

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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

NOTICE OF FILING

To: Service List

PLEASE TAKE NOTICE that I have today electronically filed with the Office of the Clerk of the Pollution Control Board Midwest Generation, LLC's Questions for Mark Hutson, Scott M. Payne, Ian Magruder, and Andrew Rehn, a copy of which is herewith served upon you.

Dated: September 10, 2020

MIDWEST GENERATION, LLC

By: /s/Kristen L. Gale

Susan M. Franzetti
Kristen L. Gale
NIJMAN FRANZETTI LLP
10 South LaSalle Street Suite 3600
Chicago, IL 60603
(312) 251-5590

CERTIFICATE OF SERVICE

The undersigned, an attorney, certifies that a true copy of the foregoing Notice of Filing, and Midwest Generation, LLC's Questions for Mark Hutson, Scott M. Payne, Ian Magruder, and Andrew Rehn was electronically filed on September 10, 2020 with the following:

Don Brown, Clerk of the Board
Illinois Pollution Control Board
James R. Thompson Center, Suite 11-500
100 W. Randolph Street
Chicago, IL 60601
don.brown@illinois.gov

and that copies were sent via e-mail on September 10, 2020 to the parties on the service list.

Dated: September 10, 2020

/s/Kristen L. Gale

Susan M. Franzetti
Kristen L. Gale
Nijman Franzetti LLP
10 S. LaSalle Street, Suite 3600
Chicago, IL 60603
(312) 251-5590

SERVICE LIST

<p>Don Brown, Assistant Clerk Don.brown@illinois.gov Vanessa Horton, Hearing Officer Vanesse.Brown@illinois.gov Illinois Pollution Control Board James R. Thompson Center Suite 11-500 100 West Randolph Chicago, Illinois 60601</p>	<p>Rex L. Gradeless Rex.Gradeless@illinois.gov Stefanie N. Diers Stefanie.diers@illinois.gov Christine M. Zeivel Christine.Zeivel@illinois.gov Illinois Environmental Protection Agency 1021 N. Grand Ave., East, P.O. Box 19276 Springfield, Illinois 62794-9276</p>
<p>Virginia I. Yang - Deputy Counsel virginia.yang@illinois.gov Nick San Diego - Staff Attorney nick.sandiego@illinois.gov Robert G. Mool bob.mool@illinois.gov Paul Mauer - Senior Dam Safety Eng. Paul.Mauer@illinois.gov Renee Snow - General Counsel renee.snow@illinois.gov Illinois Department of Natural Resources One Natural Resources Way Springfield, IL 62702-1271</p>	<p>Matthew J. Dunn mdunn@atg.state.il.us Stephen Sylvester ssylvester@atg.state.il.us Andrew Armstrong aarmstrong@atg.state.il.us Kathryn A. Pamentner KPamentner@atg.state.il.us 69 West Washington Street, Suite 1800 Chicago, IL 60602</p>
<p>Deborah Williams Deborah.Williams@cwlp.com City of Springfield Office of Utilities 800 E. Monroe, 4th Floor Municipal Building East Springfield, IL 62757-0001</p>	<p>Kim Knowles Kknowles@prairierivers.org Andrew Rehn Arehn@prairierivers.org Prairie Rivers Network 1902 Fox Dr., Ste. 6 Champaign, IL 61820</p>
<p>Faith Bugel fbugel@gmail.com 1004 Mohawk Wilmette, IL 60091</p>	<p>Kiana Courtney KCourtney@elpc.org Environmental Law & Policy Center 35 E. Wacker Dr., Ste. 1600 Chicago, IL 60601</p>

Electronic Filing: Received, Clerk's Office 09/10/2020

<p>Jennifer Cassel jcassel@earthjustice.org Thomas Cmar tcmar@earthjustice.org Earthjustice 311 South Wacker Drive, Suite 1400 Chicago, IL 60606</p>	<p>Michael Smallwood Msmallwood@ameren.com 1901 Choteau Ave. St. Louis, MO 63103</p>
<p>Mark A. Bilut Mbilit@mwe.com McDermott, Will & Emery 227 W. Monroe Street Chicago, IL 60606-5096</p>	<p>Abel Russ aruss@environmentalintegrity.org Environmental Integrity Project 1000 Vermont, Ave NW, Ste. 1100 Washington, DC 20005</p>
<p>Stephen J. Bonebrake sbonebrake@schiffhardin.com Joshua R. More jmore@schiffhardin.com Ryan C. Granholm rgranholm@schiffhardin.com Schiff Hardin LLP 233 S. Wacker Drive, Suite 7100 Chicago, IL 60606</p>	<p>Michael L. Raiff mraiff@gibsondunn.com Gibson, Dunn & Crutcher LLP 2001 Ross Avenue, Suite 2100 Dallas, TX 75201-6912</p>
<p>Jeffrey Hammons jhammons@elpc.org Environmental Law and Policy Center 1440 G Street NW Washington, DC 20005</p>	<p>Walter Stone, Vice President Walter.Stone@nrg.com NRG Energy, Inc. 8301 Professional Place, Suite 230 Landover, MD 20785</p>
<p>Claire A. Manning cmanning@bhslaw.com Anthony D. Schuering aschuering@bhslaw.com Brown, Hay & Stephens, LLP 205 S. Fifth Street, Suite 700 P.O. Box 2459 Springfield, IL 62705</p>	<p>Keith I. Harley kharley@kentlaw.edu Daryl Grable dgrable@clclaw.org Chicago Legal Clinic, Inc. 211 West Wacker Drive, Suite 750 Chicago, IL 60606</p>

Electronic Filing: Received, Clerk's Office 09/10/2020

<p>Alisa Anker, VP Reg. & Market Affairs aanker@ppi.coop Prairie Power 3130 Pleasant Run Springfield, IL 62711</p>	<p>Cynthia Skrukud Cynthia.Skrukud@sierraclub.org Jack Darin Jack.Darin@sierraclub.org Christine Nannicelli Christine.Nannicelli@sierraclub.org Sierra Club 70 E. Lake Street, Suite 1500 Chicago, IL 60601</p>
<p>Alec M. Davis, Executive Director adavis@ierg.org Kelly Thompson kthompson@ierg.org IERG 215 E. Adams Street Springfield, IL 62701</p>	<p>Melissa S. Brown Melissa.brown@heplerbroom.com Jennifer M. Martin Jennifer.Martin@heplerbroom.com Heplerbroom, LLC 4340 Acer Grove Drive Springfield, IL 62711</p>
<p>Chris Newman Newman.christopherm@epa.gov USEPA, Region 5 77 West Jackson Blvd. Chicago, IL 60604-3590</p>	

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
)	
STANDARDS FOR THE DISPOSAL OF)	
COAL COMBUSTION RESIDUALS IN)	R20-019
SURFACE IMPOUNDMENTS:)	(Rulemaking - Water)
PROPOSED NEW TO 35 Ill. Adm. Code Parts 845)	

MIDWEST GENERATION, LLC’S QUESTIONS FOR MARK HUTSON, SCOTT M. PAYNE, IAN MAGRUDER, and ANDREW REHN

Midwest Generation, L.L.C. (“Midwest Generation”, by and through its attorneys, Nijman Franzetti, LLC, submits the following questions based upon the pre-filed testimony of Mark Hutson, Scott M. Payne, Ian Magruder, and Andrew Rehn, submitted on behalf of the Environmental Law & Policy Center, Environmental Integrity Project, Sierra Club, and Prairie Rivers Network (“Environmental Groups”). Midwest Generation requests that the Hearing Officer allow follow-up questioning to be posed based on the answers provided.

I. QUESTIONS FOR MARK HUTSON

1) Identify prior projects you have worked on for any federal or state environmental agency regarding the development of rules or regulations of general applicability that applied to coal combustion residuals (“CCR”) as that term is defined Section 3.142 of the Illinois Environmental Protection Act (“Act”).

2) Identify any prior projects which you have worked on for an industrial facility in the past 10 years that involved CCR as that term is defined in the Act and describe the work conducted.

3) Identify the scope of any work you have been requested to perform on behalf of the clients you are representing here today, including any work related to any coal-fired generating stations.

4) Have you reviewed the U.S.EPA’s “Human and Ecological Risk Assessment of Coal Combustion Residuals”?

5) You attached the U.S.EPA Criteria for Solid Waste Disposal Facilities, A Guide for Owners/Operators (“U.S.EPA Criteria) to your testimony. What is the purpose of the

U.S.EPA criteria for Solid Waste Disposal Facilities, for your testimony on CCR surface impoundments?

- a. Do you agree that the U.S.EPA Criteria states that if a landfill does not meet a location restriction, such as being located in a floodplain, that the landfill must be closed by placing a final cover over the waste?

- 6) The preamble of the federal CCR rule, based on a detailed scientific study, states:

“EPA did not propose to require clean closure nor to establish restrictions on the situations in which clean closure would be appropriate. As EPA acknowledged in the proposal, most facilities will likely not clean close their CCR units given the expense and difficulty of such an operation. Because clean closure is generally preferable from the standpoint of land re-use and redevelopment, EPA has explicitly identified this as an acceptable means of closing a CCR unit. However, both methods of closure (i.e., clean closure and closure with waste in place) can be equally protective, provided they are conducted properly. Thus, consistent with the proposal, the final rule allows the owner or operator to determine whether clean closure or closure with the waste in place is appropriate for their particular unit.” 80 F.R. 21412.

What is the scientific and risk-based foundation that makes you suggest a more restrictive rule than the USEPA in regard to selection of clean closure or closure in place?

- 7) On p. 9 of your testimony, you state that the point of CCR rules should be to keep waste out of water, whether or not it is capable of yielding usable quantities of groundwater to wells or springs.

- a. You agree that when a clay liner is compacted, it is often at or very near full saturation, resulting in a liner that has a much lower permeability, yet it is saturated with water. Please explain how saturated layers that have very low permeability, when exposed to CCR, are a hazard to human health and the environment.

- 8) On p. 14 of your testimony you suggest that the performance standard for the groundwater monitoring systems be modified to represent the quality of background groundwater that has not been affected by any site operations.

- a. Are you aware of Illinois Pollution Control Board (“Board”) Regulations, Part 620, Groundwater Quality”?
- b. Do you agree that Part 620 regulates the groundwater quality in Illinois, including at power generating stations? If not, please explain why.
- c. How is your proposed language consistent with Part 620 of the Board Regulations?

- d. Assuming power generating stations have underground storage tanks (“USTs”), how is your proposal consistent with Parts 731 through 734 of the Board regulations, which are regarding USTs?

9) On p. 14 of your testimony you state that comparisons of downgradient water quality to “background” concentration using intra-well analysis are not effective in monitoring an existing facility since intra-well tests do not compare each well against “background.”

- a. What is your definition of “background”?
- b. Do you agree that intra-well statistics assist in establishing a contrast between past and present groundwater data?
- c. Do you agree that the contrast established between the past and present groundwater data can assist in evaluating the concentrations of constituents in the groundwater?
 - i. Can this tool also provide insight into results of groundwater monitoring at sites with complex issues?
 - ii. Why do you propose or support removing this data evaluation tool from being able to be used to assist in data interpretations?

10) Do you agree that each groundwater situation, because of varying conditions and circumstances, such as the historical use of the impoundment and the site’s hydrogeology, are unique and may require flexibility in order to make an accurate assessment of the groundwater situation?

- a. Do you agree that rules of general applicability should be flexible enough to allow the Agency to adapt them to a given situation? If not, please explain.

11) On p. 14 of your testimony you discuss reviewing CCR monitoring data from multiple CCR sites, were any of those sites in Illinois and if so, which ones?

12) Are you aware that the U.S.EPA did not include iron, manganese, and vanadium in its list of groundwater protection standards because it did not identify any risks to human health or the environment based on the U.S.EPA’s risk assessment?

13) On p. 16 of your testimony, you state that metals from a CCR release “can accumulate to elevated concentrations in stream-side and/or bottom sediments while contamination of surface water remains undetectable due to high dilution.”

- a. Identify any scientific studies and/or data you relied on for this statement.
- b. Is your statement on page 16 true only for CCR? If so, what is your basis.

14) On p. 16 of your testimony, you suggest that the language be modified so that a “sufficient number of wells” are installed to identify the leading edge of the contaminant plume.

Do you agree that at least two sets of sampling data from a newly installed monitoring well will result in better information on the groundwater system and the potential plume? If not, please explain.

- a. How long do you believe installing multiple additional wells will take?
- b. If the contaminant plume is offsite, do you agree that installing additional wells on an adjacent property could possibly take longer than your estimate in your answer to Question 14.a?

15) On p. 16 of your testimony, you state that the chemical composition of CCR disposed in impoundments is highly variable between locations and depths sampled. Identify any scientific studies and/or data you relied on for this statement.

16) On p. 16 of your testimony, you state that an alternate source demonstration relying upon one or two CCR samples ignores “the variability of the source material.”

- a. Identify any scientific studies and/or data you relied on for this statement.
- b. Do you believe that if the source coal is from the same coal mine, and the coal is consistently burned in the power generating plant using the same combustion process the primary chemical composition of the resulting CCR is significantly different? If so, please explain why and identify the studies and/or data you rely upon.

17) On p. 17 of your testimony, you state “porewater within a CCR disposal unit is horizontally and vertically variable.” Identify any scientific studies and/or data you relied on for this statement.

18) On p. 17 of your testimony, you state that issues related to insufficient analysis of porewater in a CCR surface impoundment have been identified in other states as well as in Illinois. Identify where in Illinois the issues been identified. Identify the other states and the power stations in those states.

19) On p. 18 of your testimony, you state that “leaving industrial waste in the form of CCR buried in unlined impoundments...”

- a. What distinguishes CCR from other industrial waste to the point that it requires a separate treatment relative to regulatory considerations?
- b. Do you believe CCR creates a higher risk to human health and the environment than all other industrial waste? If so, what is your basis and identify the scientific studies and/or data that support your basis.

20) Do you agree that, unlike municipal solid waste, CCR does not generate its own leachate from decomposition?

21) Do you agree that municipal solid waste also contains metals?

22) Do you agree that risk-based closure considerations, including restrictive institutional controls, are an effective approach to remediate contaminated sites when there are no receptors? If not, explain your answer and identify the basis for your answer.

23) Do you agree that much of the CCR that you suggest should be removed from a CCR surface impoundment will be placed in a landfill at different location?

- a. If not, identify where you believe the CCR will be disposed, and provide your basis, including any studies, you rely upon.
 - i. Provide the estimated volume of CCR to be disposed in a landfill and the estimated volume for disposal at the location(s) you identify in answer to Question 23.a. and provide your basis, including any studies, you rely upon.
- b. Have you conducted an evaluation of the existing landfill capacity available in Illinois? If so, what were your results?
- c. Have you conducted an evaluation of the existing landfill capacity available in states neighboring Illinois? If so, what states and what were your results?
- d. Assuming there is insufficient existing landfill capacity, are you aware of the process and time required for siting and permitting a new location for a landfill?
 - i. If you are aware, what is your understanding of the process?
 - ii. And, what is your estimate of the time required for siting and permitting a new landfill?
 - iii. What is your estimate of the time required for the construction of a landfill and approvals prior to getting an operational permit issued?
- e. Are you aware that the post-closure care period for putrescible and chemical waste landfills in Illinois is 30 years?
- f. Are you aware that upon closure, landfills may be capped with a synthetic liner?

24) If groundwater monitoring results around an unlined CCR surface impoundment show no elevated concentrations of constituents, do you agree that there is no risk to human health or the environment by leaving the CCR in place?

- a. If you do not, please explain.
- b. Also, if you do not, explain how removing CCR that is not causing elevated concentrations of constituents in the groundwater using equipment and

vehicles (rail or trucks) is more protective of the environment than capping the material in place.

25) Provide the groundwater monitoring results for the Grainer Generating Station you describe on pages 22 and 23 of your testimony.

26) On p. 23 of your testimony, you refer to four monitoring points at the Grainger Generating Station. How many monitoring points are there total at the Grainger Generating Station?

- a. Did all of the monitoring points exhibit a decrease in arsenic?
- b. Did any monitoring points exhibit no change in arsenic water quality over the same period and if so, how many?
- c. Did any exhibit an increase in arsenic concentrations and if so, how many and what was the magnitude of that increase?

27) On p. 23 of your testimony, you only discuss arsenic at the Grainger Generating Station. How many parameters are analyzed at the Grainger Generating Station?

- a. Of the parameters analyzed, how many exhibited similar decreases in concentrations as arsenic?
- b. Of the parameters analyzed, how many exhibited no change in concentrations?
- c. Of the parameters analyzed, how many increased in concentration?

28) The most recent Grainger Generating Station results you discuss on page 23 are from 2017, have you evaluated data from 2018 to present? If so, provide the data.

29) In your experience, is it unusual to see substantial decreases in concentrations of contaminants during the early stages of remediation?

- a. Are you familiar with the concept of diminishing returns for remedial sites?
- b. If you are familiar with the concept of diminishing returns for remedial sites, do you agree that at some point the concentrations of constituents in the groundwater will reach an asymptotic level? If you do not agree, please explain why.
- c. If in answer to Question 28 above, you reviewed more recent groundwater data from the Grainger Generating Station, what does the more recent data show?

30) On p. 24 of your testimony, you state that damage to a cap can occur if people “in pick-up trucks or on dirt bikes decide to turn the ‘big hill out where the old plant used to be’ into a playground. What is your basis for this statement?

- a. Identify locations in Illinois in which people have trespassed on a capped landfill with their vehicles or bikes.

31) Confirm that the Groundwater Impact Assessment you conducted in Illinois and described on p. 3-4 of Attachment 4 of your testimony is the Lincoln Stone Quarry in Joliet, IL.

- a. Confirm that part of the project was preparing a large and detailed numerical groundwater flow and contaminant transport model for the Lincoln Stone Quarry.
- b. Confirm that the groundwater model, developed as part of the GIA, could be used to assist in the design of the closure of the Lincoln Stone Quarry.

II. SCOTT M. PAYNE and IAN MMAGRUDER

1) Identify prior projects you have worked on for any federal or state environmental agency regarding the development of rules or regulations of general applicability that applied to coal combustion residuals (“CCR”) as that term is defined Section 3.142 of the Illinois Environmental Protection Act (“Act”).

2) Identify any prior projects which you have worked on for an industrial facility in the past 10 years that involved CCR as that term is defined in the Act and describe the work conducted. Of those projects, identify any in Illinois.

3) Identify the scope of any work you have been requested to perform on behalf of the clients you are representing here today, including any work related to any coal-fired generating stations.

4) On p. 32 of your testimony, you state that natural resource agencies and geologic surveys and researchers at nearby colleges and universities often have the most accurate site-specific data. Are you suggesting that consultants do not use that data?

5) Assuming you are suggesting that consultants do not use that data, what is your basis to state that consultants working at CCR surface impoundments do not use natural resource agencies data and geologic surveys?

6) On p. 32 of your testimony, you state that “Consultants who work for coal plant owner/operators may be from out-of-state and lack this site-specific knowledge.” Please confirm that you are located in Montana.

III. QUESTIONS FOR ANDREW REHN

- 1) Identify prior projects you have worked on for any federal or state environmental agency regarding the development of rules or regulations of general applicability that applied to coal combustion residuals (“CCR”) as that term is defined Section 3.142 of the Illinois Environmental Protection Act (“Act”).
- 2) Identify any prior projects which you have worked on for an industrial facility that involved CCR as that term is defined in the Act and describe the work conducted.
- 3) Identify the scope of any work you have been requested to perform on behalf of the clients you are representing here today, including any work related to any coal-fired generating stations.
- 4) Are you a structural engineer? If so, please describe your training and experience.
- 5) Are you a licensed Professional Engineer (P.E.)? If so, in which state(s)? When did you receive your license(s)?
- 6) Are you aware that under the Illinois Professional Engineering Practice Act of 1989, Standards of Professional Conduct, a licensed P.E. must “at all times recognize that their primary obligation is to protect the life, health, property and welfare of the public”? 68 Ill. Adm. Code 1380.300(a)(1). See 68 Ill. Adm. Code 1380.300 attached as Appendix A.
- 7) Are you aware that under the Illinois Professional Engineering Practice Act of 1989, Standards of Professional Conduct, a licensed P.E. shall “approve and seal only designs prepared by them or under their direct supervision and found to be safe for the public health, property and welfare”? 68 Ill. Adm. Code 1380.300(a)(2). See Appendix A.
- 8) Are you aware that under the Illinois Professional Engineering Practice Act of 1989, Standards of Professional Conduct, a licensed P.E. shall “not affix their signature or seal to any plans or documents dealing with subject matter in which they lack competence, nor to any plan or document not prepared by them or under their direct supervisory control”? 68 Ill. Adm. Code 1380.300(b)(2). See Appendix A.
- 9) Are you aware that under the Illinois Professional Engineering Practice Act of 1989, Standards of Professional Conduct, a licensed P.E. must “be objective and truthful in all professional reports, statements or testimony”? 68 Ill. Adm. Code 1380.300(c)(1). See Appendix A.
- 10) Are you aware that violations of the Illinois Professional Engineering Practice Act of 1989 and its rules, including the Standards for Professional Conduct, would subject the licensed P.E. to disciplinary action including suspension or revocation of license and fines up to \$10,000 per violation? See 225 ILCS 325/24 attached as Appendix B.
- 11) On p. 6 of your testimony you state, “We need more educated eyes on the reports to protect against such errors or inappropriate assumptions.”

- a. Describe how a licensed Professional Engineer is not sufficiently educated to conduct a structural stability and safety factor assessment.
- b. In light of the Illinois Standards of Professional Conduct for Professional Engineers described in Questions 6-9, identify any inappropriate assumptions you have observed in structural stability and safety factor assessments.
- c. In light of the Illinois Standards of Professional Conduct for Professional Engineers described in Questions 6-9, identify any errors you have observed in structural stability and safety factor assessments.

12) On p. 5 of your testimony, you describe CCR landfills and areas of CCR impacting groundwater. Are you aware of Illinois Pollution Control Board ("Board") Regulations, Part 620, Groundwater Quality"?

- a. Do you agree that Part 620 regulates the groundwater quality in Illinois, including at power generating stations? If not, explain why.

13) On p. 9 of your testimony you discuss a public comment by Steven Campbell who evaluated the distance between the Waukegan ash ponds and the uppermost aquifer.

- a. Do agree that Mr. Campbell did not evaluate whether there "will not be an intermittent, recurring, or sustained hydraulic connection" between the base of the Waukegan ash ponds and the uppermost aquifer? 40 CFR 257.60.
- b. If you disagree, identify the section of his comment that makes such an evaluation.

14) Do you agree that the Waukegan Station Placement Above the Uppermost Aquifer Location Restriction for the East and West Ash Basins, which is Attachment 17 to your testimony, states that the East and West Basins are so located "so that there will not be intermittent, recurring, or sustained hydraulic connection between any portion of the base of the Basins and the uppermost aquifer due to normal fluctuations in groundwater elevations"?

15) Other than identification of the location of rail spurs at power stations and rail near landfills, what evaluations of using rail to transport ash from a CCR surface impoundment to a landfill have you conducted?

- a. In your Attachment 18 "Map of Illinois Rail Relative to Coal Ash", confirm that the landfills identified have a rail spur. If they do not, identify which landfills have a spur and which do not.
- b. If not all of the landfills do not have a rail spur, explain how the CCR will be transferred from the rail to the landfill.
- c. In your evaluation of rail spurs, did you consider how the CCR will be transported from the CCR surface impoundment to the rail spur? If so, please

describe your consideration including a description of the infrastructure requirements at a power station you considered.

- d. In your evaluation of the rail spurs, did you consider the additional transfer points of CCR for its removal (*e.g.* from the truck to train and then from train to truck and any infrastructure requirements for the transfer)? If so, what did you find?

16) On p. 10 of your testimony, you state that many of the sites are along major rivers with significant barge traffic “indicating that transporting coal ash by barge is likely a reasonable alternative to consider.”

- a. What evaluations of moving the CCR on barge did you conduct and what were those results?
- b. Did you evaluate or identify the location of any landfills in Illinois or other states that are located near a major river accessible by barge? If so, identify the landfills with access to major rivers by barge.
- c. If you conducted an evaluation on the availability to move CCR via a barge, did you consider how the CCR will be transported from the CCR surface impoundment to the barge? If so, please describe your consideration including a description of the infrastructure requirements at a power station you considered.
- d. If you conducted an evaluation on the availability to move CCR via a barge, did you consider the additional transfer points of CCR for its removal (*e.g.* from the truck to barge and then from barge to truck and any infrastructure requirements for the transfer)? If so, what was your conclusion?
- e. As part of your evaluation of the availability of the use of barges to move the CCR, did you evaluate any permits that may be required to be obtained? If so, what were the results?

17) Do you agree that much of the CCR that you suggest should be removed from a CCR surface impoundment will likely be placed in a landfill at different location?

- a. If not, identify where you believe the CCR will be disposed, and provide your basis, including any studies, you rely upon.
 - i. Provide the estimated volume of CCR to be disposed in a landfill and the estimated volume for disposal at the location(s) you identify in answer to Question 17.a. and provide your basis, including any studies or data, you rely upon.
- b. Have you conducted an evaluation of the existing landfill capacity available in Illinois? If so, describe your evaluation and your results.

- c. Have you conducted an evaluation of the existing landfill capacity available in states neighboring Illinois? If so, identify the states, describe your evaluation, and your results.
- d. Assuming there is insufficient existing landfill capacity, are you aware of the process and time required for siting and permitting a new location for a landfill?
 - i. If you are aware, what is your understanding of the landfill siting process in Illinois?
 - ii. What is your estimate of the time required for siting and permitting a new landfill in Illinois?
 - iii. What is your estimate of the time required for the construction of a landfill and approvals prior to getting an operational permit issued?

18)
Quarry.

On p. 11 of your testimony, you refer to the pumps operated at the Lincoln Stone

- a. Are you aware that the Lincoln Stone Quarry is a monofill landfill permitted by Illinois EPA pursuant to Permit No. 1994-241-LFM?
- b. Are you aware of the 2013 Groundwater Impact Assessment (“GIA”) prepared by KPRG and Associates, Inc. and Geo-Hydro, Inc. and its conclusions, including that migration from the Lincoln Stone Quarry under the natural hydraulic gradients precludes migration away from the Lincoln Stone Quarry, except to the north and west?
- c. Are you aware that the GIA concluded that outward gradient to the southeast from the Lincoln Stone Quarry exists only at depth due to depressurization by dewatering at the nearby Laraway Quarry which is to the southeast?
- d. Are you aware that the GIA concluded that there were no known receptors between the Lincoln Stone Quarry and the Laraway Quarry to the southeast?
- e. Are you aware the GIA concluded that the gradient reversal to the southeast is an anomaly and is addressed by the extraction pumps operating at the Lincoln Stone Quarry?
- f. Are you aware that when the Laraway Quarry ceases operations, including ceasing dewatering its property, the groundwater flow will revert back to its natural direction?
- g. Are you aware that once the Laraway Quarry ceases operations and the groundwater flow reverts back to its natural direction, the extraction pumps will likely no longer be necessary?

- h. Are you aware that based in part upon the GIA, the Illinois EPA approved the closure in place plan for the Lincoln Stone Quarry?

Respectfully submitted,

MIDWEST GENERATION, LLC

By: /s/ Kristen L. Gale

One of Its Attorneys

Dated: September 10, 2020

Kristen L. Gale
Susan M. Franzetti
NIJMAN FRANZETTI LLP
10 S. LaSalle St., Suite 3600
Chicago, IL 60610
(312) 251-5590

APPENDIX A

Joint Committee on Administrative Rules**ADMINISTRATIVE CODE**

TITLE 68: PROFESSIONS AND OCCUPATIONS
CHAPTER VII: DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION
SUBCHAPTER b: PROFESSIONS AND OCCUPATIONS
PART 1380 THE PROFESSIONAL ENGINEERING PRACTICE ACT OF 1989
SECTION 1380.300 STANDARDS OF PROFESSIONAL CONDUCT

Section 1380.300 Standards of Professional Conduct

In order to safeguard life, health and property, to promote the public welfare, and to establish and maintain a high standard of integrity in the practice of professional engineering, the following Standards of Professional Conduct shall be binding on every person holding a license as a professional engineer and on all corporations authorized to practice professional engineering in this State.

- a) Professional Responsibility. Licensees shall be responsive to the needs of clients and employers, but shall hold paramount life, health, property and the welfare of the public.
 - 1) Licensees shall at all times recognize that their primary obligation is to protect the life, health, property and welfare of the public. If their professional judgment is overruled under circumstances where the life, health, property or welfare of the public is endangered, they shall notify their client or employer and such authority(ies) as may be appropriate (which may include the Division or other law enforcement agencies).
 - 2) Licensees shall approve and seal only those designs prepared by them or under their direct supervision and found to be safe for the public health, property and welfare. In circumstances where a licensee in responsible charge of the work is unavailable to complete the work in instances such as death, incapacity, termination of employment or relocation, a successor licensee may take responsible charge by performing all professional services, including design criteria, recalculations, code research and compliance, and any other necessary and appropriate changes, in order to complete the project. The successor licensee shall have control of and responsibility for the work product and the signed and sealed originals of all documents.
 - 3) Licensees shall not reveal confidential facts, data or information obtained in a professional capacity without the prior consent of the client, except as authorized or required by law.
 - 4) Licensees shall not permit the use of their name or firm's name, nor shall they be associated in business ventures with persons or firms which they have reason to believe to be engaging in fraudulent or dishonest business practices.

Electronic Filing: Received, Clerk's Office 09/10/2020

- 5) Licensees having knowledge of any alleged violation of any of this Part shall cooperate with the Division, furnishing such information or assistance as may be required to conduct an investigation resulting from a complaint.
- b) Competence. Licensees shall perform services only in areas of their competence.
 - 1) Licensees shall undertake assignments only when qualified by education and experience in the specific technical field of engineering involved.
 - 2) Licensees shall not affix their signature or seal to any plans or documents dealing with subject matter in which they lack competence, nor to any plan or document not prepared by them or under their direct supervisory control.
 - 3) Licensees may accept an assignment outside of their fields of competence to the extent that their services are restricted to those phases of the project in which they are qualified, and to the extent that all other phases of the project will be performed by registrants qualified in those phases.
 - c) Professional Integrity. Licensees shall issue professional statements in an objective and truthful manner.
 - 1) Licensees shall be completely objective and truthful in all professional reports, statements or testimony.
 - 2) Licensees may express publicly a professional opinion on technical subjects only when it is founded upon adequate knowledge of the facts and a background of competence in the subject matter.
 - 3) A licensee, when acting as a representative of an individual or organization, shall issue no statements, criticisms, or arguments on engineering matters without first prefacing such comments by explicitly identifying on whose behalf the comments will be made. When the licensee is acting as a consultant, expressing a professional opinion, such opinion shall be prefaced by complete personal identification as a consultant, without necessarily naming the client. Such licensee shall reveal any personal interest in the matter.
 - d) Conflict of Interest. Licensees shall act in professional matters for each employer or client as faithful agents or trustees and shall avoid conflicts of interest.
 - 1) Licensees shall conscientiously avoid conflicts of interest with their employers or clients. Whenever conflicts of interest appear unavoidable; however, licensees shall disclose promptly to their employers or clients any business association, interest or circumstance which may influence judgment or quality of services.
 - 2) Licensees shall not accept compensation, financial or other, from more than one party for services on a project or for services pertaining to a project unless the licensee makes full disclosure and receives consent of all interested parties.
 - 3) Licensees shall not solicit or accept financial or other valuable consideration from any material supplier or equipment supplier for specifying the

Electronic Filing: Received, Clerk's Office 09/10/2020

supplier's products except when the licensee is a known employee or agent of the supplier.

- 4) Licensees shall not solicit or accept gratuities, directly or indirectly, from any contractor, architect, engineer or other party dealing with the licensee's employer or client in connection with work for which the licensee is responsible.
 - 5) Licensees in public service as members, advisors or employees of a governmental body or department shall not participate in decisions with respect to professional services solicited or provided by them or their organization.
 - 6) Licensees shall not solicit or accept a professional contract from a governmental body on which a principal or officer of their firm or organization serves as a member.
- e) **Employment Solicitation.** Licensees shall avoid improper solicitation of professional employment.
- 1) Licensees shall not offer to pay, either directly or indirectly, any commission, political contribution, gift or other consideration in order to secure professional assignments.
 - 2) Licensees shall not falsify or permit misrepresentation of their, or their associates', academic or professional qualifications. They shall not misrepresent or exaggerate their degree of responsibility in or for the subject matter of prior assignments. Brochures or other presentations incident to the solicitation of employment shall not misrepresent pertinent facts concerning employers, employees, associates, joint ventures or past accomplishments with the intent or purpose of enhancing their qualifications and/or their work.

(Source: Amended at 34 Ill. Reg. 5623, effective March 30, 2010)

APPENDIX B

Electronic Filing: Received, Clerk's Office 09/10/2020

(225 ILCS 325/24) (from Ch. 111, par. 5224)

(Section scheduled to be repealed on January 1, 2030)

Sec. 24. Grounds for disciplinary action.

(a) The Department may refuse to issue or renew a license or registration, or may revoke, suspend, place on probation, reprimand, or take other disciplinary or non-disciplinary action as the Department may deem proper, including fines not to exceed \$10,000 per violation, with regard to any license issued under this Act, for any one or a combination of the following reasons:

(1) Material misstatement in furnishing information to the Department.

(2) Negligence, incompetence, or misconduct in the practice of professional engineering.

(3) Failure to comply with any provisions of this Act or any of its rules.

(4) Fraud or any misrepresentation in applying for or procuring a license under this Act or in connection with applying for renewal or restoration of a license under this Act.

(5) Purposefully making false statements or signing false statements, certificates, or affidavits to induce payment.

(6) Conviction of or entry of a plea of guilty or nolo contendere, finding of guilt, jury verdict, or entry of judgment or sentencing, including, but not limited to, convictions, preceding sentences of supervision, conditional discharge or first offender probation under the laws of any jurisdiction of the United States that is (i) a felony or (ii) a misdemeanor, an essential element of which is dishonesty, that is directly related to the practice of the profession of professional engineering.

(7) Aiding or assisting another person in violating any provision of this Act or its rules.

(8) Failing to provide information in response to a written request made by the Department within 60 days after receipt of such written request.

(9) Engaging in dishonorable, unethical, or unprofessional conduct of a character likely to deceive, defraud, or harm the public.

(10) Habitual or excessive use or abuse of drugs defined in law as controlled substances, of alcohol, narcotics, stimulants, or any other substances that results in the inability to practice with reasonable judgment, skill, or safety.

(11) A finding by the Department that an applicant or licensee has failed to pay a fine imposed by the Department.

(12) A finding by the Department that the licensee, after having his or her license placed on probationary status, has violated the terms of probation or failed to comply with such terms.

(13) Inability to practice the profession with reasonable judgment, skill, or safety as a result of physical illness, including, but not limited to, deterioration through the aging process, loss of motor skill, mental illness, or disability.

(14) Discipline by another state, territory, foreign country, the District of Columbia, the United States government, or any other government agency if at least one of the grounds for discipline is the same or substantially equivalent to those set forth in this Act.

(15) The making of any willfully false oath or affirmation in any matter or proceeding where an oath or

Electronic Filing: Received, Clerk's Office 09/10/2020

affirmation is required by this Act.

(16) Using or attempting to use an expired, inactive, suspended, or revoked license or the certificate or seal of another or impersonating another licensee.

(17) Directly or indirectly giving to or receiving from any person or entity any fee, commission, rebate, or other form of compensation for any professional service not actually or personally rendered.

(18) Signing or affixing the professional engineer's seal or permitting the seal to be affixed to any technical submissions not prepared by the professional engineer or under the professional engineer's supervision and control.

(19) Making a statement pursuant to the Environmental Barriers Act that a plan for construction or alteration of a public facility or for construction of a multi-story housing unit is in compliance with the Environmental Barriers Act when such plan is not in compliance.

(a-5) In enforcing this Section, the Department or Board, upon a showing of a possible violation, may order a licensee or applicant to submit to a mental or physical examination, or both, at the expense of the Department. The Department or Board may order the examining physician to present testimony concerning his or her examination of the licensee or applicant. No information shall be excluded by reason of any common law or statutory privilege relating to communications between the licensee or applicant and the examining physician. The examining physicians shall be specifically designated by the Board or Department. The licensee or applicant may have, at his or her own expense, another physician of his or her choice present during all aspects of the examination. Failure of a licensee or applicant to submit to any such examination when directed, without reasonable cause as defined by rule, shall be grounds for either the immediate suspension of his or her license or immediate denial of his or her application.

If the Secretary immediately suspends the license of a licensee for his or her failure to submit to a mental or physical examination when directed, a hearing must be convened by the Department within 15 days after the suspension and completed without appreciable delay.

If the Secretary otherwise suspends a license pursuant to the results of the licensee's mental or physical examination, a hearing must be convened by the Department within 15 days after the suspension and completed without appreciable delay. The Department and Board shall have the authority to review the licensee's record of treatment and counseling regarding the relevant impairment or impairments to the extent permitted by applicable federal statutes and regulations safeguarding the confidentiality of medical records.

Any licensee suspended under this subsection (a-5) shall be afforded an opportunity to demonstrate to the Department or Board that he or she can resume practice in compliance with the acceptable and prevailing standards under his or her license.

(b) The determination by a circuit court that a registrant is subject to involuntary admission or judicial admission as provided in the Mental Health and Developmental Disabilities Code operates as an automatic suspension. Such suspension will end only upon a finding by a court that the patient is no longer subject to involuntary admission or judicial admission, the issuance of an order so finding and discharging the patient, and the recommendation of the Board to the Secretary that the registrant be allowed to resume practice.

(c) In cases where the Department of Healthcare and Family

Electronic Filing: Received Clerk's Office 09/10/2020

Services (formerly the Department of Public Aid) has previously determined that a licensee or a potential licensee is more than 30 days delinquent in the payment of child support and has subsequently certified the delinquency to the Department, the Department shall refuse to issue or renew or shall revoke or suspend that person's license or shall take other disciplinary action against that person based solely upon the certification of delinquency made by the Department of Healthcare and Family Services in accordance with paragraph (5) of subsection (a) of Section 2105-15 of the Department of Professional Regulation Law of the Civil Administrative Code of Illinois.

(d) The Department shall refuse to issue or renew or shall revoke or suspend a person's license or shall take other disciplinary action against that person for his or her failure to file a return, to pay the tax, penalty, or interest shown in a filed return, or to pay any final assessment of tax, penalty, or interest as required by any tax Act administered by the Department of Revenue, until the requirements of the tax Act are satisfied in accordance with subsection (g) of Section 2105-15 of the Department of Professional Regulation Law of the Civil Administrative Code of Illinois.

(Source: P.A. 100-872, eff. 8-14-18; 101-310, eff. 8-9-19.)