable."**

Response: This proposed revision is not needed. Subpart F is not listed in Section 845.170, and therefore does not apply to inactive closed CCR surface impoundments, so no distinction between monitoring programs is necessary.

3) If a closed inactive surface impoundment has a post-closure plan approved by the Agency prior to the effective date of these rules, would it be appropriate to add clarifying language to Section 845.780, as laid out below?

Response: As a point of clarification, inactive closed surface impoundments and closed inactive CCR surface impoundments are defined differently in Section 845.120, and accordingly have different requirements under Part 845.

a) **Revise Section 845.780(d)(2) so it would read as follows: "Deadline to prepare the initial written post-closure plan. Unless the owner or operator of a CCR surface impoundment has a post-closure plan approved by the Agency, the owner or operator of a CCR surface impoundment must submit to the Agency an initial written post-closure care plan consistent with the requirements specified in subsection (d)(1) of this Section with its initial operating permit application."**

Response: This proposed revision is not appropriate as the Agency intends closed inactive CCR surface impoundments to be subject to the requirements as specified in Section 845.780(d)(2).

b) **Revise Section 845.780(e) so it would read as follows: "Upon the completion of the post-closure care period, the owner or operator of the CCR surface impoundment must submit a request to the Agency to terminate post-closure care. The request must include a certification by a qualified professional engineer verifying that post-closure care has been completed in accordance with the post-closure care plan approved by the Agency prior to the effective date of these rules or in accordance with the post-closure care plan specified in subsection (d) of this Section and the requirements of this Section, whichever is applicable."**

Response: This proposed revision is not appropriate as the Agency intends closed inactive CCR surface impoundments to be subject to the requirements as specified in Section 845.780(e).

Ameren Questions

Question Set No. 1 – Surface Impoundments and Clean Closure
Public Act 101-0171 (the "CCR law") (eff. July 30, 2019), which serves as the basis for the instant proceedings before the Illinois Pollution Control Board ("Board"), added multiple sections to the Illinois Environmental Protection Act ("Act") for the regulation and closure of coal combustion residual ("CCR") surface impoundments. Of key relevance to Question No. 1 is the legislature's addition of Sections 3.143 and 22.59 to the Act. *See* P.A. 101-0171, 2, 20–28, *available at* http://www.ilga.gov/legislation/publicacts/101/PDF/101-0171.pdf (last accessed Jun. 19, 2020).

Throughout Section 22.59 of the Act, the legislature refers to the regulation of "CCR surface impoundments" and, in turn, the legislature added Section 3.142 to the Act to define CCR surface impoundments to mean "a natural topographic depression, man-made excavation, or diked area, which is designed to hold an accumulation of CCR and liquids, *and the unit treats, stores, or disposes of CCR*. 415 ILCS 5/3.143 (West 2020) (emphasis added). 415 ILCS 5/3.142 (West 2020). This definition is identical to the federal definition of CCR surface impoundments found at 40 C.F.R. §257.53.

Section 22.59(j) of the Act assesses substantial fees against owners and operators of CCR surface impoundments (initial fees of $50,000 or $75,000; and annual fees of $25,000 or $50,000), the great amounts applicable to those surface impoundments that have not yet completed closure and the lesser amounts applicable to those surface impoundments that are in post-closure care. *See* 415 ILCS 5/22.59(j). Presumably, these fees are to compensate the Agency for the costs of its oversight and regulation of the surface impoundment. There is of course no federal corresponding fee provision in the federal CCR law.

1) **Where an owner of an ash pond has completed closure via Agency-authorized clean closure (removal of all CCR) prior to July 30, 2019, the effective date of the CCR law, does the Agency agree that the ash pond is not a surface impoundment?**

Response
The Agency does not agree.

2) **If not, on what authority or interpretation does the Agency apply the definition of surface impoundment? Does the Agency consider the unit to treat CCR? Store CCR? Dispose of CCR?**

Response
The United States Court of Appeals for the District of Columbia Circuit, Case No. 15-1219, Decided August 21, 2018, Utility Solid Waste Activities Group, et al versus Environmental Protection Agency (Respondent) and Waterkeeper Alliance, et al (Intervenors), the "USWAG decision" ruled, among other things, that USEPA had acted incorrectly when it did not include inactive facilities in Part 257. Therefore, it is the Agency's position that

any CCR surface impoundment that had not completed removal of CCR from the CCR surface impoundment prior to October 19, 2015, the effective date of Part 257, is subject to the requirements of Part 257, including the definition of a CCR surface impoundment. Section 3.143 of the Act does have the same definition of CCR surface impoundment as Part 257. Section 22.59(m) of the Act applies the provisions of P.A. 101-171 to all existing CCR surface impoundments and all CCR surface impoundments after the date of the amendatory Act. A CCR surface impoundment that existed on Oct. 19, 2015 is regulated by both Part 257 and Section 22.59 of the Act. As currently written, Part 257 does not deem closure by removal complete until the CCR and any liner have been removed and decontamination of any area affected by releases from the CCR surface impoundment has been completed pursuant to Part 257.100(b)(5).

3) If the Agency agrees that its authorized pre-CCR law clean closure resulted in the removal of all CCR, such that the unit no longer treats, stores or disposes of CCR, under what authority or interpretation does the Agency apply the definition of surface impoundment to the clean closed unit?

Response

Please see Response #2.

4) Where the Agency authorized clean closure by removal prior to the effective date of the Act (and accordingly did not require groundwater monitoring because all CCR had been removed) does the Agency now intend that the three year groundwater monitoring requirement it proposes in subsection (b) of Section 845.740 (closure by removal) apply retroactively to the unit that had contained no CCR as of July 30, 2019? If so, under what authority or interpretation?

Response

The Agency's position is that as drafted, Section 845.740(b) applies to any CCR surface impoundment that closed by removal after Oct. 19, 2015. The Agency does not believe this provision is being applied retroactively, because the USWAG decision ruled that USEPA should have included CCR surface impoundments at inactive facilities in Part 257 from the outset. The Agency notes that this provision of Part 845 is based on an amendment to Part 257 that USEPA has proposed. If the amendment to Part 257 is not adopted by USEPA before the record on Part 845 closes, the Agency believes it will have to request that the Board delete Section 845.740(b) and related subsections in order to meet the requirements of Section 22.59(g)(1) of the Act.

5) Where the Agency authorized clean closure by removal prior to the effective date of the Act (and accordingly did not require post-closure care because all CCR had been removed) does the Agency now intend that the $75,000 initial fee assessment and $25,000 annual fee assessment (applicable to units that have not closed) apply? If so, under what authority or interpretation? If so, what level of regulatory effort does the Agency expect to expend for a former ash pond that no longer has any CCR?

Response

The Agency objects to this question. CCR surface impoundment fees are required by Section 22.59(j) of the Act and are not a subject of the Agency's proposed Part 845. Additionally, the Agency cannot answer this question due to pending litigation filed by Ameren and regarding CCR surface impoundment fees.

6) **Isn't it correct that the Agency approved a closure plan for Hutsonville under which Ameren closed Ash Pond B, Ash Pond C, and the Bottom Ash Pond by removing the CCR in those ponds and then placing the CCR from those ponds in Pond A? Isn't it correct that the Agency approved the closure of Pond A, requiring a final cover, and the CCR from the above three described ponds were placed in Pond A, under the final cover system? Isn't it correct that when the Agency approved the closure and post-closure plans that encompassed Ash Pond B, Ash Pond C, and the Bottom Ash pond that it did not require groundwater monitoring specific to any of the clean-closed units but did require groundwater monitoring for Pond A? Isn't it correct that the Agency approved Ameren's submittal documenting completion of closure for Pond A, Pond B, Pond C and the Bottom Ash Pond? Isn't it correct that the Agency approval of this documentation occurred before July 30, 2019? Isn't it correct the Agency is now seeking to require Ameren to pay a fee of $225,000 for the Pond, B, Pond C and the Bottom Ash Pond ($75,000 each) on the basis that the portion of Section 22.59(j)(1) relevant to "each CCR surface impoundment that have not completed closure" applies to these three clean-closed former ponds? Isn't it true that Ameren has willingly paid the Agency's assessed $50,000 fee for Pond A pursuant to Section 22.59(j)(1) (applicable to "each closed CCR surface impoundment") but contests the application of Section 22.59(j)(1) to the three areas that were authorized to close by removal? Under what authority or interpretation does the Agency consider that these three areas have not "closed"?**

Response

The Agency objects to this question. CCR surface impoundment fees are required by Section 22.59(j) of the Act and are not a subject of the Agency's proposed Part 845. Additionally, the Agency cannot answer this question due to pending litigation filed by Ameren and regarding CCR surface impoundment fees. This question also calls for site-specific responses from the Agency outside the scope of this rulemaking proceeding.

7) **On page 34 of the Agency's Statement of Reasons, the Agency indicates that the new CCR law "mandated fees and financial assurance for all CCR surface impoundments *regulated by the proposed regulations*" citing, in footnote 5, Sections 22.59 (f); (g);and (j)(1) (emphasis added). Given the above, under what authority or interpretation does the Agency consider Ameren former ponds B, C and the Bottom Ash Pond, and any other former ash ponds that were authorized to close by removal prior to the effective date of the CCR law, within the regulatory reach of Section 22.59 as "surface impoundments"?**

Response:

The Agency objects to this question. This question calls for site-specific responses from the Agency outside the scope of this rulemaking proceeding. Additionally, the Agency cannot answer this question due to pending litigation filed by Ameren and regarding CCR surface impoundment fees.

Question Set No. 2 – Agency's Use of October 19, 2015 for Purpose of Closure Requirements

The Agency recognizes its proposal as has "developed a rule of general applicability for [CCR surface impoundments] at power generating facilities." Statement of Reasons at 1. Contained in proposed Part 845 is Section 845.170, which the Agency has described as a "comprehensive list of the Section of Part 845 that are applicable to inactive closed CCR surface impoundments . . . ." Pre-Filed Testimony of Lynn E. Dunaway at 1. Under proposed Section 845.120, two relevant definitions exist which discuss inactive CCR surface impoundments. First is an "Inactive CCR surface impoundment", which the Agency defines as "a CCR surface impoundment in which CCR was placed before but not after October 19, 2015 and still contains CCR on or after October 19, 2015." Second, proposed Section 845.120 defines "Inactive Closed CCR Surface Impoundment" to mean "an inactive CCR surface impoundment that completed closure before October 19, 2015 with an Agency-approved closure plan."

The new CCR provisions of the Act do not refer to the October 19, 2015 date in any manner, nor does it require strict adherence to the federal CCR law or require the Board's identical-in-substance rulemaking procedures. Instead, to the extent there is any closure triggering date in the Illinois CCR provisions, such date is May 1, 2019, as contained in Section 22.59(e) ("Owners or operators of CCR surface impoundments who have submitted a closure plan to the Agency before May 1, 2019, and who have completed closure prior to 24 months after the effective date of this amendatory Act of the 101st General Assembly shall not be required to obtain a construction permit for the surface impoundment closure under this Section"). 415 ILCS 5/22.59 (e).

1) **How does the Agency define "closed" or "closure" as used throughout its rule proposal?**

Response

The term "closed" is defined in Section 845.120

2) **What is the significance of the Agency's use of the October 19, 2015 date?**

Response

October 19, 2015 is the effective date of 40 CFR Part 257.

3) **If the Agency believes the October 19, 2015 date it to be federally required, would the Agency please provide the authority for such requirement to the Board in this proceeding for purposes of developing a complete record?**

Response

The effective date of Part 257 is located at 80 Fed. Reg. 21469 (Apr. 17, 2015).

4) Further, would the Agency address the impact of the October 19,2015 date on its proposed rules?

a. Specifically, does the Agency consider a CCR surface impoundment which began closure after October 19, 2015 but completed closure before July 30, 2019 (effective date of CCR provisions) to be an Inactive CCR surface impoundment or an Inactive Closed CCR surface impoundment?

Response

The CCR surface impoundment described is an inactive CCR surface impoundment under Section 845.120.

b. Also, if the Agency considers a surface impoundment of the type described in the preceding sentence to be an Inactive CCR surface impoundment, what is the Agency's justification for not including Inactive CCR surface impoundments within the scope of proposed Section 845.170?

Response

When drafting Part 845, prior to submitting a proposal to the Board, and in light of the USWAG decision, and the unknown factor of how USEPA will address the decision with regard to the requirements of Part 257, the Agency considered Oct. 19, 2015, the effective date of Part 257, to be a date before which the federal rule was not likely to be applicable.

c. How does the Agency interpret Section 22.59 (e) and regard its import in its rule proposal?

Response

The Agency's position is that Section 22.59(e) of the Act relieves owners and operators of CCR surface impoundments who have submitted a closure plan on or before May 1, 2019, and complete closure within 24 months (i.e. July 30, 2021) from the requirement of obtaining a construction permit pursuant to Part 845.

Question Set No. 3 – Hutsonville Pond D and Existing 35 Ill. Adm. Code Part 840

On January 20, 2011, in R09-21, pursuant to its authority under Section 27 and 28 of the Act, 415 ILCS 5/27 and 28, and pursuant to an extensive public hearing, the Illinois Pollution Control Board adopted a site-specific rule setting forth regulatory requirements governing the closure of Pond D at Ameren's Hutsonville station. See *In the Matter of: Ameren Ashpond Closure Rules (Hutsonville Power Station): Proposed 35 Ill. Adm. Code 840.101 – 840-152, R2009-021 (adopted Jan. 20, 2011)*. These regulatory requirements, now promulgated as Part 840 of the Board's rules, apply to Hutsonville Pond D and are believed to be the sole Illinois regulatory requirement adopted by the Board relative to the closure

of any Illinois coal ash pond.

In accordance with Part 840 Ameren submitted a Groundwater Monitoring Plan, a Closure Plan, a Post-Closure Plan and all the documents necessary to obtain Agency approval and Agency approval was granted in each instance On January 30, 2013 Ameren notified the Agency that closure had been completed in accordance with Part 840. Ever since, Ameren has been monitoring and maintaining Pond D in accordance with the post-closure plan mandated by the Board in this rulemaking.

1) Does the Agency agree that any application of Part 845, as proposed, would place a duplicating program of regulation relative to Pond D dealing with the same subject matter as Part 840?

Response

No.

2) Does the Agency agree that the adoption of additional regulations applying to closure and post-closure care of Hutsonville Pond D is redundant and not necessary given the existing applicability of Part 840?

Response

The Agency does not believe Section 845.170, as proposed, applies any redundant requirements for closure and post-closure care for inactive closed CCR surface impoundments, which the Agency believes defines Hutsonville Ash Pond D.

3) If the Agency's answer to question number two is in the negative, what is the Agency's justification for that answer?

Response

The Agency's reading of Section 845.170.

4) If the Agency's answer to question number two is in the affirmative, would the Agency support a clarification by the Board that its more specific rule, instead of new Part 845, applies to Hutsonville? If not, what would be the Agency's basis or reason?

Response

The Agency would have to review the language of any such Board clarification before making that decision.

Question Set No. 4 – Old Ash Pond at Meredosia Power Station

In Section VI of its Statement of Reasons, the Agency identified Ameren's former Meredosia facility as having three CCR Surface Impoundments that would presumably be subject to Part 845. All three of those CCR Surface Impoundments have been closed by Ameren. Two of these impoundments were closed pursuant to a closure plan approved by the Agency. The third closed impoundment has been identified by Ameren and the Agency

as the Old Ash Pond. Unlike the other two ponds, the Old Ash Pond is not identified in the inventory of CCR surface impoundments that were referenced in *Util. Solid Waste Activities Grp. v. Envtl. Prot. Agency*, 901 F.3d 414, 434 (D.C. Cir. 2018).

The Old Ash Pond ceased accepting CCR by the early 1970s and was closed by 1972. As such, it was closed before the federal RCRA statute was enacted on October 21, 1976 and before any Agency program existed relative to closure of CCR surface impoundments. It is now a mound of soil with a forest growing on it. To date, the Agency has never requested that Ameren take any action with regards to closure of the Old Ash Pond, even as Ameren proceeded to obtain closure of the other two ponds at the Meredosia facility. The area encompassed by the Old Ash Pond is located within the Groundwater Management Zone of the two other ponds at Meredosia that were closed with Agency approval. Under Part 845 as proposed, the Old Ash Pond would now be subject to the provisions of Part 845 and now would be required to proceed through closure almost fifty years after it ceased accepting CCR. Further, the Agency has assessed a $75,000 initial fee (and a $25,000 annual fee) as to the Old Ash Pond.

1) **As to the Old Ash Pond at Meredosia and assuming the accuracy of the above-cited facts, if Ameren were to propose a revision to proposed Section 845.100 that provided that Part 845 does not apply to any CCR surface impoundment that ceased accepting CCR prior to October 21, 1976 (the effective date of RCRA), would the Agency have a reason or basis for objecting to such revision?**

Response

The Agency would have to review the language of any such Board revision before making that decision.

2) **If so, what would be the Agency's basis or reason?**

Response

The Agency cannot answer this until a revision is made available.

Question Set No. 5 – Fees Assessed Pursuant to Section 22.59(j)
Pursuant to Section 22.59(j) of the Act, the Agency is empowered to collect an initial fee of either $50,000 or $75,000 from the owner or operator of a CCR surface impoundment, together with annual fees of either $25,000 or $15,000 on an ongoing basis. 415 ILCS 5/22.59(j). The Agency has previously asserted that those fees are being assessed and collected to defray the cost associated with administering the regulatory scheme proposed in proposed Part 845 for those "surface impoundments regulated by the proposed regulations". See Statement of Reasons, p. 34.

1) **In setting the relevant fees pursuant to Section 22.59(j) did the Agency provide information to the General Assembly as to what those fees should be and what specific Agency oversight activities the fees would cover? If so, would the Agency provide such information to the Board for purposes of a complete record on the question of coverage and applicability?**

Response:

The Agency objects to this question. CCR surface impoundment fees are required by Section 22.59(j) of the Act and are not a subject of the Agency's proposed Part 845.

2) **In setting the relevant fees pursuant to Section 22.59(j) of the Act, did the Agency indicate that it expected the 73 surface impoundments it identifies on page 3 of its Statement of Reasons to be covered by the new rules? In identifying those, did the Agency give consideration to the new definition of "surface impoundment" at Section 3.143 of the Act, or did it apply its previous designation of ash pond? Did the Agency simply divide the expected costs of its new program by the number 73 or did it provide the legislature some other rationale in terms of appropriate fees? If other rationale, please explain.**

Response:

The Agency objects to this question. CCR surface impoundment fees are required by Section 22.59(j) of the Act and are not a subject of the Agency's proposed Part 845.

3) **If the fees forecast more revenues than are required to appropriately oversee this program, would the Agency be retaining those surplus funds or returning them to the owner or operators which have paid the assessments?**

Response:

The Agency objects to this question. CCR surface impoundment fees are required by Section 22.59(j) of the Act and are not a subject of the Agency's proposed Part 845.

4) **When does the Agency expect the annual fees to end for a specific surface impoundment (i.e., what key regulatory milestone would end the applicability of annual fees)? Would the Agency prorate the annual fee upon completion of such milestone?**

Response:

The Agency objects to this question. CCR surface impoundment fees are required by Section 22.59(j) of the Act and are not a subject of the Agency's proposed Part 845.

5) **If the Agency's answer to Question 3 or 4 is in the negative, would the Agency have a basis or reason to object to a revision of the proposed rules (a) to require the Agency to return the amount of annual fees which exceeds the Agency's cost of implementing the proposed rules or (b) which more clearly define which fee assessment applies and when it is no longer required? If so to either or (b), what would be that basis or reason?**

Response:

The Agency objects to this question. CCR surface impoundment fees are required by Section 22.59(j) of the Act and are not a subject of the Agency's proposed Part 845.

6) **Similarly, what key regulatory milestones would apply to end the obligation for financial assurance for any given surface impoundment subject to these rules? Would the Agency be amenable to a rule provision clearly establishing such milestones? If not, why not?**

Response:

Proposed Section 845.920 details when the Agency will release an owner or operator of a CCR surface impoundment from the requirements of Subpart I.

7) **If Ameren were to propose a revision to Section 845.100 that provided that Part 845 does not apply to any CCR surface impoundment that ceased accepting CCR prior to October 21, 1976, would the Agency have a reason or basis for objecting to a revision which prohibited the Agency from collecting a total amount of annual fees which exceeds the Agency's cost of implementing the proposed rules?**

Response:

The Agency objects to this question. CCR surface impoundment fees are required by Section 22.59(j) of the Act and are not a subject of the Agency's proposed Part 845.

8) **In proposing these rules, or in assisting in the legislative development of the CCR provisions of the Act, did the Agency consider Section 5(f) of the Act – which provides authority for the Board to prescribe reasonable fees for permits required pursuant to this Act?**

Response:

The Agency objects to this question. CCR surface impoundment fees are required by Section 22.59(j) of the Act and are not a subject of the Agency's proposed Part 845.

9) **Does the Agency intend to track or otherwise document employee time and costs expended pursuant to the proposed rules using a site- specific mechanism which permits the Agency to demonstrate the time, effort, and/or cost associated with each individual CCR surface impoundment? If the Agency's answer to Question 9 is in the negative, please explain the Agency's basis or reason.**

Response:

Yes, the Agency has developed timecodes to track time and costs. It would to be burdensome to do this on a site-specific basis.

10) If Ameren were to propose a revision to the proposed rules which provided that the Agency shall prepare a report not less than annually which details costs incurred by the Agency during the prior calendar year ending on December 31 on a site-specific basis, would the Agency have a reason or basis for objecting to such a revision? If the Agency's answer to Question 10 is in the affirmative, please explain the Agency's basis or reason.

The agency does not intend to prepare such a report. This information could be requested through FOIA.

11) Is the Agency opposed to an amendment to the proposed rules which would require it to provide an accounting of the funds collected pursuant to 415 ILCS 5/22.59(j)? If so, please explain the Agency's basis or reason.

Response:

See responses above. Also, this not relevant to the proposal before the Board.

12) Other states which have adopted regulatory schemes for the oversight of closure activities of CCR surface impoundments have assessed fees in amounts which correlate to the amount of time the supervising body spends administering the relevant regulations. To the best of the Agency's knowledge and belief, are the amounts assessed pursuant to 415 ILCS 5/22.59(j) similarly related?

Response:

The Agency objects to this question. CCR surface impoundment fees are required by Section 22.59(j) of the Act and are not a subject of the Agency's proposed Part 845.

Illinois Pollution Control Board

GENERAL QUESTIONS

1. **IEPA states of the 73 CCR surface impoundments at power generating facilities, some are lined with impermeable materials, while others are not. Also, six CCR surface impoundments have liners that comply with the federal liner standards in 40 CFR 257. SOR at 3.**

    a. **Please clarify whether the list of 73 CCR surface impoundments represent the complete universe of such impoundments in the state. If not, how does the Agency anticipate finding out about additional surface impoundments that are not currently on the list of 73? Who can report surface impoundments? Only owner/operators self-reporting or other third parties? Will the Agency continually update the list?**

    Response: To the best of the Agency's knowledge and belief, the 73 listed CCR surface impoundments compose the complete universe. Anyone could provide the Agency with information regarding alleged CCR surface impoundments. The list would need to be updated if the existence of a previously unknown CCR surface impoundment, which should be regulated by Part 845, is confirmed by the Agency to exist, or an owner or operator constructs a new CCR surface impoundment.

    b. **Provide map showing the locations of all 73 CCR surface impoundments.**

    Response: An on-line mapping tool is available at:
    https://www2.illinois.gov/epa/topics/water-quality/watershed-management/ccr-surface-impoundments/Pages/default.aspx
    *Chrome web browser is required for using.

    c. **Clarify whether the 73 CCR surface impoundments include both primary and polishing ponds.**

    Response: The list of 73 CCR surface impoundments includes primary ponds and some secondary/polishing ponds, where it is known CCR is present in the CCR surface impoundment and where the Agency believes it is likely that CCR is present in the secondary/polishing CCR surface impoundment.

    d. **Clarify whether all 73 CCR impoundments would be subject to the proposed regulations.**

    Response: It is the Agency's position that all 73 CCR surface impoundments are subject to Part 845, as proposed to the Board.

e. How many of these impoundments would be "Existing CCR surface impoundment" per the proposed definition under Section 845.120?

Response: The Agency believes that 43 of the 73 listed are "Existing CCR surface impoundments" as defined by Section 845.120

f. How many of these impoundments would be "New CCR surface impoundment" per the proposed definition under Section 845.120?

Response: The Agency does not believe any of the 73 listed are "New CCR surface impoundments as defined by Section 845.120.

g. How many of these impoundments would be "Inactive CCR surface impoundment" per the proposed definition under Section 845.120?

Response: The Agency believes that 26 of the 73 listed are "Inactive CCR surface impoundments" as defined by Section 845.120.

h. How many of these impoundments would be "Inactive Closed CCR surface impoundment" per the proposed definition under Section 845.120?

Response: The Agency believes that four (4) of the 73 listed are "Inactive Closed CCR surface impoundments" as defined by Section 845.120.

i. How many of these impoundments are located in areas of environmental justice concern?

Response: Based on EJ Start 2019 data the Agency believes that 29 of the 73 listed are in areas of environmental justice concern pursuant to Section 845.700(g)(7).

j. How many of the CCR impoundments are planned to be closed before July 31, 2021?

Response: The Agency believes that 16 of the 73 listed, which have not already completed closure, will complete closure by July 31, 2021.

k. How many of the CCR impoundments have impacted underlying groundwater by exceeding the Board's Part 620 standards or the proposed groundwater protection standards (GWPS)?

Response: To the best of the Agency's knowledge and belief, 44 of the 73 listed have exceeded the Board's Part 620 standards or proposed GWPS, while 29 of the 73 listed have not been fully evaluated.

l. **Please provide a table listing the 73 CCR surface impoundments along with owner/operator information, as well as their status by addressing questions 1(a) thru 1(j).**

Response: Please see attached table.

SUBPART A: GENERAL PROVISIONS

2. **Section 845.100 limits the applicability of the proposed rules apply only to CCR Surface Impoundments as they are defined in section 845.120. Please explain why the Agency chose to exclude sites at active and inactive electric utilities or independent power producers that have historic CCR that has been commingled with fill material.**

Response**:** Section 22.59 of the Act is titled CCR surface impoundments. References throughout Section 22.59 are to CCR surface impoundments, including Section 22.59(g) wherein the legislature directs the Agency to propose and the Board to adopt rules establishing "requirements for CCR surface impoundments." Therefore, the Agency believes the appropriate applicability for Part 845 pursuant to statutory authority is CCR surface impoundments.

3. **Subsection 845.100(a) specifies that "CCR surface impoundments failing to satisfy any of the requirements are considered open dumps, which are prohibited." Please comment on whether it would be acceptable to the Agency if subsection (a) is revised as follows to reflect the statutory prohibition of open dumps:**

a) **This Part establishes criteria for the purpose of determining which CCR surface impoundments do not pose a reasonable probability of adverse effects on health or the environment. CCR surface impoundments failing to satisfy any of the requirements of this Part are considered open dumps, which are prohibited under Section 21(a) of the Act.**

Response: The proposed revision is acceptable to the Agency.

4. **Subsection (e), consistent with 40 CFR 257.50(f), exempts wastes, including fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated at facilities that are not part of an electric utility or independent power producer, such as manufacturing facilities, universities, and hospitals.**

a. **Please clarify whether this exemption generally applies even if the specified wastes generated by facilities that are not part of an electric**

utility or independent power producer are being treated or stored in surface impoundments. If so, explain the rationale for the exemption if those impoundments pose the same threat to groundwater as the CCR surface impoundments.

Response: As the Board points out Section 845.100(e) is consistent with Part 257. According to USEPA in its Federal Registry entry for 40 CFR Part 257 located at 80 Fed. Reg. 21340, (Apr. 17, 2015), industries using coal to generate electricity and heat for their own use consumed less than one percent of the coal burned. Hence, these industries would produce less than one percent of the CCR generated. Further, Section 22.59(a)(3) states as a finding of the General Assembly that the electrical generating industry has caused groundwater contamination at active and inactive plants throughout Illinois. Based on this information, as drafted, Part 845 would regulate approximately 99% of the CCR generated and is consistent with the General Assembly's findings. Further, Section 22.59(g)(1) of the Act requires that the rules adopted pursuant to Section 22.59(g) be as protective and comprehensive as Subpart D of 40 CFR 257 governing CCR surface impoundments. The Agency's position is that the same universe of CCR surface impoundments is intended to be regulated by Part 845.

b. Please comment on whether the Agency is aware of the number surface impoundments in the State that are used to manage the exempted wastes.

Response: The Agency is currently aware of two exempted CCR surface impoundments at one facility.

5. Please clarify whether proposed language at subsection 845.110(a) should specify as follows: "Compliance with the requirements of this Part does not affect the need for the owner or operator of a CCR surface…"

Response: Section 845.110(a) already contains the phrase "of this Part".

6. Subsection 845.110(b) states, "Any CCR surface impoundment or lateral expansion of a CCR surface impoundment continues to be subject to the following requirements:" Please clarify whether CCR surface impoundments are already subject to the requirements of subsection (b). If so, under what authorities are they subject to these requirements. If not, comment on whether the proposed language should be revised as follows: "Any CCR surface impoundment or lateral expansion of a CCR surface impoundment is~~continues to be~~ subject to the following requirements:"

Response**:** CCR surface impoundments are already subject to the requirements listed in Subsection 845.110(b) pursuant to the citations provided as well as 40 CFR 257.3-1, however, the Agency does not object to the Board's proposed revision.

7. **Subsection 845.110(b)(1) specifies requirements pertaining to floodplains. Please comment on whether new CCR surface impoundments or lateral expansions should be allowed to locate in floodplains.**

   Response: The requirements of Part 845, including the location restrictions of Subpart C, establish criteria by which a CCR surface impoundment can be determined to not pose a reasonable probability of adverse health or environmental effects. Similarly, solid waste landfills that meet applicable siting and construction requirements are not prohibited in floodplains. Therefore, new CCR surface impoundments and lateral expansions of CCR surface impoundments that meet the criteria of Part 845 should not be prohibited in floodplains.

8. **Subsection 845.110(b)(1)(A) requires surface impoundments in floodplains to prevent wash out of solid waste. Please clarify whether CCR is considered as solid waste under the Environmental Protection Act. Comment on whether this requirement should refer to CCR instead of solid waste.**

   Response: CCR in a surface impoundment meets the definition of a solid waste. However, the revision suggested by the Board would clarify the intent of the subsection and is acceptable to the Agency.

9. **Subsection 845.110(b)(1)(B)(i) defines "base flood" as "a flood that has a 1 percent or greater chance of recurring in any year or a flood of a magnitude equaled or exceeded once in 100 years on average over a significantly long period." Please explain what "significantly long period" means in the context of the proposed definition. Also, comment on whether it would be acceptable to the Agency to define base flood consistent with FEMA's definition under 44 CFR §59.1 as follows:**

   Base flood means a flood that has a 1 percent ~~or greater~~ chance of ~~recurring~~ of being equaled or exceeded in any given year ~~or a flood of a magnitude equaled or exceeded once in 100 years on average over a significantly long period~~.

   Response: A "significantly long period" is within the time of recorded weather records. The base flood definition is consistent with the definition of a 100-year flood as defined in Section 3.102 of the Act and the definition of base flood in 40 CFR 257.3-1 and should remain unchanged in Part 845.

10. **In Subsection 845.110(b)(3), please explain why the term "waters of the United States" is used rather than the "waters of the State".**

Response: Section 845.110(b)(3) mirrors 40 CFR 257.3-3 in language and citation to federal statutes. Regarding 845.110(b)(1), the Agency's proposal added equivalent or related state citations. In light of the Board's question, and should the Board deem revision appropriate, the Agency would suggest the following:

3) Surface Water

A) A facility shall not cause a discharge of pollutants into waters of the United States that is in violation of the requirements of the National Pollutant Discharge Elimination System (NPDES) under section 402 of the Clean Water Act, as amended~~, Section 12(f) of the Act, or 35 Ill. Adm. Code Subtitle C~~.

* * *

E) Except as in compliance with the provisions of the Act, Board regulations, and the CWA, and the provisions and conditions of the NPDES permit issued to the discharger, the discharge of any contaminant or pollutant by any facility into waters of the State from a point source or into a well shall be unlawful.

Section 845.120 Definitions (Questions 10-13)

11. "Beneficial use of CCR". Please comment on whether CCR meeting the definition of coal combustion byproduct in the Act would also meet the definition of "beneficial use of CCR under 40 CFR 257.53. If not, clarify which definition would control in making a determination of beneficial use.

Response: Generally, CCR meeting the definition of coal combustion byproduct in the Act would meet the definition of beneficial use of CCR. However, Part 257 does set an unencapsulated volume restriction of 12,400 tons when CCR is used in non-highway applications. Therefore, CCR used beneficially would have to meet the requirements of the Act and the limitations of Part 257.

12. "Closed". Please comment on whether this term should be revised to "Closed CCR surface impoundment".

Response: The current definition of "closed" mirrors the definition of "closed" in 40 CFR 257.53 and the definition itself makes clear that closed is being applied to CCR surface impoundments. There are instances throughout Part 845 where "closed" is used without "CCR surface impoundment" following the term, the definition should apply and adding the phrase following "closed" would be redundant. For example, "when the CCR surface impoundment is closed" in 845.200(a)(5) and 845.750 and "the CCR surface impoundment will be closed" in 845.720(a)(1)(A). Adding the proposed Board language could unnecessarily exclude application of the definition in those instances. However, in light of the Board's question, the Agency would not object to the following revision:

"Closed" for the purposes of this Part means placement of CCR in a CCR surface impoundment has ceased, and the owner or operator has completed closure of the CCR surface impoundment and has initiated post-closure care in accordance with Subpart G.

13. "CCR storage pile". Please comment on whether the definition should specify a time limit on "temporary accumulation" of non-flowing CCR. For example, the Board has specified a 1-year limit on waste piles in the landfill regulations under 35 Ill. Adm. Code 810.103.

Response: The Agency does not believe a time frame is necessary because CCR storage piles are a practice associated with closure by removal under Section 845.740. Therefore, the duration over which a CCR storage pile exists will be limited by the time required to complete CCR removal from the CCR surface impoundment. Further, Section 845.740(c)(4)(B)(iii) requires a CCR storage pile to have a liner, therefore, the area of a CCR storage pile is fixed. Section 845.740(d) requires monthly reporting of the volumes removed from the CCR surface impoundment and the volumes transported off-site, in addition to other requirements. Therefore, the volumes of CCR and timeframes over which they are stored is available to the Agency.

14. "Hazard potential classification." Please explain the reason for deviating from the three- tiered hazard classification system under 40 CFR 257.53.

Response: Communication with IDNR, which is responsible for the dam safety program in Illinois, including CCR surface impoundment dams, indicates that there are no CCR surface impoundments in Illinois which meet the criteria of a "low hazard potential CCR surface impoundment". Since the low hazard potential CCR surface impoundment is a null set in Illinois, and the other classifications are more restrictive, the Agency did not include the third classification.

15. Section 845.130 requires the owner or operator to maintain the identification marker at all times an operating permit is required under this Part. Please clarify whether the operating permit would be required until a CCR surface impoundment is closed in accordance with the proposed regulations. If not, comment on whether the marker should be maintained until closure is completed under Part 845.

Response: For a CCR surface impoundment closed with a final cover system an operating permit is required until the end of post-closure care, which cannot end until the completion of corrective action, but will always be at least 30 years. For a CCR surface impoundment closed by removal, an operating permit is required until groundwater monitoring has been completed regardless of whether the groundwater monitoring is that required by post removal monitoring or corrective action. The operating permit requirements are found in Section 845.200(a)(5). Therefore, as drafted, Part 845 requires maintenance of the marker beyond closure.

SUBPART B: PERMITTING

16. **Subsection 845.200(a)(1) specifies that "[n]o person must construct, install, or modify a CCR surface impoundment or related treatment or mitigation facilities, under corrective action measures under Subpart F, without a construction permit issued by the Agency under this Part." Mr. Lecrone's testimony that permits are required for the construction, installation, modification or operation of CCR surface impoundments. Lecrone PFT at 3. Please clarify the intent of including the phrase "under corrective action measures under Subpart F". Does this provision apply to only facilities under corrective action measures?**

Response: The Agency did not intend for this provision to only apply to corrective action measures. The intent was for the provision to be applicable to construction activities INCLUDING corrective action measures. The Agency would recommend revising the language as follows:

"….or related treatment or mitigation facilities, including corrective action measures under Subpart F,…. "

17. **Subsection 845.200(b)(2)(C) allows the issuance of a construction or operating permit under Part 845 if the permit application is for construction, installation, or operation of equipment necessary to restore, protect or enhance the environment. Please explain how this provision is different from subsection 845.200(b)(2)(B), which allows the issuance of permit for construction, installation, or operation of equipment to alleviate or correct a violation.**

Response: The intent of this provision is to include instances where construction would be beneficial for reasons either directly in response to a violation, and/or to provide some other benefit not directly related to an existing violation. As an example, a facility could propose the construction of a piece of equipment to directly address a permit violation, such as installation of new filters as a corrective action or remedy to effluent violations for total suspended solids. A facility may also propose to construct a new treatment system for a separate wastestream, or at a different outfall. Construction of such a system would provide an environmental benefit, but not be directly in response to an existing violation.

18. **Subsection 845.210(a) requires all permit applications to be made on such forms as are prescribed by the Agency and must be mailed or delivered to the address designated by the Agency on the forms.**

    a. **Please clarify whether the Agency has prepared permit application forms specifically for CCR facilities regulated under Part 845. If so, submit copies of the permit application forms into the record.**

    b. **Does the Agency have any plans to make these forms available on its website**

to facilitate online submission of the permit application forms?

Response: The Agency has not yet developed application forms specifically for CCR facilities regulated under Part 845. Any such application forms, once developed or prepared, would be made available on the Agency's website. The Illinois EPA website/Bureau of Water does not allow for online submission of permit application forms.

19. **Subsection 845.210(d)(1) allows the Agency to approve "the use of any hydrogeologic site investigation or characterization, groundwater monitoring well or system, or groundwater monitoring plan completed prior to the effective date of these rules to satisfy the requirements." Please clarify whether the Agency approval would be contingent on prior investigations, groundwater systems or plans meeting the requirements of the proposed rules. If not, please explain what criteria would be used by the Agency for approval.**

Response: The intention of this subsection, is to allow the applicant to submit, and the Agency to approve the usage of information, plans, monitoring wells, etc., which may have been developed or installed prior to the effective date of these rules, if such information, plans, monitoring wells, etc. meet the requirements of these rules. It allows the usage of such data, plans or wells, which meet the necessary requirements of the rule, without requiring the applicant to conduct new investigations or develop new plans which may not provide any benefit over those efforts already implemented or completed.

20. **Subsection 845.210(d)(4) allows the owner or operator of inactive closed CCR surface impoundments to use a post-closure care plan previously approved by the Agency. Please comment on whether such approved plans must meet the requirements of the proposed rules.**

Response: Yes, they could use a previously approved post closure care plan assuming that it meets the requirements of this Part. If a previously approved post closure care plan does not meet the requirements of this Section, then the applicant may be asked to supplement their plan.

21. **In Section 845.220(b)(1), would it be acceptable to the Agency if the proposed language is revised as follows to mirror Section 845.230(a):**

    1) Plans and specifications that demonstrate the proposed CCR surface impoundment will meet the location standards in the following sections ~~not be~~:

        A) ~~placed less than five feet above the uppermost aquifer under~~ Section 845.300 (Placement Above the Uppermost Aquifer);

B) ~~**located in wetlands under**~~ **Section 845.310 (Wetlands);**

C) ~~**located in fault areas under**~~ **Section 845.320 (Fault areas);**

D) ~~**located in a seismic impact zone under**~~ **Section 845.330 (Seismic impact zones); and**

E) ~~**located in an unstable area under**~~ **Section 845.340 (Unstable areas).**

Response: The Agency has no objection to the revisions as suggested by the Board.

22. The proposed subsection Section 845.230(d)(2)(E) is numbered as (d)(2)(D) due to a typographical oversight. Therefore, subsections Section 845.230(d)(2)(D) thru (d)(2)(L) needs to be renumbered, as well as any cross references.

Response: The typographical errors in the numbering are noted. The only cross references the Agency has identified for 845.230(d)(2) are 845.230(d)(2)(C) in 845.530(b) and 845.230(d)(2)(A) in 845.540(b)(1)(A), neither of which are indicated in the affected subsections of 845.230(d)(2).

23. The proposed subsections 845.230(d)(2)(H)(i) thru (iv) specify detailed groundwater monitoring information that must be submitted for Initial Operating Permit for Existing, Inactive and Inactive Closed CCR Surface Impoundments. Please comment on why similar information is not required for construction permit applications under Section 845.210, as well as initial operating permit for new construction.

Response: The groundwater monitoring data required by this subsection, is necessary to determining the current site characteristics and compliance status for existing CCR surface impoundments. This data will be used to determine the operational conditions or corrective action which might be necessary under the rule for these existing facilities. Groundwater monitoring needs for construction permits, or operating permits for new construction, will be evaluated during the application review. Determinations on the need for a revised groundwater monitoring program will be based on the effects on the physical, operational, or environmental conditions following construction.

24. Subsection 845.240(b) requires the owner or operator to prepare and circulate a notice explaining the proposed construction project and any related activities and the time and place of the public meeting. Please comment on whether this section should specify that the public notification must include the owner or operator's contact information, including the owner or operator's publicly accessible internet site where all documentation relied upon in preparing the tentative construction

permit application would be available.

Response: The Agency agrees that this section should require that the public notification include the owner or operator's contact information, including the owner or operator's publicly accessible internet site where applicable documentation would be available pursuant to Subsection 845.240(e).

If the Board proposed a revision to Section 845.240(b), the Agency would suggest the following:

b) The owner or operator must prepare and circulate a notice explaining the proposed construction project and any related activities and the time and place of the public meeting. The owner or operator of the CCR surface impoundment must:

1) mail or hand-deliver the notice to the Agency and all residents within a one-mile radius from the facility boundary;

2) post the notice on all of the owner or operator's social media outlets; ~~and~~

3) post the notice in conspicuous locations throughout villages, towns, or cities within 10 miles of the facility, or use appropriate broadcast media (such as radio or television), and

4) include in the notice the owner or operator's contact information, the internet address where the information in Section 845.240(e) will be posted and the date on which the information will be posted to the site.

25. Subsection 845.240(f) requires the owner or operator of the CCR surface impoundment to outline its decision-making process for the construction permit application. Please comment on whether the owner or operator is obligated to receive any public comments and respond to questions at the meeting. Also, clarify if Agency has any role in the pre- application public meeting.

Response: The purpose of the pre-application public meetings is to inform the public of construction plans and related activities at a CCR surface impoundment site and provide the public with an outline of its decision-making process for the construction permit application. This includes, where applicable, the corrective action alternatives and the closure alternatives considered. Section 845.240(a) states in part, that the owner or operator of the CCR surface impoundment must hold at least two public meetings to discuss the proposed construction. These meetings are an opportunity for the owner or operator of the CCR surface impoundment to inform the public of their intentions and to get input from the public to guide their decision-making process. While this section does not explicitly require the company to accept public comments, a discussion of the proposed construction implies a back and forth interaction between the parties to the

extent feasible or reasonable. The Agency has no role in theses public meetings.

26. Please comment on whether section 845.250 should specify a time limit for the Agency to make a tentative determination to issue or deny the construction permit. If not, please explain the rationale.

Response: The Agency intentionally did not include a time limit for a final Agency permit determination pursuant to the exemption carved out by the legislature in Section 39(a) of the Act. The proposed permitting process was modeled after the existing NPDES permit program, which also does not include a time frame for a final Agency decision. The complex nature of these applications, public notice requirements, and the opportunity for a public hearing, make it difficult to complete the process within a defined timeframe. Like the NPDES program, robust public participation is an essential part of this proposal. Not having a specific decision deadline allows for the maximum flexibility during the public notice and hearing processes.

27. Subsection 845.260(a) requires the Agency to email the notification to the Agency's listserv for the applicant's facility. Please comment on who will be on the Agency's listserv for the facility, and how the Agency collects information for developing the listserv.

Response: The Agency Office of Community Relations and the Division of Water Pollution Control Permit Section will maintain a listserv of those parties who have asked to be notified either of any CCR surface impoundment related permit action, or only certain facilities. These interested parties will then be notified by e-mail of any related permitting activities.

28. Subsection 845.260(b)(2)(F) requires the public notice to include Address and telephone number of Agency premises at which interested persons may obtain further information, request a copy of the permit application and related documents. Please comment on whether the rules should require the Agency to make permit application and related documents available on its webpage for easy access to interested persons. If so, please provide amended language to allow digital access. If not, please explain the reasons for not providing online access to permit application and related documents.

Response: The Agency does not currently make permit applications available on the Agency webpage as part of the existing state construction and operating permit programs or the NPDES program. These applications are anticipated to be complex and would need to be screened using Freedom of Information Act guidelines prior to public notice. This process is not part of any existing Division of Water Pollution Control permitting programs.

29. Under subsection 845.260(c), please comment on whether the Agency will allow interested persons to file public comments online. If so, should the public notice

include any specific emailing instructions to file public comments.

Response: This section was also modeled after the NPDES public notice process. The Public Notice Fact Sheet for NPDES permits includes contact information for the Agency, including the phone number and e-mail address of the permit engineer. The Agency proposes to do the same thing for CCR surface impoundment permitting under this section. It is the intention of the Agency to accept written comments in the form of a hard copy letter or by e-mail.

30. Under subsection 845.260(d)(1), please comment on how the Agency determines if there is a significant degree of public interest to decide whether a hearing must be held.

Response: The Agency modeled this proposed permitting process after the existing NPDES permitting program found in Section 309.115(a). Significant degree of public interest is something the Agency looks at on a case by case situation. If there is any doubt whether to hold a hearing or not, the Agency favors holding the hearing.

31. Under subsection 845.260(d)(3), please comment on whether the hearing location chosen by the Agency must comply with the requirements of Americans with Disabilities Act of 1990 (42 USC 12101 et seq.). If so, please amend this subsection to reflect the proposed intent.

Response: Yes, the hearing location chosen by the Agency must comply with the ADA. Title II of the ADA applies to all state and local governments, their departments and agencies, and prohibits discrimination against qualified individuals with disabilities in all programs, activities and services of public entities. Accordingly, Illinois EPA public hearings must comply with the administrative processes required to comply with the ADA; however, the Agency does not see the need to amend this subsection. The Agency is required to comply with a myriad of state and federal statutes in its operations that are not specifically referenced in programmatic regulations. As an example, the language in Section 309.115(d) for NPDES hearings mirrors that of Section 845.260(d)(3) without reference to the ADA. If the Board would like all Agency public hearing regulations updated to include reference to the ADA, the Agency would prefer to that be done at the same time for consistency and so as not to give the indication that some public hearings are subject to the ADA while others are not.

SUBPART C: LOCATION RESTRICTIONS

32. Please comment on whether the Agency is aware of how many of the 73 CCR surface impoundments are located within 5 feet of the uppermost aquifer, wetlands, fault areas, seismic impact zones, and unstable areas. If so, provide a listing of the impoundments indicating the specific affected location restrictions. Also, comment on whether the Agency is aware of how many of

the existing CCR surface impoundments affected by the location restrictions would continue to operate by making the demonstrations required under Subpart C.

Response: While location demonstrations are available on Owner/Operator public websites for a portion of the CCR surface impoundments under 40 CFR Part 257, this information has not yet been submitted to the Agency. It will need to be submitted in the initial operating permit application. Approximately 30 of the 73 CCR surface impoundments identified by the Agency are being disputed by the Owner/Operator as meeting the definition of a CCR surface impoundment so the Agency is unable to predict when or how many initial operating permit applications containing location demonstrations will be submitted.

33. **Regarding restrictions pertaining to wetlands, please comment on whether the proposed rules should prohibit CCR surface impoundments from being located in wetlands.**

Response: Section 845.310(a) prohibits the siting of new, existing or lateral expansions of existing CCR surface impoundments in wetlands unless a qualified professional engineer can certify that the requirements of Section 845.300(a)(1) through (5) can be met. Current Federal Subtitle D RCRA rules allow for CCR surface impoundments and other disposal units such as landfills to make similar demonstrations in their permitting applications.

34. **Please comment on whether the Agency believes that the proposed requirements under Section 845.310 would be protective of the wetlands if CCR surface impoundments are allowed to continue to operate in wetlands.**

Response: Section 845.310(a) prohibits the siting of new, existing or lateral expansions of existing CCR surface impoundments in wetlands unless a qualified professional engineer can certify that the requirements of Section 845.300(a)(1) through (5) can be met. Current Federal Subtitle D RCRA rules allow for CCR surface impoundments and other disposal units such as landfills to make similar demonstrations in their permitting applications.

35. **Please comment on whether the CCR surface impoundments required to close for failing to meet the wetland restrictions under Section 845.310 should close through removal of the CCR and decontamination of the CCR surface impoundment rather than leaving the CCR in place and installing a final cover system. If not, please explain the rationale for leaving CCR permanently in wetlands.**

Response: Closure by removal for CCR surface impoundments failing the wetland restrictions should not be presumptive. Section 845.710(c) requires that closure by removal be one of the closure options assessed. However, 845.710(b), (d), (e) and (g)

contain more than 20 criteria that must be considered when closing a CCR surface impoundment. Among those criteria is Section 845.710(b)(1)(D), which requires an evaluation of the risk to human health and the environment from excavating, transporting and final disposal in an entirely new location compared with human health and environmental risk associated with closure with a final cover. Significantly, Section 845.710(g) requires that the selected closure method must achieve the GWPS, which are protective of human health and the environment.

36. Please comment on whether it would be acceptable to the Agency if subsection 845.300(c) is modified as follows to require the submission of the qualified professional engineer's certification with the initial operating permit application:

c) The owner or operator of an existing CCR surface impoundment must complete the demonstration required by subsection (a) and submit the completed demonstration along with the qualified professional engineer's certification to the Agency in the facility's initial operating permit application.

If so, comment on whether similar changes should be made to Sections 845.310(c) 845.320(c), 845.330(c) and 845.340(d).

Response: The Agency's intent through Section 845.230(a)(1)(B) is for the professional engineer's certification to be submitted as part of the demonstrations required in the initial operating permit. The Board's suggested language is acceptable to the Agency for purposes of providing clarity in Sections 845.300(c), 845.310(c), 845.320(c), 845.330(c) and 845.340(d).

SUBPART D: DESIGN CRITERIA

37. Please comment on whether the design and construction of a new CCR surface impoundment or a retrofit of an existing surface impoundment must be subject to a groundwater impact assessment similar to the construction of new nonhazardous solid waste landfills under 35 Ill. Adm. Code 811.317 to ensure compliance with the GWPS of Section 845.600 over extended time period beyond the 30-year postclosure care period. Also, indicate if there are any proposed provisions that require a similar or equivalent assessment.

Response: The design and construction of a new CCR surface impoundment or a retrofit of an existing surface impoundment is not subject to a groundwater impact assessment similar to the construction of new nonhazardous solid waste landfills under 35 Ill. Adm. Code 811.317 to ensure compliance with the GWPS of Section 845.600 over extended time period beyond the 30-year post closure care period. At this time there are no proposed provisions that require a similar or equivalent assessment.

38. Please clarify if the construction quality assurance (CQA) requirements of Section 845.290 apply to the installation liner at new CCR surface impoundments or lateral expansion of a CCR surface impoundment under Section 845.410, and leachate collection system at new CCR surface impoundments under Section 845.420. If so, comment on whether Sections 845.410 and 420 include a provision requiring compliance with the CQA requirements of Section 845.290.

Response: The construction quality assurance (CQA) requirements of Section 845.290 apply to the installation of liners at new CCR surface impoundments, the lateral expansion of a CCR surface impoundments and the installation of leachate collection systems at CCR surface impoundments. Section 845.290 specifically references construction of a new impoundment, construction of a lateral expansion and retrofit of an existing surface impoundment, which includes the design and installation of liners and leachate collection systems.

39. Under Section 845.430(b)(1) and (b)(3), please explain what is included in "pertinent surrounding area" of the CCR surface impoundments.

Response: The "pertinent surrounding area" would include the drainage ways which convey storm water drainage away from the CCR surface impoundments.

40. Section 845.450(a)(5)(A) requires spillways to be designed on the basis of sustained flows or infrequent flows. Please explain on what basis will owner or operator determine the type of flow expected from a CCR surface impoundment.

Response: Spillway design will depend upon the geometry for the CCR impounding structure. In most cases the design flow will come from direct precipitation in to the CCR impoundment and drainage coming from the interior slopes of the CCR impoundment as well as the discharge of CCR and other waste streams into the impoundment.

41. Section 845.450(a)(5)(B) requires the spillway capacity for Class 2 CCR surface impoundments to be based on the flow from a 1000-year flood. Please comment whether the proposed rules should include a definition of the term 1000-year flood under Section 845.130. If so, propose a definition for that term.

Response: According to the USGS the 1000-year flood means that statically speaking, a flood of that magnitude (or greater) has a 1 in 1,000 chance of happening in any given year. This statistical value is based on observed data. This definition can be added to the proposed regulation. See https://www.usgs.gov/faqs/what-a-1000-year-flood?qt-news_science_products=0#qt-news_science_products
*Chrome web browser is required for using.

42. Section 845.460(c)(4) requires the owner or operator of a new CCR surface impoundment to place each safety factor assessment in the facility's operating record as required by Section 845.800(d)(6). Please explain on why a similar requirement is not proposed for existing CCR surface impoundments.

Response: Each safety factor assessment for an existing CCR surface impoundment must be submitted with the annual inspection required by Section 845.540(b) and placed in the annual consolidated report as required by Section 845.550(a)(2)(C) which is required to be placed in the in the written operating record by Section 845.550(b) and 845.800(d)(14).

SUBPART E: OPERATING CRITERIA

43. Section 845.510(c)(1) requires an owner or operator of a CCR surface impoundment to prepare initial and annual inflow design flood control system plans for the CCR surface impoundment. Please explain the rationale for requiring an annual plan if there is no change in the conditions at the facility that would substantially affect the written plan in effect.

Response: Part 257.82 requires a periodic update of the inflow flood plan which cannot exceed every five years. Since owners and operators are required to do annual consolidated reports, the Agency required an annual update to the inflow design flood control so that information could be included with each annual report. While the information is required annually, unless there are changes necessitating an update to the inflow design plan, the same plan could be in each annual report until an update is required.

44. Section 845.540(a)(1)(A) requires inspection by a qualified person after each 25-year, 24- hour storm. Please clarify whether the inspection needs to be done within 24 or 48 hours after the storm. Also, comment on whether information on the magnitude of the storm would be readily available within a short duration of a storm.

Response: Section 845.540(a)(1)(A) requires that the inspection be completed at least every seven days regardless of any rain event to be consistent with Part 257. To be more protective, the Agency intended to require owners and operators to conduct an additional inspection after the specified major rain event. Given the Board's question, a revision clarifying this intent may be needed. If the Board believes such a revision is appropriate, the Agency suggests the following:

Section 845.450(a)(1) (E) If the 25-year, 24-hour storm occurs more than 48 hours before the scheduled weekly inspection, an additional inspection within 24 hours of the end of the storm event must be conducted in addition to the scheduled seven-day inspection.

The National Oceanic and Atmospheric Administration (NOAA) has published a publicly available document with maps displaying the precipitation totals expected during a 24-hour period, with an expected return frequency of 25 years (a 25-year, 24-hour storm), as well as other time periods and return frequencies. An owner or operator would only need a rain gauge at their location to know if the specified rain event has occurred, based on the data mapped by NOAA.

45. Section 845.540(b)(3) requires the qualified engineer's annual inspection report to be "completed and submitted" with the annual consolidated report required by Section 845.550 by January 31 of each year. However, Section 845.550 does not require the annual consolidated report to be submitted to the Agency. Please clarify whether the annual inspection report or the annual consolidated report needs to be submitted to the Agency. If so, propose language changes to reflect the proposed intent.

Response: The annual inspection report is included in the annual consolidated report that must be put into the facility's operating record. Therefore, the annual consolidated report, which contains the annual inspection report and the annual groundwater monitoring and corrective action report are required to be available to the Agency and the public on the owner or operator's publicly available website. Given the Board's question, the Agency suggests replacing the word "submit" in Section 845.540(b)(3) with the phrase "…completed and included with the annual consolidated report…, to clarify the requirement.

SUBPART F: GROUNDWATER MONITORING AND CORRECTIVE ACTION

46. Section 845.600(a)(1) lists Groundwater Protection Standards (GWPS) for 20 chemical constituents.

a. Please clarify whether the listed constituents represent the chemical constituents of concern associated with CCR in Illinois.

Response: The constituents listed in Section 845.600(a)(1) were found by USEPA to be the constituents of concern associated with CCR, located at 80 Fed. Reg. 21340, and 21403-21406 (Apr. 17, 2015) and 83 Fed. Reg. 36444 and 36445 (July 30, 2018).

b. Comment on whether the existing CCR surface impoundments with Agency approved groundwater monitoring program are currently monitoring for any constituents not listed in Section 845.600(a)(1).

Response: CCR surface impoundments that had an Agency approved groundwater monitoring program prior to the implementation of Part 257 at CCR surface impoundments monitor for constituents listed in Part 620.

c. If so, provide a list of other chemical constituents being monitored at existing CCR impoundments and comment on whether they should be

included in Section 845.600(a)(1) with corresponding GWPS.

Response: The constituents listed in Section 620.410(a), with the exception of Perchlorate, Radium-226 and Radium-228 are monitored at some CCR surface impoundments. Some CCR surface impoundments also require the monitoring of the constituents listed in Section 620.410(d) (i.e. Benzene and the BETX compounds). The requirement for some CCR surface impoundments to monitor Benzene and BETX was unintentional because the CCAs requiring the monitoring incorrectly cited Section 620.410(d) instead of Section 620.410(e). The intended constituent was pH in Section 620.410(e). It is not necessary to add all of the 620 constituents to Section 845.600(a)(1), because Part 620 remains applicable at locations containing CCR surface impoundments, and therefore the constituents not listed in Section 845.600 are regulated by Part 620. Because Section 620.410(a) contains inorganic constituents, corrective measures that address the constituents listed in Section 845.600(a)(1), will also address the Section 620.410(a) constituents.

47. **Mr. Dunaway states that the proposed GWPS concentrations in Section 845.600(a) are the "lower of the numerical concentrations adopted in Part 257 or the existing Class I GWQS for that parameter. The numerical concentration of a constituent is more protective than a background concentration in proposed Part 845." Dunaway PFT at 4.**

    a. **Please list the chemical constituents in Section 845.600(a) for which the GWPS are based on Part 620 Class I standards, and 40 CFR 257.**

    Response: The Section 845.600(a) constituents based on 40 CFR 257 concentrations are Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Fluoride, Lithium, Mercury, Molybdenum, Selenium, Thallium and Radium 226 and 228 Combined. The Section 845.600(a) constituents based on Part 620 are Boron, Chloride, Lead, pH, Sulfate and Total Dissolved Solids.

    b. **Also, explain why the numerical concentration (GWPS) is more protective than the background concentration, particularly if the upgradient background concentration is lower than the proposed numeric GWPS.**

    Response: It is the Agency's intent to apply to the USEPA to replace the USEPA's CCR surface impoundment regulations under Part 257, with Part 845 for the owners and operators of CCR surface impoundments in Illinois. Under Part 257, when an exceedance of a GWPS is detected, for Boron, Calcium, Chloride, Fluoride, pH, Sulfate or Total Dissolved Solids (Part 257, Appendix III constituents), the only requirement is that Assessment Monitoring for Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Fluoride, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium and Radium 226 and 228 Combined (Part 257, Appendix IV constituents), must be initiated. The Agency is proposing a more protective approach, by requiring that an exceedance of a numerical concentration of Boron, Chloride,

Fluoride, pH, Sulfate or Total Dissolved Solids, under Section 845.600(a), results in the initiation of corrective action, not just the initiation of assessment monitoring for ~~just as it would if~~ Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Fluoride, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium and Radium 226 and 228 Combined ~~exceeded their respective GWPS~~ Unlike Part 257, Part 845, as proposed, will require corrective action for all of the Section 845.600(a)(1) constituents, which is a more protective approach.

c. Please clarify whether calcium is required to be monitored at existing and inactive CCR surface impoundments. Since a GWPS is not proposed for calcium, please comment on whether the background concentration for calcium should be the GWPS for existing and inactive CCR surface impoundments similar to the new CCR surface impoundments under Section 845.600(b). If so, propose appropriate revisions Section 845.600 to reflect the proposed intent.

Response: Section 845.650(a) specifies that Calcium must be monitored by all CCR surface impoundments subject to Subpart F. The Agency intended for owners and operators of CCR surface impoundments to monitor Calcium as a general groundwater chemistry parameter. Discussion with the Agency's Office of Toxicity Assessment reveals that the specified toxicological references it uses to establish groundwater standards and cleanup objections have no toxicological data for Calcium, hence Calcium does not have a numerical standard in Part 620, and this is likely the reason that Calcium does not have an MCL, and USEPA did not calculate a risk based numerical value for Part 257. USEPA included Calcium in Appendix III of Part 257 as a general indicator of CCR leaching and because it is associated with Arsenic leaching, 80 Fed. Reg. 21403, (Apr. 17, 2015). Section 845.600 establishes an Arsenic GWPS and Section 845.650 requires routine monitoring of Arsenic, in addition to Calcium, therefore, a Calcium GWPS at the background concentration is not needed.

48. Mr. Dunaway notes that the GWPS in proposed Part 845 are intended to be stand-alone standards, unrelated to Part 620. Dunaway PFT at 6. Further, he explains that Section 845.600(c) is intended to clarify that the alternative standard pursuant to Part 620.450(a)(4) is not available for any constituents with GWPS subject to proposed Part 845 until the end of post closure care.

a. Please clarify whether CCR surface impoundments regulated under Part 845 would be subject Part 620 standards other than Section 620.450(a)(4) during operation, closure and post closure.

Response: A CCR surface impoundment regulated under Part 845 is generally subject to Part 620. However, the Agency envisions regulation of CCR surface impoundments under Part 845 and Part 620 as a step-wise process, because Part 620 is comprised of more than numerical standards. Part 257 and hence Part 845, don't recognize Illinois' groundwater classification system. To be protective the GWPS in Section 845.600(a) are

set at the lower of the Class I groundwater standard or the numerical values of Part 257. A CCR surface impoundment subject to Part 620, sighted within an area of Class II groundwater could have a higher groundwater quality standard, than the GWPS. The GWPS of Part 257 and Part 845 have a compliance point at the waste boundary (the Agency assumes this to be the downstream toe of the impoundment berm or edge of the impoundment if incised) and extend to the identified edge of the plume where constituent concentrations exceed the GWPS. Part 620 has a point of compliance as much as 25 feet from toe of the berm or edge of the impoundment. The applicable Part 620 numerical standard extends as far as the geologic material yielding the particular Class of groundwater extends. Due to these conflicts, Part 845 must be applied first for any constituent with a GWPS. For any constituent which has no GWPS, and after the active life of a CCR surface impoundment as defined by Part 845, the requirements of Part 620 are applicable.

b. If not, to avoid any conflicts or confusion with the application of Part 620, comment on whether the proposed rules must include a provision noting that CCR surface impoundments subject to Part 845 are exempted from the Part 620 groundwater quality standards until the Agency approves the facility's completion of postclosure care.

Response: As explained in 48(a), there should be no general exemption from Part 620 for CCR surface impoundments regulated under Part 845.

49. Section 845.610(d) requires the owner or operator a CCR surface impoundment in the event of a release to immediately take all necessary measures to control all sources of the release so as to reduce or eliminate, to the maximum extent feasible, further releases of contaminants into the environment.

a. Please clarify whether the term "release" has the same meaning as the definition under Section 3.395 of the Act.

Response: No

b. If not, explain what constitutes "release" in the context of this subsection.

Response: In light of the Board's line of questioning, the Agency believes a definition applicable to Part 845 is appropriate. The Agency suggests the following:

"Release" means for Part 845, leaching of dissolved constituents at a concentration above the applicable GWPS as measured at a CCR surface impoundment's points of compliance or physical movement of CCR, except subject to an Agency approved closure or corrective action, from inside the CCR surface impoundment to the outside the CCR surface impoundment.

c. Would subsurface transport of contaminants from a CCR surface impoundment to underlying groundwater that does not cause exceedances of the applicable GWPS considered as a release?

Response: No.

50. Section 845.610(e)(3) requires certain information to be included in the annual groundwater monitoring and corrective action report "to the extent available". Please clarify whether the informational requirements in this subsection are optional or does the rule require the owner or operator to include all information described in Section 845.610(e)(3)(A) through (F).

Response: The informational requirements of Section 845.610(e)(3) are not optional if they exist. However, information responsive to Section 845.610(e)(3)(E), would not exist if there had been no statistically significant increase over background. Another example relative to Section 845.610(e)(3)(F), a new CCR surface impoundment may not be able to provide its statistical background at the time the annual report is due, depending upon when the CCR surface impoundment was constructed and the monitoring system installed.

51. Regarding the hydrogeologic site characterization under Section 845.620, Mr. Dunaway states that the characterization will incorporate existing information from publicly available data sources and maps, as well as site specific information derived from borings, monitoring and analyses performed specifically for the hydrogeologic site characterization, or other previously existing site investigations. Dunaway PFT at 8.

a. Please clarify whether all or most existing CCR surface impoundments have performed hydrogeologic site characterization that meets the proposed requirements.

Response: Most existing CCR surface impoundments have not performed hydrogeologic site characterizations that meet the proposed requirements. The Agency estimates that approximately one third of the existing CCR surface impoundments have completed hydrogeologic site characterizations that meet most of the proposed requirements.

b. Comment on whether the rule as proposed allows the use of existing information derived from previous investigations for site characterization.

Response: Provided the information derived from previous investigations is not subject to change (e.g. site geology, location of water bodies), the rule as written allows its use.

52. Section 845.630(f) requires the owner or operator of a new CCR surface

impoundment to submit a construction permit application containing documentation showing that the groundwater monitoring system is designed to meet the requirements. Please clarify whether the owner or operator must wait for the Agency to approve the construction permit before installing the groundwater monitoring system. If so, does the proposed rule reflect the proposed intent?

Response: Yes, the rule reflects that intent. Section 845.220(a)(7)(B) requires that a construction permit include the design and construction plans of the groundwater monitoring system. Section 845.200(b)(1) prohibits the Agency from issuing construction permits unless the applicant provides adequate proof that the CCR surface impoundment will not cause a violation of Board rules. Therefore, any monitoring well system constructed to carry out the required monitoring of a new CCR surface impoundment must be approved as part of the construction permit.

53. Please comment on whether it would be acceptable to the Agency if Section 845.640(c) is revised as follows:

c) The owner or operator must perform the following each time ground water is sampled:

1) Measure ~~G~~groundwater elevations ~~must be measured~~ in each well prior to purging~~, each time groundwater is sampled.~~;

2) ~~The owner or operator of the CCR surface impoundment must~~ determine the rate and direction of groundwater flow ~~each time groundwater is sampled.~~; and

3) Measure ~~G~~groundwater elevations in wells which monitor the same CCR management area ~~must be measured~~ within a time period short enough to avoid temporal variations in groundwater flow which could preclude accurate determination of groundwater flow rate and direction.

Response: The Boards revision is acceptable to the Agency.

54. In Section 845.640(f), please clarify whether "compliance wells" refer to all downgradient wells. If not, does the proposed rules allow an owner or operator to designate certain downgradient wells as compliance wells?

Response: The term "compliance well" includes all groundwater monitoring wells installed at the down gradient compliance point of a CCR surface impoundment and any groundwater monitoring wells, which are not background wells, installed as part of a corrective action plan.

55. Section 845.650(b)(1)(B) requires, for new CCR surface impoundments or lateral

expansions, a minimum of eight independent samples for each background well and downgradient well to be collected and analyzed for all constituents with a groundwater protection standard listed in Section 8 5.600(a) and Calcium during the first 180 days of sampling. Please clarify whether the 180-day period starts after the placement of CCR in the impoundment or before. Comment on whether sampling should be done prior to placement of waste in order to collect samples unimpacted by the CCR to establish background at new facilities.

Response: Section 845.650(b)(1) requires that monitoring be conducted during the active life of a CCR surface impoundment. The active life begins with the first placement of CCR in the surface impoundment. Subpart F does not preclude initiating sampling prior to operation of the CCR surface impoundment of any properly permitted wells. It is not necessary to begin sampling new CCR surface impoundments or lateral expansions of CCR surface impoundments prior to the placement of CCR, because background wells which have not and will not be impacted by the new or expanded CCR surface impoundment are required.

56. **The proposed response activities required under Section 845.650(d)(1)and (d)(2) do not include any timeframes for completing those activities. Please comment on whether the proposed rules should include deadlines for the owner or operator to complete the response activities under subsections (d)(1) and (2).**

Response: Section 845.650(d)(3) requires that an assessment of corrective measures begin within 90 days of the detected exceedance. Section 845.650(d)(1) requires that the owner or operator characterize the nature and extent of the release, with a characterization that minimally includes the requirements of Section 845.650(d)(1)(A) through (D). Because an assessment of corrective measures can't begin without characterizing the nature and extent of a release, the owner or operator has 90 days to complete the activities required by Section 845.650(d)(1) and (2). The Agency notes that a great deal of site information will already be available because of the hydrogeologic site characterization required by Section 845.620.

57. **Please clarify whether the Agency nonconcurrence determination Section 845.650(d)(4)(C) of an alternative source demonstration is considered as an Agency action appealable to the Board. If not, please explain if the owner or operator has any recourse other than initiating assessment of corrective action measures.**

Response: Yes, the nonconcurrence determination is a final Agency decision appealable to the Board pursuant to Part 105 of the Board's rules.

58. **Section 845.660(a)(1) requires the initiation assessment of corrective measures within 90 days of finding that any constituent listed in Section 845.600 has been detected in exceedance of the GWPS in Section 845.600, or immediately upon detection of a release from a CCR surface impoundment. Please clarify whether assessment of corrective action measures must be done even if detection of a**

release from a CCR impoundment is below the applicable GWPS. If so, explain why assessment is necessary if monitored levels are below GWPS.

Response: The language in Section 845.660(a)(1) reflects the language contained in Part 257. As the Response to Question No. 49 indicates, a release in the context of this subsection would be leaching at a concentration above the applicable GWPS as measured at the CCR surface impoundment's point of compliance or physical movement of CCR, except subject to an Agency approved closure or corrective action, from inside the CCR surface impoundment to the outside the CCR surface impoundment. Therefore, detections below the applicable GWPS would not be considered a release triggering assessment and any release of CCR material from the surface impoundment would require corrective action.

59. **Section 845.660(d) requires the owner or operator of the CCR surface impoundment to discuss the results of the corrective measures assessment at least 30 days prior to the selection of remedy in a public meeting with interested and affected parties as required by Section 845.240. This section specifies requirements for public meetings concerning application for a construction permit. Please comment on whether Section 845.240 needs to be modified in any way to accommodate public meeting requirements tailored to address corrective measures assessment. If so, propose any necessary revisions to Section 845.240.**

Response: Section 845.240(f) specifies "…where applicable, corrective action alternatives… must be discussed." The Agency believes this clause adequately links the corrective action alternatives requirements to the public meeting requirements of Section 845.240.

60. **Section 845.670(b) allows owner or operator of the CCR surface impoundment one year after the completion of the assessment of corrective measures, and completion of the public meeting in Section 845.660(d) to submit a corrective action plan in a construction permit application.**

    a. **Please comment on the rationale for allowing a one-year period for plan submission rather than shorter time frame in the range of four to six months.**

Response: Though Part 257 specifies the time frame by which a corrective action alternatives assessment must be undertaken, Part 257 does not specify any timeframe by which a remedy must be selected and requires only a semi-annual report on the decision-making process. Therefore, a 1-year limit is more protective than Part 257. When considering that the selected remedy must meet multiple criteria listed in Section 845.670(c) through (f), then be incorporated into a corrective action plan, which would then have to be part of a construction permit, the Agency did not believe 1 year to be an unreasonable time frame.

b. Comment on whether the proposed rules require the Agency to approve or deny the corrective action plan /construction permit within a certain time period like 90 or 120 days of receiving the permit application. If not, please explain why an approval timeframe is unnecessary.

Response: Just like NPDES permits, RCRA and UIC permits, P.A. 101-171 revised Section 39 of the Act to exempt CCR surface impoundment applications from the 90-day and 180-day time periods for the Agency to take final action.

c. If the Agency denies the corrective action plan in the construction permit, please clarify whether the Agency's action is appealable.

Response: A denial of a construction permit is a final Agency action appealable to the Board pursuant to Part 105 of the Board's rules.

SUBPART G: CLOSURE AND POST-CLOSURE CARE

61. Section 845.700(a) specifies that the owner or operator must cease placing CCR or "non- CCR waste streams" in CCR surface impoundments that are required to initiate closure under Subpart G.

a. Please clarify whether CCR surface impoundments subject to Part 845 are generally allowed to receive "non-CCR waste streams" during operation.

Response: Yes, they are. See 845.220(a) that requires information about non-CCR waste streams be included in construction permit applications.

b. If not, comment on whether a provision prohibiting the placement of "non-CCR waste streams" in CCR surface impoundments should be added to Section 845.100.

c. If so, comment on the types of non-CCR waste streams that are allowed to be accepted at CCR surface impoundments.

Response: CCR was historically wet sluiced from the boilers to the CCR surface impoundments. This flow of ash transport water was typically the majority of the wastewater which was sent to the surface impoundment. However, at most facilities other waste streams would be sent to the impoundment along with the ash and transport waters. These waste streams could include things like floor drains, filter backwashes, service waters, wash waters, coal pile runoff, roof drains, or other stormwater from the facility. These waste streams may continue to be discharged to the CCR surface impoundment after CCR ceases to be placed there. Continued discharge of these waters from the surface impoundment to an outfall would continue to be subject to the facility's NPDES permit. These waste streams would

need to be re-routed in order to complete closure of the impoundment.

62. Section 845.700(d)(2) specifies timeframes for closure based upon whether CCR surface impoundment has satisfied an alternative closure requirement of 40 CFR § 257.103 that allows for the continued receipt of CCR or non-CCR waste streams.

a. Please comment on why the Agency chose to include a cross-reference to 40 CFR § 257.103 rather than including the alternative closure requirement provisions in Part 845.

Response: The federal CCR regulatory program contained in 40 CFR 257 is what applies to surface impoundments prior to the effective date of Part 845. Section 845.700(d)(2) speaks to demonstrations and requirements that have or have not been fulfilled under Part 257 at the time Part 845 takes effect. 845.700(d)(2)(A) speaks to when an owner or operator of a CCR surface impoundment has not previously made an alternative closure demonstration under 257.103, 845.700(d)(2)(B) references time extensions approved under 257.103, and 845.700(d)(2)(B) speaks to permanent cessation of boilers by a date certain under 257.103. Since Part 845 does not have any applicability preceding its effective date, references to the requirements of Part 845 would not be appropriate.

b. **Clarify whether the owner or operator of a CCR surface impoundment under Section 845.700(d)(2) must initiate closure within 6 months of ceasing to accept CCR. If so, please revise subsection (d)(2) to reflect the proposed intent. If not, explain when impoundments under subsection (d)(2) are required to initiate closure.**

Response: CCR surface impoundments required to close under Section 845.700 a)1) or b) are required to close using the Application Schedule for their Priority Category under Section 845.700 h). Section 845.730 provides that closure of the CCR surface impoundment has been initiated if the owner or operator has ceased placing waste in the CCR surface impoundment and has submitted to the Agency a construction permit application pursuant to Section 845.220(d).

63. Under the alternative closure requirements of 40 CFR § 257.103 (a)(1), a CCR surface impoundment subject to Subpart G is allowed to continue to receive CCR up to 5 years of the initial certification if the owner or operator certifies that the CCR must continue to be managed in that impoundment due to the absence of alternative disposal capacity both on- site and off-site of the facility if certain conditions are met.

a. Please comment on whether the Agency expects CCR surface impoundments in Illinois would be faced with the situation of not having alternative disposal capacity both on- site and off-site.

Response: Determining the availability of alternative disposal capacity will be determined by the owner or operator on a case by case basis. The Agency would be forced to speculate relative to expectations on the availability alternative disposal capacity.

b. Clarify whether the non-availability of off-site capacity applies to off-site disposal sites within Illinois or outside the state.

Response: The availability of off-site capacity applies to off-site disposal sites both within and outside the state.

c. Does the Agency have the authority to disapprove the certification submitted by an owner or operator of a CCR surface impoundment under 40 CFR § 257.103(a)(1)? If so, what criteria will the Agency use to make its determination?

Response: No, Part 257 is a self-implementing program and Section 845.700 allows owners or operators of surface impoundments that are closing under the timeframes in (d)(2)(B) and (d)(2)(C) due to previous compliance with Part 257 to continue to prepare semi-annual reports consistent with the federal program until closure is initiated.

d. Also, explain the rationale for limiting the continued acceptance of CCR under 40 CFR § 257.103 to October 15, 2023 rather than 5 years from the date of initial certification.

Response: As has been proposed on other timelines in this Section, the Agency has chosen shortened timelines in order to move closure progress CCR surface impoundments required to close.

64. Section 845.700(g)(1)(C) specifies that Category 3 includes CCR surface impoundments located in areas of environmental justice concern as determined by the Agency under subsection 845.700(g)(6).

a. Please clarify whether the Agency's determination under subsection (g)(6) be appealed to the Board by an affected community.

Response: No

b. Do affected communities have access to the data used by the Agency to determine whether a community is an EJ community or not?

Response: Yes. The Illinois EPA obtains the data from the American Community Survey, which is publicly available and the same data source utilized by USEPA EJ Screen for demographic data.

c. Will the Agency identify the source of the data used to make its determination under subsection (g)(6)?

Response: Yes. The Illinois EPA's data source is the American Community Survey 5-year average.

65. Mr. Pressnall states that the Agency has developed a Geographic Information System (GIS) mapping tool call EJ Start to identify census block groups and areas within one mile of census block groups meeting the EJ demographic screening criteria. Pressnell PFT at 69. Please provide a valid website link to EJ Start.

Response: The correct link is: https://illinois-epa.maps.arcgis.com/apps/webappviewer/index.html?id=f154845da68a4a3f837cd3b880b0233c
*Chrome web browser is required for using. In addition, the Illinois EPA has now made the coal ash impoundment map available on its website and it includes an environmental justice layer.

66. Section 845.700(g)(4) requires the owner or operator of a Category 1 surface impoundment to replace the water supply with a supply of equal or better quality and quantity within 30 days of notice that such impact has occurred. Please identify the specific provision of the proposed rules that require the owner or operator to provide a notification of impact to any existing potable water supply and include a cross-reference to that provision in Section 845.700(g)(4).

Response: There is no specific provision in the proposed rule that requires the owner or operator to provide a notification of impact to any existing potable water supply. Section 845.650(d)(2) requires the owner or operator to notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination if contaminants have migrated off-site as indicated by sampling of monitor wells. This notification would trigger outreach to owners to sample potable wells within the defined plume of contamination and subsequent water supply replacement as needed.

67. Please clarify whether an owner or operator submitting the preliminary closure plan with the initial operating permit application per Section 845.720(a)(2) should also submit the qualified professional engineer's certification that the initial and any amendment of the preliminary written closure plan meets the

requirements of Part 845. If so, revise Section 845.720(a)(2) to reflect the proposed intent.

Response: To clarify the Agency's intent for the professional engineer certifications of preliminary and amended closure plans to be submitted as part of the initial and renewal operating permit applications, and to maintain consistency with the proposed revision in Response to Question No. 69 below, the Agency proposes revising Section 845.710(a)(4) as follows:

"The owner or operator of the CCR surface impoundment must obtain and submit with its initial and renewal operating permit applications a written certification from a qualified professional engineer that the initial and any amendment of the preliminary written closure plan meets the requirements of this Part."

68. In Section 845.720(b)(2), please clarify whether the exception, as provided in Section 22.59 of the Act, from filing a construction permit refers to CCR surface impoundments with permits issued by the USEPA. If not, please explain what's covered under the exception.

Response: The exception being referred to is Section 22.59(e) of the Act, which is for owners and operators of CCR surface impoundments who submitted closure plans to the Agency before May 1, 2019 and who have those plans approved and closure completed within 24 months (May 31, 2021). USEPA does not currently have a permit program for CCR surface impoundments and is not likely to have a program prior to March 31, 2021. The exemption is from the construction permit required for closure of a CCR surface impoundment under Part 845, Subpart B.

69. Please clarify whether an owner or operator submitting the written final closure plan as a part of a construction permit application under Section 845.720(b)(1) should also submit the qualified professional engineer's certification that the final closure plan meets the requirements of Part 845. If so, revise Section 845.720(a)(2) to reflect the proposed intent.

Response: To clarify the Agency's intent for the professional engineer's certification of the final written closure plan to be submitted as part of the construction permit application, and since subsection (a)(2) does not speak to the final closure plan or the construction application, the Agency proposes revising Section 845.710(b)(5) as follows:

"The owner or operator of the CCR surface impoundment must obtain and submit with its construction permit application for closure a written certification from a qualified professional engineer that the final written closure plan meets the requirements of this Part."

70. Please clarify whether written certification from a qualified professional engineer required under Section 845.750(c)(4) that the design of the final cover system meets the requirements of Section 845.750 must be submitted with the final closure plan as well as the construction permit. If so, comment on whether the proposed rules must be revised to reflect the proposed intent.

Response: To clarify the Agency's intent for the professional engineer's certification of the final cover system to be submitted as part of the construction permit application for closure, and to maintain consistency with the revisions proposed in Response to Question Nos. 67 and 69 above, the Agency proposes revising Section 845.750(c)(4) as follows:

"The owner or operator of the CCR surface impoundment must obtain and submit with its construction permit application for closure a written certification from a qualified professional engineer that the design of the final cover system meets the requirements of this Section."

71. Section 845.760(a) allows the owner or operator of a CCR surface impoundment up to 5 years from the date of submitting the construction permit application to complete closure activities. Please comment the rationale for allowing up to 5 years for completing closure activities. In this regard, the Board's landfill regulations require closure activities to be completed within 180 days of beginning closure. See 35 Ill. Adm. Code 811.110.

Response: Moving or removing ash is different than closing a landfill. Landfills are generally dry. Impoundments are wet, which brings another set of engineering complications to the closure process. The ash in the impoundments is a slurry and generally kept wet. For closure in place, saturated material has to be managed in order to construct the final cover. Closure by removal may require even more drying of the CCR material before transporting it to another location. All of this takes time and care. Section 845.760(a) is consistent with CFR 257.102(f)(1)(ii). USEPA recognized the difference between landfills and surface impoundment as described above when it allowed CCR landfills only six months to complete closure activities in CFR 257.102(f)(1)(i), whereas CCR surface impoundments are allowed five years in CFR 257.102(f)(1)(ii).

72. Please clarify why extension of closure under Section 845.760(c)(3) does not have limit on number of times an owner or operator may seek an extension.

Response: Section 845.760(c)(C) applies only to CCR surface impoundments that are closing by removal, because the time required to remove, transport and dispose of large volumes of CCR may take more than the maximum 15 years allowed for closure with a final cover. Providing additional time to complete removal may make closure by removal a stronger option when weighed in the closure alternatives analysis required by Section

845.710.

73. **Section 845.760(f) requires the owner or operator to prepare a notification of closure of the CCR surface impoundment and place the notification in the facility's operating record. Please clarify whether the owner or operator needs to notify the Agency are any other persons regarding the closure of the CCR surface impoundment**.

Response: The closure report and certification must be submitted to the Agency in Section 845.760(e). Once these are approved by the Agency, the notification, along with the certification, of the facility's closure is placed in the facility's operating record. The notification does not need to be submitted to the Agency or any other persons since the facility's operating record will be publicly available under 845.800(d) and 845.810.

74. **Section 845.780(a)(1) specifies that the post-closure care requirements apply to the owners or operators of CCR surface impoundments who have completed an Agency approved closure. Please clarify whether an Agency approved closure means the Agency's approval of the closure report and closure certification submitted under Section 845.760(f). If so, should Section 845.780(a)(1) include a cross reference to Section 845.760(f)?**

Response: Yes, post-closure care requirements do apply to Agency approved closure completed under Section 845.760(f). It also applies to inactive closed CCR surface impoundments which have not yet completed post-closure.

75. **Please clarify whether Section 845.780(c) allows termination of post-closure care only if both subsections (c)(1) (GWPS) and (c)(2) are met. Comment on whether post-closure care could be terminated if concentrations have been reduced to the maximum extent feasible, and concentrations are protective of human health and the environment even if the concentrations are above the GWPS.**

Response: The termination of post-closure care requires that both subsections (c)(1) and (c)(2) be met. The Agency has found that the GWPS are protective of human health and the environment. Since concentrations above the GWPS are not protective of human health and the environment, post closure case could not be terminated if the GWPS are not met.

SUBPART I: FINANCIAL ASSURANCE

76. **Section 845.900(e) states that Subpart I does not apply to State of Illinois, local government, and not-for-profit electric co-ops. How many of these groups have CCR surface impoundments in Illinois?**

Response: Currently, there are two (City, Water, Light and Power and Southern Illinois Power Cooperative).

77. Section 845.950(b) requires the language of the mechanisms used for providing financial assurance for closure, post-closure, and corrective action of CCR surface impoundments to be consistent with the forms prescribed by the Agency. Please clarify whether the Agency has developed financial assurance forms tailored for CCR surface impoundments regulated under Part 845. If so, please submit CCR surface impoundment financial assurance forms into the record. (This question applies to Sections 845.960(c), 970(c), 980(c) and 990(c)).

Response: Please see attached mechanisms.

	A	B	C	D	E	F	G	H	I	J
1	Company	Facility	Pond ID Number	Pond Description	Closure Complete	Post Closure Care Complete	Status	Close before July 31, 2021	Area of EJ Concern	Exceeds 620/GWPS
2	Ameren	Venice	W1191050002-01	N. Pond	yes, Nov. 2012	no	Inactive Closed	see closure date	yes	yes has GMZ
3	Ameren	Venice	W1191050002-02	S. Pond	yes, Nov. 2012	no	Inactive Closed	see closure date	yes	yes has GMZ
4	Ameren	Hutsonville	W0330100003-01	Pond A	yes, Nov. 2016	no	Inactive	see closure date	no	yes has GMZ
5	Ameren	Hutsonville	W0330100003-02	Pond B	no, removal Nov. 2016	no pond specific monitoring	Inactive	see closure date	no	unkown, no pond specific monitoring
6	Ameren	Hutsonville	W0330100003-03	Pond C	no, removal Nov. 2016	no pond specific monitoring	Inactive	see closure date	no	unkown, no pond specific monitoring
7	Ameren	Hutsonville	W0330100003-04	Pond D	yes, Jan. 2013	no	Inactive Closed	see closure date	no	yes
8	Ameren	Hutsonville	W0330100003-05	Bottom Ash	no, removal Nov. 2016	no pond specific monitoring	Inactive	see closure date	no	unkown, no pond specific monitoring
9	Ameren	Meredosia	W1370300005-01	Bottom Ash Pond	yes, Jan 2019	no	Inactive	see closure date	no	yes has GMZ
10	Ameren	Meredosia	W1370300005-02	Fly Ash	yes, Aug 2019	no	Inactive	see closure date	no	yes has GMZ
11	Ameren	Meredosia	W1370300005-03	Old Ash Pond	no	no	Inactive	no	no	Not Fully Evaluated
12	CWLP	City Water Light and Power	W1671200052-01	Lake Side Pond	no	no	Existing	no	yes	yes
13	CWLP	City Water Light and Power	W1671200052-02	Dallman Pond	no	no	Existing	no	yes	yes
14	Vistra	Baldwin Energy Center	W1578510001-01	Old East Fly Ash Pond	no	no	Existing	Likely	no	yes has GMZ
15	Vistra	Baldwin Energy Center	W1578510001-02	East Fly Ash Pond	no	no	Existing	Likely	no	yes has GMZ
16	Vistra	Baldwin Energy Center	W1578510001-03	West Fly Ash Pond	no	no	Existing	Likely	no	yes has GMZ
17	Vistra	Baldwin Energy Center	W1578510001-06	Bottom Ash Pond	no	no	Existing	no	no	yes
18	Vistra	Coffeen Station	W1350150004-01	Ash Pond 1	no	no	Existing	no	no	Not Fully Evaluated
19	Vistra	Coffeen Station	W1350150004-02	Ash Pond 2	no	no	Existing	Likely	no	yes has GMZ
20	Vistra	Coffeen Station	W1350150004-03	GMF Pond	no	no	Existing	no	no	Not Fully Evaluated
21	Vistra	Coffeen Station	W1350150004-04	GMF Recycle Pond	no	no	Existing	no	no	Not Fully Evaluated
22	Vistra	Duck Creek Station	W0578010001-01	Ash Pond No.1	no	no	Existing	Likely	yes	yes has GMZ
23	Vistra	Duck Creek Station	W0578010001-02	Ash Pond No.2	no	no	Existing	Likely	yes	yes has GMZ
24	Vistra	Duck Creek Station	W0578010001-03	Bottom Ash Basin	no	no	Existing	no	yes	Not Fully Evaluated
25	Vistra	Duck Creek Station	W0578010001-04	GMF Pond	no	no	Existing	no	yes	Not Fully Evaluated
26	Vistra	Duck Creek Station	W0578010001-05	GMF Recycle Pond	no	no	Existing	no	yes	Not Fully Evaluated
27	Vistra	Edwards Station	W1438050005-01	Ash Pond 1	no	no	Existing	no	no	Not Fully Evaluated
28	Vistra	Joppa Station	W1270100004-01	West Pond 1	no	no	Inactive	no	no	Not Fully Evaluated
29	Vistra	Joppa Station	W1270100004-02	East Ash Pond 2	no	no	Existing	no	no	Not Fully Evaluated
30	Vistra	Havana Station	W1250200004-01	East Ash Pond Cell 1	no	no	Existing	no	yes	Not Fully Evaluated
31	Vistra	Havana Station	W1250200004-02	East Ash Pond Cell 2	no	no	Existing	no	yes	Not Fully Evaluated
32	Vistra	Havana Station	W1250200004-03	East Ash Pond Cell 3	no	no	Existing	no	yes	Not Fully Evaluated
33	Vistra	Hennepin Station	W1550100002-01	West Ash Pond 1	no	no	Inactive	Likely	yes	yes has GMZ
34	Vistra	Hennepin Station	W1550100002-02	West Ash Pond 3	no	no	Inactive	Likely	yes	yes has GMZ
35	Vistra	Hennepin Station	W1550100002-03	West Secondary Ash Pond	no	no	Inactive	Likely	yes	yes has GMZ
36	Vistra	Hennepin Station	W1550100002-04	East Ash Pond 2	no	no	Inactive	Likely	yes	yes has GMZ
37	Vistra	Hennepin Station	W1550100002-05	East New Primary Pond	no	no	Existing	no	yes	Not Fully Evaluated
38	Vistra	Hennepin Station	W1550100002-07	East Pond 4	no	no	Inactive	Likely	yes	yes has GMZ
39	Vistra	Kincaid Generation	W0218140002-01	Ash Pond	no	no	Existing	no	no	Not Fully Evaluated
40	Vistra	Newton Station	W0798070001-01	Primary Ash Pond	no	no	Existing	no	no	yes
41	Vistra	Vermilion Station	W1838000002-01	North Pond Cell 1 & 2	no	no	Inactive	no	no	yes
42	Vistra	Vermilion Station	W1838000002-03	Old East Pond	no	no	Inactive	no	no	yes
43	Vistra	Vermilion Station	W1838000002-04	New East Pond Cell 1 & 2	no	no	Inactive	no	no	yes
44	CTI Developmen	Wood River Station	W1190200004-01	West Ash Pond 1	no	no	Inactive	Likely	yes	yes has GMZ
45	CTI Developmen	Wood River Station	W1190200004-02	West Ash Pond 2W	no	no	Inactive	Likely	yes	yes has GMZ
46	CTI Developmen	Wood River Station	W1190200004-03	West Ash Pond 2E	no	no	Inactive	Likely	yes	yes has GMZ
47	CTI Developmen	Wood River Station	W1190200004-05	Pond	no	no	Existing	no	yes	Not Fully Evaluated
48	Grand Tower	Grand Tower	W0770400003-01	Ash Pond	no	no	Inactive	Likely	no	yes has GMZ
49	NRG	Will County Station	W1978100011-01	Pond 1 North	no	no	Inactive	no	no	yes VN/CCA/GMZ
50	NRG	Will County Station	W1978100011-02	Pond 3 South	no	no	Existing	no	no	yes VN/CCA/GMZ
51	NRG	Will County Station	W1978100011-03	Pond 2 South	no	no	Existing	no	no	yes VN/CCA/GMZ
52	NRG	Will County Station	W1978100011-04	Pond 1 South	no	no	Inactive	no	no	yes VN/CCA/GMZ

	A	B	C	D	E	F	G	H	I	J
1	Company	Facility	Pond ID Number	Pond Description	Closure Complete	Post Closure Care Complete	Status	Close before July 31, 2021	Area of EJ Concern	Exceeds 620/GWPS
53	NRG	Waukegan Station	W0971900021-01	East Pond	no	no	Existing	no	yes	yes VN/CCA
54	NRG	Waukegan Station	W0971900021-02	West Pond	no	no	Existing	no	yes	yes VN/CCA
55	NRG	Waukegan Station	W0971900021-03	Old Pond	no	no	Exsiting	no	yes	Not Fully Evaluated
56	NRG	Powerton	W1798010008-01	Ash Basin	no	no	Existing	no	no	yes VN/CCA/GMZ
57	NRG	Powerton	W1798010008-02	Sec. Ash Basin	no	no	Existing	no	no	yes VN/CCA/GMZ
58	NRG	Powerton	W1798010008-03	Metal Cleaning Basin	no	no	Existing	no	no	yes VN/CCA/GMZ
59	NRG	Powerton	W1798010008-04	Bypass Basin	no	no	Existing	no	no	yes VN/CCA/GMZ
60	NRG	Powerton	W1798010008-05	Former Ash Basin	no	no	Inactive	no	no	Not Fully Evaluated
61	NRG	Joliet 29	W1970450047-01	Pond 1	no	no	Inactive	no	yes	yes VN/CCA/GMZ
62	NRG	Joliet 29	W1970450047-02	Pond 2	no	no	Existing	no	yes	yes VN/CCA/GMZ
63	NRG	Joliet 29	W1970450047-03	Pond 3	no	no	Inactive	no	yes	yes VN/CCA/GMZ
64	NRG	Joliet 9	W1970450046-01	Lincoln Stone Quarry	no	no	Existing	no	yes	yes
65	Prairie Power	Prairie Power Inc	W1490650005-01	N. Pond	yes,Nov. 2014	no	Inactive Closed	see closure date	no	yes has GMZ
66	SIPC	Southern Illinois Power Co-op	W1998600002-01	Pond 1	no	no	Existing	no	no	unkown, no pond specific monitoring
67	SIPC	Southern Illinois Power Co-op	W1998600002-02	Pond 2	no	no	Existing	no	no	unkown, no pond specific monitoring
68	SIPC	Southern Illinois Power Co-op	W1998600002-03	Pond 4	no	no	Exisiting	no	no	unkown, no pond specific monitoring
69	SIPC	Southern Illinois Power Co-op	W1998600002-04	Pond A-1	no, removal Nov. 2017(may	not compliant W/GWPS	Inactive	no	no	unkown, no pond specific monitoring
70	SIPC	Southern Illinois Power Co-op	W1998600002-05	Pond B-3	no, removal Nov. 2017	not compliant W/GWPS	Existing	no	no	unkown, no pond specific monitoring
71	SIPC	Southern Illinois Power Co-op	W1998600002-06	South Fly Ash Pond	no	no	Existing	no	no	unkown, no pond specific monitoring
72	SIPC	Southern Illinois Power Co-op	W1998600002-07	Pond 3	no	no	Existing	no	no	unkown, no pond specific monitoring
73	SIPC	Southern Illinois Power Co-op	W1998600002-09	Pond 6	no	no	Existing	no	no	unkown, no pond specific monitoring
74	SIPC	Southern Illinois Power Co-op	W1998600002-10	Emery Pond	no	no	Existing	Likely	no	Yes, GMZ application

CERTIFICATE OF SERVICE

I, the undersigned, on affirmation state the following:

That I have served the attached **NOTICE OF FILING** and **PRE-FILED ANSWERS** by e-mail upon Don Brown at the e-mail address of don.brown@illinois.gov, upon Renee Snow at the e-mail address of Renee.Snow@Illinois.Gov, upon Matt Dunn at the e-mail address of mdunn@atg.state.il.us, upon Stephen Sylvester at the e-mail address of ssylvester@atg.state.il.us, upon Andrew Armstrong at the e-mail address of aarmstrong@atg.state.il.us, upon Kathryn A. Pamenter at the e-mail address of KPamenter@atg.state.il.us, upon Virginia I. Yang at the e-mail address of virginia.yang@illinois.gov, upon Nick San Diego at the e-mail address of nick.sandiego@illinois.gov, upon Robert G. Mool at the e-mail address of bob.mool@illinois.gov, upon Vanessa Horton at the e-mail address of Vanessa.Horton@Illinois.gov, upon Paul Mauer at the e-mail address of Paul.Mauer@illinois.gov, upon Deborah Williams at the e-mail address of Deborah.Williams@cwlp.com, upon Kim Knowles at the e-mail address of Kknowles@prairierivers.org, upon Andrew Rehn at the e-mail address of Arehn@prairierivers.org, upon Faith Bugel at the e-mail address of fbugel@gmail.com, upon Jeffrey Hammons at the e-mail address of Jhammons@elpc.org, upon Keith Harley at the e-mail address of kharley@kentlaw.edu, upon Daryl Grable at the e-mail address of dgrable@clclaw.org, upon Michael Smallwood at the e-mail address of Msmallwood@ameren.com, upon Mark A. Bilut at the e-mail address of Mbilut@mwe.com, upon Abel Russ at the e-mail address of aruss@environmentalintegrity.org, upon Susan M. Franzetti at the e-mail address of Sf@nijmanfranzetti.com, upon Kristen Laughridge Gale at the e-mail address of kg@nijmanfranzetti.com, upon Vincent R. Angermeier at the e-mail address of va@nijmanfranzetti.com, upon Alec M. Davis at the e-mail address of adavis@ierg.org, upon Jennifer M. Martin at the e-mail address of Jmartin@heplerbroom.com, upon Kelly Thompson at the e-mail address of kthompson@ierg.org, upon Walter Stone at the e-mail address of Water.stone@nrgenergy.com, upon Cynthia Skrukrud at the e-mail address of Cynthia.Skrukrud@sierraclub.org, upon Jack Darin at the e-mail address of Jack.Darin@sierraclub.org, upon Christine Nannicelli at the e-mail address of christine.nannicelli@sierraclub.org, upon Stephen J. Bonebrake at the e-mail address of bonebrake@schiffhardin.com, upon Joshua R. More at the e-mail address of jmore@schiffhardin.com, upon Ryan C. Granholm at the e-mail address of rgranholm@schiffhardin.com, upon N. LaDonna Driver at the e-mail address of LaDonna.Driver@heplerbroom.com, upon Alisha Anker at the e-mail address of aanker@ppi.coop, upon Chris Newman at the e-mail address of newman.christopherm@epa.gov, upon Claire A. Manning at the e-mail address of cmanning@bhslaw.com, upon Anthony D. Schuering at the e-mail address of aschuering@bhslaw.com, upon Jennifer Cassel at the e-mail address of jcassel@earthjustice.org, upon Melissa Brown at the e-mail address of Melissa.Brown@heplerbroom.com, upon Thomas Cmar at the e-mail address of tcmar@earthjustice.org , upon Melissa Legge at the e-mail address of mlegge@earthjustice.org, upon Mychal Ozaeta at the e-mail address of mozaeta@earthjustice.org, upon Michael L Raiff at the e-mail address of mraiff@gibsondunn.com

That my e-mail address is Christine.Zeivel@illinois.gov

That the e-mail transmission took place before 4:30 p.m. on the date of August 3.

/s/ Christine Zeivel
August 3, 2020