BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	R23-18(A)
AMENDMENTS TO 35 ILL. ADM. CODE	)	(Rulemaking—Air)
PARTS 201, 202, AND 212	)	

NOTICE

TO: See attached Service List

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S COMMENTS, a copy of which is herewith served upon you.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: /s/ Charles E Matoesian
Charles E Matoesian
Assistant Counsel
Division of Legal Counsel

DATED: October 23, 2023

1021 North Grand Avenue East
P. O. Box 19276
Springfield, IL 62794-9276
217/782-5544
charles.matoesian@illinois.gov

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	**R23-18(A)**
AMENDMENTS TO 35 ILL. ADM. CODE PARTS 201, 202, AND 212	)	**(Rulemaking – Air)**
	)	
	)	

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S COMMENTS

The Illinois Environmental Protection Agency ("Illinois EPA" or "Agency"), by one of its attorneys, hereby files these comments.

Background

On December 7, 2022, the Illinois EPA filed a proposed rulemaking to amend the Illinois Administrative Code to remove provisions that allow sources to request, and the Illinois EPA to grant, advance permission to continue operating during a malfunction, or to violate emission limitations during startup. Removal of these start-up, malfunction, breakdown ("SMB") provisions was necessitated by a 2015 State Implementation Plan Call regarding various states' startup, shutdown, malfunction ("SSM") provisions ("SIP Call" or "SSM SIP Call") by the United States Environmental Protection Agency ("USEPA"). [1]

Following two hearings by the Illinois Pollution Control Board ("Board"), the Board adopted the rule on July 20, 2023. However, the Board opened this sub-docket to address issues raised by certain participants.[2] On August 7, 2023, five entities filed proposals for rule

[1] 80 *Fed. Reg.* 33840 (June 12, 2015). *See generally*, R23-18 Statement of Reasons. Illinois' repealed provisions addressed only start-up, malfunction, and breakdown, not shutdowns in general or for other reasons such as scheduled shutdowns.

[2] R23-18, Board Order sending the rule to second notice (April 6, 2023), p. 22.

amendments-the American Petroleum Institute ("API") representing the four Illinois refineries;[3] the Illinois Environmental Regulatory Group ("IERG") whose proposal could potentially impact more than 1,500 stationary sources with affected units in Illinois; East Dubuque Nitrogen Fertilizers, LLC ("EDNF"); Rain CII Carbon, LLC ("Rain Carbon"); and a joint proposal by Dynegy Midwest Generation, LLC, Illinois Power Generating Company, and Kincaid Generation, LLC (collectively, "Dynegy") and Midwest Generation, LLC ("MWG") (collectively, "Dynegy and MWG"). A hearing was held on September 27, 2023, where several sources that seek rule amendments testified and answered questions posed by both the Board and the Attorney General's Office.

The Agency has been making all efforts to analyze the five rulemaking proposals in this subdocket and the six adjusted standard petitions filed with the Board in separate actions.[4] The volume and technical nature of the material in these proceedings has been challenging for the Agency given the expedited schedule established by the Board. The Agency is sensitive to the concerns of the proponents, but does not agree that these proceedings should be concluded before the proposals are fully assessed, especially as they may result in regulatory revisions that are not in keeping with requirements of the Clean Air Act ("CAA").

---

[3] ExxonMobil Corp. Joliet Refinery (Will County) ("ExxonMobil"), WRB Refining LP Wood River Refinery (Madison County) ("WRB"), CITGO Petroleum Corp. Lemont Refinery (Will County) ("CITGO"), and Marathon Petroleum Co. Robinson Refinery (Crawford County) ("Marathon").

[4] AS24-01, In the Matter of: Petition of ExxonMobil Oil Corporation for Adjusted Standard from 35 Ill. Adm. Code 216.361, 35 Ill. Adm. Code 216.103, and 35 Ill. Adm. Code 216.104; AS24-02, In the Matter of: Petition of East Dubuque Nitrogen Fertilizers, LLC for Adjusted Standard; AS24-03, In the Matter of: Petition of Marathon Petroleum Company, LP for an Adjusted Standard from 35 Ill. Adm. Code Part 201 and Section 216.361; AS24-04, In the Matter of: Petition of Dynegy for an Adjusted Standard from 35 Ill. Admin. Code Parts 201 and 212; AS24-05, In the Matter of: Petition of Rain CII Carbon LLC for Adjusted Standard from 35 Ill. Adm. Code §§ 201.149, 212.123, and 212.322, 215.301, and; AS24-06, In the Matter of: Petition of Midwest Generation, LLC for an Adjusted Standard From 35 Ill. Admin. Code Parts 201 and 212. Currently, the adjusted standard proceedings are stayed.

Prior to the August 7, 2023, deadline for rule proposals, the Agency spoke with all rule proponents except Rain Carbon, who the Agency spoke with shortly thereafter. The Agency informed all participants that certain materials would be necessary to the Agency and the Board in assessing the potential impact of proposed revisions and in submitting any revisions adopted by the Board to the USEPA as a SIP submittal. The Agency explained that significant additional data would be needed before the Agency could move forward. Generally, the Agency indicated that, for each affected facility, it would need a clear quantification of emissions during each SMB event type, the average number of SMB events per year, and the duration of each event. To give context to this data, detailed descriptions of methods being employed to reduce emissions to the greatest extent possible during SSM events should be provided. Additionally, any methods of control which are not deemed possible or feasible at any affected facility should be discussed. Proponents should also provide modeling and data assessing the impact on air quality for all relevant pollutants during SSM events. This should include a worst-case analysis of emissions during SMB events under any proposed revision, demonstrating that such emissions will not cause a violation of a National Ambient Air Quality Standard ("NAAQS") for the relevant pollutants.[5] The USEPA will require a CAA Section 110(l) analysis demonstrating that a proposal does not interfere with attainment of a NAAQS, reasonable further progress, or any other CAA requirements.

The proposals vary in the degree to which the above information has been provided; consequently, the extent to which the Agency can assess the proposals varies. Below the Agency

[5] USEPA's criteria 4 for developing alternative emission limits ("AELs") is: "(4) As part of its justification of the SIP revision, the state analyzes the potential worst-case emissions that could occur during startup and shutdown based on the applicable alternative emission limitation." 80 *Fed. Reg*. p. 33980 (June 12, 2015).

discusses the information that would be needed to assess impacts of the proposed revisions, which in turn would be necessary before the Agency would submit any adopted revisions to the USEPA for approval.

As a threshold issue, the Agency cannot rely upon any analyses of emissions impacts that are based on the concept that the affirmative defense provisions in the Board's repealed Part 201 SMB regulations created exceptions to otherwise applicable emissions standards. Several rule proponents have argued or implied that they were not previously required to comply with certain existing emissions standards pursuant to the SMB provisions, and so the less stringent alternative emissions standards they are proposing to the Board here would have no emissions consequences.[6] This position is not supported by the Board's SMB regulations nor is it consistent with the Agency's 50-year implementation of such provisions. As described in detail by the Agency in both testimony and post-hearing comments in the Board's rulemaking docket R23-18, the Board's repeal of SMB provisions did not amend the emission standards or change their applicability in any way. Exceedances of such standards have always been violations, both before the Board's R23-18 rulemaking, as well as currently. By repealing the Board's SMB regulations, the Board merely removed provisions that on their face and in practice only provided sources a potential affirmative defense should enforcement be pursued for violations of applicable emissions standards during startup, malfunction, or breakdown.[7]

As the Illinois EPA indicated in R23-18:

> Section 201.261 regards "requests for permission to continue to *operate* during a malfunction," with no indication that resulting excess emissions are not violations or that an exception to emission standards is being created (emphasis added). Similarly, that same section regards "request[s] for permission *to violate* . . . standards or limitations"

[6] *Dynegy-MWG SOR* ps.13-17; *IERG SOR* pp. 10-12; *Rain Carbon SOR* pp. 3-4, 7-8, 16-18; *API SOR* 36-38.
[7] *See* R23-18, *In the Matter of: Amendments to 35 Ill. Adm. Code Parts 201, 202, and 212.*

> during startup (emphasis added). No mention of creating an exception, no statement that sources are not required to comply with emission standards during startup, and right in the provision itself an acknowledgement that the excess emissions are violations. Similarly, Section 201.264 notes that the above provisions concern "permission to *operate* during a malfunction, breakdown or startup" (emphasis added). If the rest of Subpart I is not enough, Section 201.265 then conclusively establishes that the effect of granting permission to operate during malfunction or breakdown or to violate during startup shall be a prima facie defense to an enforcement action alleging a violation of an emission standard. Not only is this language clear and unambiguous, but it would be completely unnecessary if the rest of Subpart I established exceptions or exemptions from emission limitations during SMB events, as some have errantly claimed in this proceeding.[8]

The Agency went on to explain:

> The Board adopted this language in R71-23 as Illinois' strategy for addressing SMB events, and the Illinois EPA has implemented that strategy consistent with the Board's regulations, including the language and wording chosen by the Board, ever since. While the Agency acknowledged that "over time and with experience, the language of SMB permit provisions has been refined and clarified," its position and overall implementation strategy has remained consistent. The Agency has made no secret of its implementation efforts or of its position and has communicated its position to regulated entities on many occasions. Any argument now that the Board's regulations and the Illinois EPA's 50 years of implementation of those regulations should be disregarded and replaced by regulated entities' newly claimed "understanding" that SMB provisions constitute exceptions to emission limitations should be given absolutely no credence. It is inadequately unsupported and without merit.[9]

Some rule proponents here are relying on the same erroneous "interpretation" of the Board's SMB regulations as addressed by the Agency above to argue that their proposed rule revisions would have no emissions impact. Doing so does not inform the Board or the Agency about the potential consequences of adopting new emissions standards. This is particularly true with many of the proposals in which the existing emissions standard is numerical and would be replaced by a different, non-numerical type of standard such as work practices. What is instead

---

[8] R23-18, *Illinois EPA's Post-Hearing Comments* (March 7, 2023), p. 21.
[9] R23-18, *Illinois EPA's Post-Hearing Comments* (March 7, 2023), at p. 21-22 (internal citations omitted).

needed is an analysis of the impact of complying with the new proposed emissions standards versus those currently applicable, as described in more detail below, and even in cases where non-numerical standards are proposed, worst-case emissions should be quantified, provided and evaluated. Simply put, it is the current applicable standards that would have been assessed for air quality implications at the time of promulgation, not any later affirmative defenses sought and afforded via permit. It is the proposed alternate emission limit ("AELs") that now, at the time of potential adoption, warrant air quality review. Ambient monitoring data and attainment status are not determinative of air quality impacts, but rather information that might be utilized in the requisite air quality analyses.

Rule Proposals

EDNF

EDNF proposes amending the nitrogen oxides ("NOx") and opacity emission standards in 35 Ill. Adm. Code 217.381 for new weak nitric acid processes. The proposed NOx limitation for such processes would: (a) use a 30- day averaging period at half of the current allowable level; and (b) would apply at all times, including during startup and shutdown. For opacity, an alternative, non-numerical standard would apply during startup and shutdown, and these processes would no longer be required to comply with the opacity limitations in 35 Ill. Adm. Code 212.123. Lastly, definitions would be added that would limit the duration of startups and shutdowns.[10]

[10] *EDNF SOR* p. 1.

The Agency has spoken to EDNF regarding its proposal. As a result of these communications, the Agency requested that EDNF provide continuous emission monitoring system ("CEMS") data for emissions of NOx on an hourly basis in terms of pounds per ton ("lb/tons") of acid produced for the previous five years. The Agency further requested the date and duration of each startup and shutdown event during that timeframe. The requested data is appropriate for the Agency to evaluate and the Board to consider the worst-case emissions from that data set demonstrating the emissions impact from this proposal. It would be appropriate for EDNF to provide modeling of the worst-case emission scenario using the requested data to demonstrate that these emissions would not result in a violation of the hourly or annual NO_2 NAAQS.

Regarding the proposed exception from Section 212.123, the Agency also requested from EDNF confirmation via Method 5 emissions testing that there is not a particulate matter ("PM") element to opacity readings. If the source can and does demonstrate that there is no PM in the opacity stream, the Agency is amenable to excepting the source from the applicability of Section 212.123. However, if the source cannot or does not make such demonstration, the Agency cannot recommend that the Board adopt the proposed exclusion. The Agency also recommends that any rule amendments that establish an exception to the opacity limits in Section 212.123 be made in Part 212, not only in Part 217.

The Agency would further note that, from data available to the Agency, a standard that is less than the proposed 1.5 lb/ton of acid produced on a 30-day averaging may be achievable by the source. The most recent data that the Agency possesses via the source's Annual Emissions Reports indicate that annual emission rates at both of the nitric acid plants in question are well below 1 lb/ton of acid produced on an annual basis. The Agency requests that EDNF provide

justification for proposing a 30-day average of 1.5 lb/ton rather than a more stringent standard that may be achievable.

Rain Carbon

In its proposal, Rain Carbon explains that, "the purpose and effect of this rule is to amend Title 35, Sections 212.124 and 212.322 and Section 215.302 to establish alternative, specific, emission standards applicable to the Facility for opacity, PM, and volatile organic material ("VOM"), respectively" during startup for opacity and VOM, and during SMB for PM, when Rain Carbon's facility cannot comply with its emission limitations.[11] The proposed amendments would be applicable to emission units designated Kiln 1 and Kiln 2 (and the associated pyroscrubber pollution controls).[12] Specifically, Rain Carbon proposes an amendment to 35 Ill. Adm. Code Section 212.124 to allow for up to a 3-hour averaging period (using Test Method 9 of Appendix A to 40 C.F.R. Part 60, the appropriate method for opacity measurements) to demonstrate compliance with the opacity standard in Section 212.123(a) during startup. Rain Carbon also proposes amending Section 212.322 to allow the units to exceed the PM emission standards in Section 212.322(c) during SMB events, up to 720 hours per year. Finally, Rain Carbon seeks an amendment to 35 Ill. Adm. Code 215.302(b) to allow the units to demonstrate compliance with the VOM emissions standard in Section 215.301 based on the average of hourly emissions during startup.[13]

The Agency has spoken to Rain Carbon regarding its proposal and during discussions Rain Carbon explained that it conducted emissions testing during startup and conducted

[11] *Rain Carbon SOR* p. 22.
[12] *Rain Carbon SOR* p. 4.
[13] *Rain Carbon SOR* p. 4.

modeling based on the data from that test. The modeling demonstration, however, does not adequately represent a "worst-case" analysis, as the greatest hourly emission rates were not used as the basis for the modeling. The modeling used as an input only the excess emissions from SMB events beyond the allowable limit, evaluating that against a Significant Impact Level ("SIL"), a threshold used in preliminarily modeling additional emissions from additional or modifications of equipment typically in the context of permitting any need for more detailed cumulative modeling. This modeling approach is novel in the context of assessing impact on a NAAQS, and likely not determinative in evaluating whether emissions during SMB events would result in a NAAQS violation. It would be appropriate, and more in line with methodologies generally used to ensure maintenance of the applicable NAAQS, to conduct worst-case modeling based on the data produced from start-up testing that includes total worst-case emissions from the affected units, rather than just excess emissions beyond the applicable standards. Rain Carbon has been in contact with the Agency regarding alternative modeling methodologies that may be more appropriate for its proposal.

Rain Carbon's proposal to revise Section 212.322 allows Rain Carbon to utilize its proposed alternative standard for 720 hours per kiln per year. However, neither the proposal nor testimony of the proponent include a justification for the 720 hours per kiln. Rain Carbon only argues that because their submitted modeling demonstrates a lack of NAAQS exceedances under the proposed language, 720 hours is permissible. Again, the Agency would need to see an updated modeling demonstration, and that demonstration must address the proposed AEL timeframe of 720 hours per kiln.

The proposed rule revisions at Section 215.302 include an alternative to the standard set forth in Section 215.301 for VOM emissions. However, the testing that was conducted for the

specific purpose of supporting the regulatory proposal does not indicate that such relief is necessary. The maximum VOM emission rate measured during the testing was 2.41 pounds per hour ("lb/hr"), well within the applicable standard of 8 lb/hr. Further, the test data shows a significant drop-off of VOM emissions after the first test run (from 2.41 to 0.385 lb/hr within three hours) that continued through the duration of the test. If the emissions test conducted by Rain Carbon in support of its proposal is an accurate representation of total hourly VOM emissions, there is no need for relief and thus no need for further information for Board and Agency review. However, if the test data is not accurately representative of the total hourly VOM emissions or if Rain Carbon continues the pursuit of its alternative VOM standard, the Agency necessarily seeks information as to the representative and worst-case emissions of VOM so that the air quality impacts can be assessed properly. As relates, it would also be appropriate for Rain Carbon to provide a justification for the requested 24-hour VOM emissions averaging period within the proposed language, regardless of the potential magnitude of VOM emissions during the first hours of startup after introduction of green coke to the kilns.

The term "non-consecutive" in the proposed revisions in 212.124(e)(1) is not necessary, as it was included to acknowledge that there may be rest time between opacity readings. The degree to which readings are "non-consecutive" is inherent in the test method, as USEPA Method 9 at 2.5 notes, "Opacity shall be determined as an average of 24 consecutive observations recorded at 15-second intervals. Divide the observations recorded on the record sheet into sets of 24 consecutive observations. A set is composed of any 24 consecutive observations. Sets need not be consecutive in time and in no case shall two sets overlap." The Agency is not aware of any other regulations, state or federal, that contain language that includes the term "non-consecutive" as a clarification.

Finally, Rain Carbon did not sufficiently demonstrate why a 3-hour averaging period would be necessary to comply with the opacity standard. The visible emission observations included with the testimony of Brian Higgins[14] indicate that opacity readings were only in excess of 30% for approximately 11 minutes, and never exceeded 50%. While this is greater than the 8 minutes allowed by 212.123(b), a 3-hour average is likely not necessary, as the average for that 1-hour block of testing was only 13.9%, the opacity readings declined sharply after the first 30 minutes of observations, and no readings greater than 5% are recorded for the rest of the testing that was conducted. Rain Carbon should provide justification for the length of this averaging period, or perhaps amend its proposal with regard to the opacity standards.

API

The API proposal applies to the four petroleum refineries in Illinois. *See,* Footnote 4 above. API's position is that by removing the SMB provisions , the Board created a dilemma for refinery operations that include fluid catalytic cracking units ("FCCUs"), as "FCCUs are unable to comply with the standards in Section 216.361 during SMB events."[15] API states that it is not aware of any control equipment options available for the refineries to comply with the standards in Section 216.361, as applicable, during periods of startup and hot standby given the physical limitations of the FCCUs.[16]

To account for this, API is proposing to amend 35 Ill. Adm. Code Sections 216.103, 216.104, and 216.361.[17] Section 216.361 will have a new subsection (d) added which incorporates by reference select provisions of the National Emission Standards for Hazardous

[14] Testimony of Brian Higgins, Appendix C-3, VE Field Data.
[15] *API SOR p. 2*.
[16] *API SOR* p. 42.
[17] *API SOR* p. 14.

Air Pollutants ("NESHAP") for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units found in the code of at 40 CFR Part 63, Subpart UUU.[18] Under the NESHAP, API would comply with work standards during startup and hot standby in lieu of compliance with existing numerical emissions limitations.[19] API's proposal would also amend definitions and incorporations by reference in Sections 216.103 and 216.104, respectively.[20]

Although the proposal is common to the four refineries, the emissions impact from the proposal will vary by the source as they are differently sized, configured and operated. As such, there are common concerns as well as source-specific concerns for the proposal, which are set forth in more detail below.

Generally, the language proposed by API has significant issues. It does not include any ceiling or limits on emissions in terms of number of events, duration of events, or emissions during startup and hot standby events. Without enforceable limitations on these factors that can be modelled to show the potential for 1-hour or 8-hour carbon monoxide ("CO") NAAQS violations, there is no way to confirm that the proposed language will not result in air quality impacts that violate the CAA. Also, no source has provided modeling to demonstrate the proposal will not result in an air quality impact from their startup and hot standby events – not to the Board or Agency and not in either this general rulemaking proceeding or in the adjusted

[18] *API SOR* pp. 2-3, *16.*
[19] *API SOR* p. 16.
[20] *API SOR* pp. 25-27.

standard proceedings filed by two of the four refineries. Demonstrations of this sort will be necessary to submit any revisions adopted by the Board to USEPA as a SIP revision.

Finally, the Agency is requesting information specific to each of the four affected sources, as the API proposal, along with the petitions for adjusted standards that were submitted by the ExxonMobil and Marathon refineries in separate proceedings have raised some questions about the nature of startup events and how they may vary from source to source.

ExxonMobil

API testified at hearing that Exxon Mobil has conducted modeling of its startup emissions.[21] API has also now provided a summary of the modeling ExxonMobil conducted in its most recent post-hearing comment document.[22] At minimum, the Agency needs to evaluate this modeling and supporting data in detail. Specifically, the Agency needs to confirm that the maximum concentration of 2000 parts per million ("ppm") that was modeled is indeed the worst-case emissions scenario during SMB events, and the Agency needs to confirm that other aspects of the modeling performed are appropriate for the purpose for which it was conducted. This is the same degree of scrutiny that USEPA would apply to any SIP revision submittal by the Agency to USEPA, and will likely be necessary if an adopted proposal is to be submitted as a SIP revision. Without data confirming the number, duration, and quantity of emissions from SMB events, particularly the worst-case impacts, there is no way to quantitatively or qualitatively assess air quality impacts. It is appropriate that this data along with air quality modeling are submitted to the Board for its consideration and for the Agency's evaluation to

[21] Transcript of September 27, 2023, Hearing ("Tr") pp. 64-65, lines 21-1.
[22] *API First Post-Hearing Comments* R 23-18(A).

assess the potential for near-source NAAQS violations of the proposed revisions during SMB periods.

It is appropriate for API to provide the Board and the Agency the following information and data regarding ExxonMobil:

- The worst-case CO emissions scenario (in terms of maximum quantity and duration of CO emissions) that takes place during startup or hot standby events, based on the CEMS data and analysis requested below:
  - The date and duration of the last two startups involving refractory repair, along with CEMS data that provides hourly parts per million ppm CO concentration throughout the startup, and calculations of pounds per hour lb/hr CO emissions for each hour of the startup and total CO emissions tonnage from the entire duration of the startup. This should also include the calculation methodology used and include the data inputs (exhaust gas flow rate, oxygen concentration, etc.) used to convert each hourly ppm CO concentration data point to a lb/hr emissions rate for the hour.
  - An analysis of worst-case CO emissions from malfunction and breakdown events, including hot standby, FCCU Regenerator breakdown (including "Behind in Burning" scenarios), and CO Boiler trips. This analysis should demonstrate whether or not the worst-case CO emissions scenario occurs during startups involving refractory repair or during other scenarios.
- A description of ExxonMobil's FCCU operation with respect to the definitions of "full burn unit" and "partial burn unit" provided on page 15 of the Technical Support Document ("TSD") submitted in API's proposal, including a description of the scenarios in which the FCCU operates in each mode and the following information:
  - Whether ExxonMobil considers the 1% oxygen waste stream concentration requirement under 40 CFR § 63.1565(a)(5)(ii) to be synonymous with the definition of "full burn unit" provided on page 15 of the TSD.
  - Whether the FCCU typically starts up in full burn mode.
  - Whether ExxonMobil is able to comply with 500 ppm during startup and hot standby. If not, an explanation as to why, when the definition of "full burn unit" provided on page 15 of the TSD cites CO emission concentrations of 10-100 ppm. Also, a description of operating scenarios in which the FCCU starts up in what is considered by ExxonMobil to be a version of "full-burn mode" that differs from the version associated with routine operation and involving CO concentrations of 10-100 ppm.
  - If ExxonMobil considers a "full burn unit" as defined on page 15 of the TSD to correspond to the language "any existing petroleum or petrochemical process using catalyst regenerators for fluidized catalytic converters equipped for in situ combustion of carbon monoxide" within 35 Ill. Adm. Code 216.361(b), and the FCCU typically starts up in full burn mode, an explanation as to why ExxonMobil has never chosen to comply

with 35 Ill. Adm. Code 216.361(b), rather than 35 Ill. Adm. Code 216.361(a), during startups. Also, an explanation as to why 35 Ill. Adm. Code 216.361(b) has never been included in the CAAPP Permit provisions applying to the FCCU.

CITGO

Without data confirming the number of, the duration of, and the quantity of emissions from startup and hot standby events, there is no way to assess quantitatively or qualitatively air quality impacts. It is appropriate that these data along with air quality modeling are submitted to the Board for its consideration and for the Agency's evaluation to assess the potential for near-source NAAQS violations of the proposed revisions during startup and hot standby periods.

It is appropriate for API to provide the Board and the Agency the following information and data with regard to Citgo:

- The worst-case CO emissions scenario (in terms of maximum quantity and duration of CO emissions) that takes place during startup or hot standby events, based on the CEMS data and analysis requested below:
  - The date and duration of the last two startups involving refractory repair, along with CEMS data that provides hourly ppm CO concentration throughout the startup, and calculations of pounds per hour lb/hr CO emissions for each hour of the startup and total CO emissions tonnage from the entire duration of the startup. This should also include the calculation methodology used and include the data inputs (exhaust gas flow rate, oxygen concentration, etc.) used to convert each hourly ppm CO concentration data point to a lb/hr emissions rate for the hour.
  - An analysis of worst-case CO emissions from malfunction and breakdown events, including hot standby, FCCU Regenerator breakdown (including "Behind in Burning" scenarios), and CO Boiler trips. This analysis should demonstrate whether or not the worst-case CO emissions scenario occurs during startups involving refractory repair or during other scenarios.
- A description of CITGO's FCCU operation with respect to the definitions of "full burn unit" and "partial burn unit" provided on page 15 of the TSD submitted as part of API's Proposal for Regulations of General Applicability, which describes the scenarios in which the FCCU operates in each mode and the following information:
  - Whether CITGO considers the 1% oxygen waste stream concentration requirement under 40 CFR § 63.1565(a)(5)(ii) to be synonymous with the definition of "full burn unit" provided on page 15 of the TSD.

- If the FCCU typically starts up in full burn mode (Proposal at 31), information as to why it is unable to comply with 500 ppm during startup and hot standby if the definition of "full burn unit" provided on page 15 of the TSD cites CO emission concentrations of 10-100 ppm. Also, a description of any operating scenarios in which the FCCU starts up in what is considered by CITGO to be a version of "full-burn mode" that differs from the version associated with routine operation and involving CO concentrations of 10-100 ppm.
- If CITGO considers a "full burn unit" as defined on page 15 of the TSD to correspond to the language "any existing petroleum or petrochemical process using catalyst regenerators for fluidized catalytic converters equipped for in situ combustion of carbon monoxide" within 35 Ill. Adm. Code 216.361(b), and the FCCU typically starts up in full burn mode, an explanation as to why CITGO has never chosen to comply with 35 Ill. Adm. Code 216.361(b), rather than 35 Ill. Adm. Code 216.361(a), during startups and why 35 Ill. Adm. Code 216.361(b) has never been included in the CAAPP Permit provisions applying to the FCCU.

Marathon

API testified at hearing that Marathon has three years of ambient monitoring data measuring concentrations of CO from the years 2017 to 2019.[23] In isolation, this data is of limited value in this proceeding. For the years that monitoring data is available for the Marathon refinery, it would be appropriate for API to provide both the ambient monitoring data as well as Marathon's hourly CEMS data from the SMB events during that monitored period to evaluate pollutant concentrations contemporaneously with those events. On October 18, API provided to the Board in post-hearing comments a document entitled Completion Report containing summary CO concentration data; however, it is nevertheless appropriate for API to provide the above requested information to assess worst-case emission scenarios at the source.

The monitoring data is not determinative of the air quality impacts of the source's SMB events. It is appropriate for API to provide the Board and the Agency the ambient monitoring data and CEMS data correlated to startup and hot standby events during the period of ambient

[23] Tr, p. 65, lines 2-6.

monitoring, and to further provide the relation to more recent startup and hot standby events by providing the following information and data with regard to Marathon:

- The worst-case CO emissions scenario (in terms of maximum quantity and duration of CO emissions) that takes place during startup or hot standby events, based on the CEMS data and analysis requested below:
    - The date and duration of the last two startups involving refractory repair, along with CEMS data that provides hourly ppm CO concentration throughout the startup, and calculations of pounds per hour lb/hr CO emissions for each hour of the startup and total CO emissions tonnage from the entire duration of the startup. This should also include the calculation methodology used and include the data inputs (exhaust gas flow rate, oxygen concentration, etc.) used to convert each hourly ppm CO concentration data point to a lb/hr emissions rate for the hour.
    - An analysis of worst-case CO emissions from malfunction and breakdown events, including hot standby, FCCU Regenerator breakdown (including "Behind in Burning" scenarios), and CO Boiler trips. This analysis should demonstrate whether or not the worst-case CO emissions scenario occurs during startups involving refractory repair or during other scenarios.
    - A description of Marathon's FCCU operation with respect to the definitions of "full burn unit" and "partial burn unit" provided on page 15 of the TSD submitted as part of API's proposal[24], which describes the scenarios in which the FCCU operates in each mode and the following information:
        - Whether Marathon considers the 1% oxygen waste stream concentration requirement under 40 CFR § 63.1565(a)(5)(ii) to be synonymous with the definition of "full burn unit" provided on page 15 of the TSD.
        - If the FCCU typically starts up in full burn mode (Proposal at 31), an explanation as to why it is unable to comply with 500 ppm during startup and hot standby if the definition of "full burn unit" provided on page 15 of the TSD cites CO emission concentrations of 10-100 ppm. Also a description of any operating scenarios in which the FCCU starts up in what is considered by Marathon to be a version of "full-burn mode" that differs from the version associated with routine operation and involving CO concentrations of 10-100 ppm.
    - A description of Marathon's startup procedure with respect to the routing of emissions through the CO Boiler during any duration of the startup procedure, in

[24] AS24-03, In the Matter of: Petition of Marathon Petroleum Company, LLC for an Adjusted Standard From 35 Ill. Adm. Code Part 201 and Section 216.361.

comparison to the startup procedures for the other three refineries, would aid the Agency's assessment.

- A description of Marathon's startup procedure with respect to the routing of emissions through the CO Boiler during any duration of the startup procedure, in comparison to the startup procedures for the other three refineries. In Marathon's adjusted standard petition it states, "During startup, flue gas is introduced into the CO boiler just prior to the introduction of torch oil into the FCCU."[25] API's proposal states "Typically, the FCCUs will startup in full burn mode and the source will bypass the CO boiler during startup."[26] Information available to the Agency indicates that the other three refineries bypass their CO Boilers during the entirety of the startup procedure until normal, steady-state FCCU operation is achieved.

WRB

Without data confirming the number of, the duration of, and the quantity of emissions from SMB events, there is no way to assess quantitatively or qualitatively air quality impacts. It is appropriate that these data along with air quality modeling are submitted to the Board for its consideration and for the Agency's evaluation to assess the potential for near-source NAAQS violations of the proposed revisions during SMB periods.

It is appropriate for WRB to provide the Board and the Agency the following information and data:

- The worst-case CO emissions scenario (in terms of maximum quantity and duration of CO emissions) that takes place during startup or hot standby events, based on the CEMS data and analysis requested below:
  - The date and duration of the last two startups involving refractory repair for each FCCU, along with CEMS data that provides hourly ppm CO concentration throughout the startup, and calculations of pounds per hour lb/hr CO emissions for each hour of the startup and total CO emissions tonnage from the entire duration of the startup. This should also include the calculation methodology used and include the data inputs (exhaust gas flow rate, oxygen concentration, etc.) used to convert each hourly ppm CO concentration data point to a lb/hr emissions rate for the hour.

[25] AS24-03, In the Matter of: Petition of Marathon Petroleum Company, LLC for an Adjusted Standard From 35 Ill. Adm. Code Part 201 and Section 216.361, TSD p. 11.
[26] R23-18(A) *API SOR*, p. 31.

- An analysis of worst-case CO emissions from malfunction and breakdown events, including hot standby, FCCU Regenerator breakdown (including "Behind in Burning" scenarios), and CO Boiler trips. This analysis should demonstrate whether or not the worst-case CO emissions scenario occurs during startups involving refractory repair or during other scenarios.
- A description of WRB's FCCU units' operation with respect to the definitions of "full burn unit" and "partial burn unit" provided on page 15 of the TSD submitted as part of API's Proposal for Regulations of General Applicability, which describes the scenarios in which the FCCU operates in each mode and the following information:
  - Whether WRB considers the 1% oxygen waste stream concentration requirement under 40 CFR § 63.1565(a)(5)(ii) to be synonymous with the definition of "full burn unit" provided on page 15 of the TSD.
  - If the FCCU units typically starts up in full burn mode (Proposal at 31), an explanation as to why are they unable to comply with 500 ppm during startup and hot standby if the definition of "full burn unit" provided on page 15 of the TSD cites CO emission concentrations of 10-100 ppm. Also, a description of any operating scenarios in which the FCCU units start up in what is considered by WRB to be a version of "full-burn mode" that differs from the version associated with routine operation and involving CO concentrations of 10-100 ppm.

Dynegy and MWG

In its Joint Proposal, Dynegy and MWG seek amendments that would create a new a subsection (d) in Section 212.124, which would allow the affected units to demonstrate compliance with the 20% or 30% opacity standard in Sections 212.122(a) or 212.123(a) on a three-hour averaging basis during times of SMB.[27]

Dynegy and MWG state that the proposed "Alternative Averaging Period is modeled on each Affected Unit's Compliance Assurance Monitoring ("CAM") plan, set forth in its CAAPP permit for the applicable Illinois SIP [PM] limitation." [28] The CAM Plans in question, which are established under the authority of 40 CFR Part 64 and Section 39.5 of the Illinois Environmental Protection Act, are utilized to provide "a reasonable assurance of compliance" with the

[27] Dynegy and MWG statement of reasons ("*Dynegy-MWG SOR*"), pp. 6.
[28] *Dynegy-MWG SOR*, p. 6

regulations they are established to assure compliance with, which for these sources are the PM rules in 35 Ill. Adm. Code 212.202, 212.203 and 212.204. These regulations for which the CAM plans provide this assurance relate to PM emissions in general, not PM10 or PM2.5 for which there are specific NAAQS. As such, these CAM plans do not address whether there could be near-source NAAQS violations during SMB events.[29] While 35 Ill. Adm. Code 212.202 (Kincaid, Powerton), 212.203 (Baldwin), and 212.204 (Newton) were all adopted to protect air quality with respect to PM, they were certainly not adopted in order to be protective of the current 2012 PM2.5 or PM10 NAAQS (or even the 2006 or 1997 standards), as those Part 212 regulations were last revised in 1996. Likewise, those Part 212 PM emission standards have never been quantitatively evaluated in order to demonstrate that compliance with them would prevent a violation of the current NAAQS, nor do those standards have any bearing on whether NAAQS violations near these sources could occur during the SMB events in question because the Section 212 standards predate the current NAAQS for PM10 and PM2.5 and do not directly regulate either pollutant.

Reliance on these CAM Plans to assess the emissions impact of the three-hour averaging period in the proposed AEL is at minimum questionable. Moreover, reliance on or adherence to the plans in no way confirms quantitatively that the AEL will not result in near-source PM NAAQS exceedances. The sources should provide data and estimates to the Board and to the Agency regarding worst-case emissions of PM10 and PM2.5 during SMB events in terms of lb/hr for each pollutant for the Agency to evaluate.

[29] *Dynegy-MWG SOR* pp. 32-33.

Dynegy and MWG indicate that the rule amendments in the Joint Proposal would be codified as a subsection to Section 212.124, and would provide limited relief only until the Affected Units are retired. Notably, the latest planned retirement for any of the Affected Units is MWG's planned retirement of the Powerton Affected Units on or before December 31, 2028.[30] The potential for PM NAAQS exceedances during SMB events under the proposed language is of concern even if the applicability of the proposal may be of limited duration, sunsetting after the last source ceases operation. An evaluation of worst-case emissions and whether there is the potential for NAAQS violations necessarily should be conducted with the results and supporting data provided to the Board.

In the Joint Proposal, Dynegy and MWG argue that "IEPA has already determined that compliance with the Alternative Averaging Period would assure compliance with applicable NAAQS and State PM limitations."[31] As explained above, the Agency has certainly not made any such determination, nor does it concur that the CAM plans assure compliance with the applicable NAAQS.

The companies argue that their proposed language contains work practices that, in combination with the proposed AEL, will ensure compliance with Title 35 PM rules and PM NAAQS: "Specifically, Section 212.124(d)(3)(A) of the joint proposal requires compliance with the following work practices as a condition of relying on the Alternative Averaging Period: 'Operate the coal-fired boiler and related air pollution control equipment in a manner consistent with good engineering practice for minimizing opacity during such startup, malfunction or

[30] *Dynegy-MWG-SOR*, p. 6.
[31] *Dynegy-MWG SOR*, p. 25.

breakdown.'"[32] The proposal replaces a numerical standard (the opacity standards in 35 Ill. Adm. Code 212.122 and 212.123) with 1) an averaging period that allows individual six-minute opacity readings without any numerical limit, regardless of the fact that the three-hour averaging period has to comply with the opacity standard, and 2) non-specific language that allows the source to excuse six-minute opacity values without any numerical limit through "good engineering practice for minimizing opacity." The joint proposal uses the arguments set forth in the TSD included with the joint proposal as Exhibit 7 to claim that the proposed AEL will not allow an "effectively unlimited or uncontrolled level of emissions." As further argued below, the joint proposal and the TSD do not effectively demonstrate that the combination of three hour averaging and good engineering practices will not create an "unlimited or uncontrolled level of emissions," which is prohibited by USEPA,[33] nor does the TSD give any indication of what the potential maximum PM, PM10, or PM2.5 emissions might be during SMB periods.

Dynegy and MWG state that "The Joint Proposal relates to only opacity. Opacity is not a pollutant; it can be an indicator for PM. The Joint Proposal will not grant permission for the Companies to exceed any limitations or standards for PM or any other pollutant, and it will not affect the State's attainment or reasonable further progress in connection with any NAAQS, or the State's compliance with any other federal CAA requirements."[34] The companies argue that because opacity is an indicator for PM emissions, rather than a directly quantifiable and proportionate surrogate for numerical PM emissions, that exceeding the opacity standards in Sections 212.122 and 212.123 will not result in exceedance of the PM standards in Sections

---

[32] *Dynegy-MWG SOR*, p. 27.
[33] As acknowledged in the joint proposal, "U.S. EPA concludes its recommendations by admonishing that alternative emission limitations 'cannot allow an inappropriately high level of emissions or an effectively unlimited or uncontrolled level of emissions.'" *Dynegy-MW SOR* p. 21.
[34] *Dynegy-MWG SOR*, pp 29-30.

212.202, 212.203, and 212.204 (as applicable) for the sources.[35] The TSD further shows PM emissions correlations, which are based on PM emissions rates and concurrent opacity values measured during performance tests for each of the sources.[36]

The Agency recognizes that the correlations might be helpful to demonstrate compliance with the PM standards *below the level of the standard*, i.e., for measured values of opacity less than 20% or 30%, depending on the source and applicable opacity standard. However, the Agency requires more information and data for a sufficient demonstration that the opacity values allowed in the 3-hour averaging framework under the proposed AEL (that would allow emissions *above* the level of the standard) will not result in 1) non-compliance with the applicable PM standards, 2) the potential for near-source PM NAAQS exceedances, or 3) an "unlimited or uncontrolled level of emissions." Opacity cannot be equated to quantitative PM emissions (it can only be associated or correlated with PM emissions). The companies should provide evidence that at opacity values up to 100% (allowed under the proposed AEL language if the three-hour average does not exceed the standard), emissions do not increase enough to potentially violate near-source PM2.5 and PM10 NAAQS values. Further, there is no way to identify or evaluate emissions during the worst-case three-hour operating period allowed under the AEL while allowing for six-minute opacity values without a numerical limit (i.e., up to 100%). Without being able to quantify the PM, PM10, and PM2.5 emissions implications from all possible three-hour operating period opacity distributions allowed under the AEL, the Agency cannot confirm a lack of air quality impacts.

[35] *Dynegy-MWG SOR* p. 30.
[36] *Dynegy-MWG TSD* pp7-8.

While the TSD uses testing data available to the sources for correlating opacity to PM emissions, this data involves opacity values below the current opacity standards. The correlations provided do not confirm that at high opacity values (based on Dynegy testimony, Kincaid and Newton have measured opacity values near or at 100% in past operation),[37] the PM emissions standards are not exceeded. Dynegy and Midwest Generation operate PM CEMS at nearly all of the affected units. Data from these monitoring systems should be provided from SMB periods when those units were operating in excess of the opacity standards. The companies should submit CEMS data, continuous opacity monitoring system ("COMS") data, and emissions estimates to the Board, where they are available, to provide context about what worst-case PM, PM10, and PM2.5 emissions typically occur during SMB periods.

IERG Proposal

The IERG Proposal seeks to amend the CO standard at 35 Ill. Adm. Code Section 216.121 for fuel combustion emission sources during periods of startup and shutdown and incorporate portions of the NESHAP at 40 CFR Part 63 DDDDD during those periods. This would apply to "any furnace, boiler, or similar equipment used for the primary purpose of producing heat or power by indirect heat transfer."[38] IERG proposes to amend 35 Ill. Adm. Code 216.121 to allow a source to comply with certain portions of the NESHAP during startups and shutdowns, in lieu of complying with the existing Section 216.121 standard.[39] In conjunction with the proposed amendments to Section 216.121, IERG proposes amendments to Sections 216.103 and 216.104, governing definitions and incorporations by reference

[37] Dynegy-*MWG SOR*, Exhibit 5, Exhibit A, *Dynegy's Written Responses to Questions Received at Hearing*, pp. 1-3.
[38] 35 Ill. Adm. Code Section 211.2470, definition of *Fuel Combustion Emission Unit or Fuel Combustion Emission Source*.
[39] *IERG SOR*, p.15.

respectively. Specifically, IERG proposes to amend Section 216.103 to add the sentence "T[h]e definitions of "startup" and "shutdown" in 40 CFR 63.7575 apply to Section 216.121(b) of this Part." Section 216.104 would be amended to incorporate the NESHAP standard by adding the clause "40 CFR 63, Subpart DDDDD (2022)."[40]

IERG's proposal is not sufficiently tailored. It applies to very broad categories of emission units at any type of stationary source, combusting any type of fuel, and using any or no kind of emissions control strategy.[41] IERG did not provide any information to the Board regarding CO emissions during startup and shutdown periods for any of the approximately 1500 sources or for any of the approximately 3900 units in any number of counties in Illinois (including within potential Environmental Justice areas)all of whom would be allowed under the proposal to emit additional CO.[42] IERG should provide a quantification of emissions during those periods, durations of those periods, and discussion of potential environmental impact during those periods for specific sources and units in need of relief, and descriptions of what might be "typical" worst-case emissions for those units during those periods. IERG should provide with its proposal worst-case quantification, modeling, and information related to modeling including the data inputs.

The Agency also notes that relatively few of the approximately 1,500 potentially affected sources sought and obtained in their permit's affirmative defenses for emissions in excess of the otherwise applicable standard under the now-defunct SSM provisions, and IERG has not provided information regarding the number of sources it directly represents that need relief or

---

[40] *IERG SOR* p. 24.
[41] USEPA's criteria 1 for developing alternative emission limits AELs is: "(1) The revision is limited to specific, narrowly defined source categories using specific control strategies (e.g., cogeneration facilities burning natural gas and using selective catalytic reduction)." 80 Fed. Reg. 33980 June 12, 2015).
[42] *IERG SOR* p. 31.

how many sources in Illinois it believes may need the proposed relief sought. Thus, not only has none of the relief been supported with information as to emissions impact, but arguably relief is also being sought unnecessarily, and in turn excess emissions associated with the proposed relief are greater than necessary and appropriate.

IERG provided very limited support for its very broad proposal. Specifically, it offered a few remarks in support of its proposal. Citing from the 2021 Annual Air Quality Report, it noted "Illinois has no violating CO monitors for either the 1-hour or 8-hour CO National Ambient Air Quality Standard." And it noted that the CO NAAQS allows one exceedance per year and the "most recent Illinois data shows the highest monitor's worst daily high 1-hour and 8-hour CO NAAQS readings are dramatically below the NAAQS."[43] None of this is relevant as to whether there may be a violation of the1-hour or 8-hour CO NAAQS from IERG's proposal. That the existing ambient air monitoring network has never measured a NAAQS exceedance is not dispositive that there are *no* NAAQS implications from this request. Rather, the qualitative information and quantitative data and modeling discussed previously are necessary to assess air quality impacts of the proposal. The CO monitors in Illinois are not necessarily meant to measure CO concentrations near or at any of the unnamed potentially affected sources, nor are they meant to determine compliance with the NAAQS on a state-wide basis or a regional basis. Rather, those monitors are meant to measure CO concentrations on a much more local basis based on historical need. The vast majority of potentially affected sources are nowhere near one of those CO monitors, and the appropriate concern is CO concentrations at publicly accessible areas near affected sources (here the 1500 or more potentially affected sources). It is also irrelevant that the

[43] *IERG SOR* p. 15.

CO NAAQS allows for one exceedance per year; no one source, or group of sources, gets to "claim" that exceedance for their own.

IERG arguably needs to narrow the universe of affected sources and necessarily needs to provide technical support for its proposed revisions regardless of their ultimate breadth. This technical support would include identifying sources that are actually in need of an alternative CO standard, determining the greatest potential for impacting air quality during their startup and shutdown periods, quantifying worst-case emissions, and demonstrating that CO emissions during these periods would not threaten the CO (1-hour and 8-hour) NAAQS at these higher impact sources via modeling.

Board Non-Substantive Changes

In a Hearing Officer Order on September 20, 2023, the Hearing Officer set forth the Board's pre-filed questions for the first hearing. One of the questions indicated that the Board had made some non-substantive changes to the proposed rule amendments, and requested comments as to whether such changes were acceptable.[44] The Agency does not have any issues with these changes.

Conclusion

For the reasons set forth above, the Agency requests that the Board solicit additional information from all rule proponents and review such information, allowing the Agency to review as well, before adopting any amendments to the rule such that the air quality implications or impact of each proposal can be determined, and the appropriate review and consideration of the proposals may occur. This is a unique rulemaking in that the Board and Agency are not only

[44] R23-18(A), *Hearing Officer Order*, Board Question 1 at p. 3 (September 20, 2023)

assessing a single rulemaking proposal, but rather five that vary considerably from one to another. While the Agency understands that the rulemaking is being expedited, time should be provided for full consideration of the environmental impact of the proposals once additional information is provided.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: /s/ Charles E. Matoesian
Division of Legal Counsel

DATED: October 23, 2023
1021 N. Grand Ave. East
P.O. Box 19276
Springfield, IL 62794-9276
(217) 782-5544

CERTIFICATE OF SERVICE

I, the undersigned, an attorney, state the following:

I have electronically served the attached ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S COMMENTS upon the following persons:

Don Brown
Illinois Pollution Control Board
100 W. Randolph St., Suite 11-500
Chicago, IL 60601
Don.brown@illinois.gov

Renee Snow
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702
renee.snow@illinois.gov

Michael Leslie
U.S. EPA Region 5
Ralph H. Metcalfe Federal Building
77 West Jackson Blvd.
Chicago, IL 60604
Leslie.Michael@epa.gov

Sarah L. Lode
David M. Loring
ArentFox Schiff, LLP
233 South Wacker Drive, Suite 6600
Chicago, IL 60606
Sarah.Lode@afslaw.com
David.Loring@afslaw.com

Andrew N. Sawula
ArentFox Schiff, LLP
One Westminster Place, Suite 200
Lake Forest, IL 50045
Andrew.Sawula@asflaw.com

Timothy Fox
Chloe Salk
Illinois Pollution Control Board
60 East Van Buren Street, Suite 630
Chicago, IL 60605
Tim.fox@illinois.gov
chloe.salk@illinois.gov

Molly Kordas
Ann Marie A. Hanohano
Illinois Attorney General
69 West Washington Street, Suite 1800
Chicago, IL 60602
Molly.kordas@ilag.gov
annmarie.hanohano@ilag.gov

Jason James
Illinois Attorney General
201 West Point Drive, Suite 7
Belleville, IL 62226
Jason.james@ilag.gov

Joshua R. More
Amy Antoniolli
Samuel A. Rasche
Arentfox Schiff LLP
233 South Wacker Drive, Suite 7100
Chicago, IL 60606
Joshua.More@afslaw.com
Amy.Antoniolli@afslaw.com
Sam.Rasche@afslaw.com

Byron F. Taylor
John M. Heyde
Sidley Austin LLP
One South Dearborn
Chicago, IL 60603
bftaylor@sidley.com
jheyde@sidely.com

Kelly Thompson
Illinois Environmental Regulatory Group
215 E. Adams St.
Springfield, IL 62701
kthompson@ierg.org

Faith E. Bugel
1004 Mohawk Rd.
Wilmette, IL 60091
fbugel@gmail.com

Cantrell Jones
Environmental Law and Policy Center
35 E. Wacker Drive, Suite 1600
Chicago, IL 60601
CJones@elpc.org

Alec Messina
Melissa S. Brown
4340 Acer Grove Drive
Springfield, IL 62711
Alec.Messina@heplerbroom.com
Melissa.brown@heplerbroom.com

Keith I. Harley
Greater Chicago Legal Clinic, Inc.
211 West Wacker Drive, Suite 750
Chicago, IL 60606
kharley@kentlaw.edu

Mark A. Bilut
McDermott, Will & Emery
227 West Monroe Street
Chicago, IL 60606-5096
mbilut@mwe.com

My e-mail address is charles.matoesian@illinois.gov

The number of pages in the e-mail transmission is 31.

The e-mail transmission took place before 4:30 p.m. on October 23, 2023.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY,

By: /s/ Charles E Matoesian
Charles E Matoesian
Assistant Counsel
Division of Legal Counsel

Dated: October 23, 2023

1021 North Grand Avenue East
Springfield, Illinois 62794-9276
(217) 782-5544
charles.matoesian@illinois.gov