

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
)	
PETITION OF EXXONMOBIL OIL)	AS 24-1
CORPORATION FOR ADJUSTED)	(Adjusted Standard-Air)
STANDARD FROM)	
35 ILL. ADM. CODE 216.361,)	
35 ILL. ADM. CODE 216.103, AND)	
35 ILL. ADM. CODE 216.104)	

NOTICE

TO: Don Brown
 Clerk
 Illinois Pollution Control Board
 60 E. Van Buren St., Ste. 630
 Chicago, IL 60605

Eric E. Boyd
 Edward A. Cohen
 Timothy B. Briscoe
 55 East Monroe Street
 Chicago, IL 60603

Brad Halloran
 Hearing Officer
 Illinois Pollution Control Board
 60 E. Van Buren St., Ste. 630
 Chicago, IL 60605

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board the RECOMMENDATION of the Illinois Environmental Protection Agency, a copy of which is herewith served upon you.

ILLINOIS ENVIRONMENTAL
 PROTECTION AGENCY

By: /s/ Gina Roccaforte
 Gina Roccaforte
 Assistant Counsel
 Division of Legal Counsel

DATED: June 10, 2024
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RECOMMENDATION

NOW COMES the Illinois Environmental Protection Agency (“Illinois EPA” or “Agency”) by one of its attorneys, and pursuant to 35 Ill. Adm. Code 104.416, hereby submits the Agency’s Recommendation to the Illinois Pollution Control Board (“Board”) in response to the Petition of ExxonMobil Oil Corporation (“ExxonMobil” or “Petitioner”) regarding the Joliet Refinery located in Channahon, Will County, Illinois. For the reasons stated below, the Illinois EPA recommends that the Board DENY Petitioner’s request for an adjusted standard from 35 Ill. Adm. Code 216.361, 216.103, and 216.104 due to informational deficiencies in the Petition and as the relief sought is duplicative of rule revisions being sought in the Board’s R23-18(A) rulemaking proceeding, to the extent that the Board intends to adopt such rule revisions with respect to ExxonMobil. In support of its Recommendation, the Illinois EPA states as follows:

I. BACKGROUND

On August 14, 2023, ExxonMobil filed a Petition for Adjusted Standard (“Petition”) from the provisions of 35 Ill. Adm. Code 216.361, 216.103, and 216.104 under Section 28.1 of the Environmental Protection Act (“Act”), 415 ILCS 5/28.1. Petition at 3. ExxonMobil requests an adjusted standard from the carbon monoxide (“CO”) emissions standards for petroleum and petrochemical processes during periods of startup, malfunction, and breakdown (“SMB”) and from accompanying definitions and incorporations by reference. Petition at 3-4.

Illinois EPA must make a recommendation to the Board as to the disposition of the Petition within 45 days after the filing of the petition or at least 30 days before a hearing, unless otherwise ordered by the hearing officer or Board. 35 Ill. Adm. Code 104.416. Pursuant to the Illinois EPA's Motion for Stay of Proceeding, or in the Alternative, Motion for Extension of Time to File Recommendation (filed with the Board on September 11, 2023, and granted by the Hearing Officer on September 25, 2023, and by the Board on October 5, 2023), the Illinois EPA's Status Report and Motion to Extend Stay of Proceeding (filed with the Board on December 13, 2023, and granted by the Hearing Officer on January 4, 2024), and the Illinois EPA's Status Report and Motion to Extend Stay of Proceeding (filed with the Board on April 10, 2024), the Hearing Officer has ordered the Agency to file its Recommendation by June 10, 2024. Hearing Officer Order (August 25, 2024).

The bases for all of the Motions filed by the Illinois EPA remain the same. The Board is currently considering the R23-18(A) rulemaking that includes the American Petroleum Institute's ("API") rulemaking proposal for certain refineries including ExxonMobil, and such rulemaking proposal substantively mirrors ExxonMobil's requested adjusted standard. *See*, R23-18(A), *In the Matter of: Amendments to 35 Ill. Adm. Code Parts 201, 202, and 212*. Both the rulemaking and Petition concern amendments to and relief from the same Board regulations for refineries. As the Illinois EPA articulated in its Motions, relief is not needed or appropriate in both forums. Further, simultaneously participating in both an expedited rulemaking and this adjusted standard proceeding forces the Agency, Board, ExxonMobil, and potentially other participants to expend significant resources in proceedings that seek the same relief. *See*, Illinois EPA's Motion for Stay of Proceedings, or in the Alternative, Motion for Extension of Time to File a Recommendation, September 11, 2023, at 4, and Illinois EPA's Status Reports and

Motions to Extend Stay of Proceeding, December 13, 2023, at 3, and April 10, 2024, at 4. In its Motions, the Illinois EPA provided updates regarding the progress of the rulemaking, indicating that three public hearings have taken place and post-hearing comments were to be (and now have been) filed, leaving only Second Notice review by the Joint Committee on Administrative Rules prior to final Board action.

Despite the above, ExxonMobil urged the Board to move forward with this adjusted standard proceeding and deny the Agency's last-filed Motion to extend the stay. ExxonMobil argued, "This proceeding and the R 23-18(A) proceeding, however, are separate proceedings with different procedural requirements. The Board can decide how and whether to proceed with this adjusted standard matter (AS 24-001) in light of the alternative emissions limitation proceeding (R 23-18(A)) whether or not a stay of proceedings is in place." ExxonMobil's Status Report and Response to Illinois EPA's Motion to Extend Stay of Proceeding, April 24, 2024, at 4-5. The Hearing Officer indicated that a stay was no longer necessary and ordered the Agency to file its Recommendation.¹

II. PETITIONER'S REQUEST

ExxonMobil seeks an adjusted standard for the fluid catalytic cracking unit ("FCCU") at the Joliet Refinery from the Board's CO standard under Section 216.361, Petroleum and

¹ Most of the other participants in the R23-18(A) rulemaking proceeding have filed Petitions for Adjusted Standard with the Board. See, AS 24-2, *Petition of East Dubuque Nitrogen Fertilizers, LLC for an Adjusted Standard*; AS 24-3, *Marathon Petroleum Company, LLC for an Adjusted Standard from 35 Ill. Adm. Code 216.361*; AS 24-4, *Petition of Dynegy for an Adjusted Standard from 35 Ill. Adm. Code Parts 201 and 212*; AS 24-5, *Petition of Rain CII Carbon LLC for an Adjusted Standard from 35 Ill. Adm. Code §§ 201.149, 212.123, and 212.322, 215.301*; and AS 24-6, *Petition of Midwest Generation, LLC for an Adjusted Standard from 35 Ill. Adm. Code Parts 201 and 212*. All of these adjusted standard proceedings are currently stayed by the Hearing Officers under Motions to Extend Stay of Proceeding filed by the Illinois EPA under identical circumstances as in this proceeding until either September 16, 2024, (AS 24-4 and AS 24-6), or September 23, 2024, (AS 24-2, AS 24-3, and AS 24-5) to allow the Board to adopt a rule in the R23-18(A) proceeding before September 1 (one year since first notice began) to the extent the Board intends to do so. AS 24-2, Hearing Officer Order (April 18, 2024); AS 24-3, Hearing Officer Order (May 2, 2024); AS 24-4, Hearing Officer Order (April 25, 2024); AS 24-5, Hearing Officer Order (April 15, 2024); and AS 24-6, Hearing Officer Order (April 25, 2024). None of the other petitioners objected to the stays.

Petrochemical Processes, during periods of SMB, with corresponding adjusted standard revisions to 35 Ill. Adm. Code 216.103, Definitions, and 35 Ill. Adm. Code 216.104, Incorporations by Reference, that incorporate select provisions of the National Emission Standards for Hazardous Air Pollutants (“NESHAP”) for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units at 40 CFR 63, Subpart UUU (“Subpart UUU”). Petition at 20-34. Additional information regarding Petitioner’s requested relief is set forth below.

III. REQUIRED ADJUSTED STANDARD ANALYSIS

Illinois EPA’s Recommendation must set forth the rationale for the Agency’s position and may present any information that the Agency believes is relevant to the Board’s consideration of the proposed adjusted standard. 35 Ill. Adm. Code 104.416(a). At a minimum, the Agency must address and respond to the petition with respect to each issue raised by the requirements of Section 104.406(a) through (j). 35 Ill. Adm. Code 104.416(b).

Illinois EPA hereby provides its analysis of the Petitioner’s request for an adjusted standard from 35 Ill. Adm. Code 216.361, 216.103, and 216.104. The Agency’s assessment is based on the information set forth in ExxonMobil’s Petition. It does not include any additional technical support/information that has been provided by ExxonMobil or API in the R23-18(A) rulemaking but that has not been made part of the record of this proceeding. This information was developed by ExxonMobil, in conjunction with API in its representation of ExxonMobil, in the context of API’s rulemaking proposal. It was considered by the Agency in the rulemaking context alone. As ExxonMobil has pointed out in urging the Board to proceed forward with its Petition, the rule and this docket are two separate proceedings with different requirements and different standards for Board action. To the extent the company would like additional

information considered here, ExxonMobil is in the best position to submit it along with any requisite explanation in the context of an adjusted standard proceeding. Further, Board rules require that certain information be included in ExxonMobil's Petition itself. 35 Ill. Adm. Code 104.406. Should ExxonMobil amend its Petition, the Agency will file an Amended Recommendation.

As set forth in detail below, the record in this adjusted standard proceeding is insufficient for the Board to grant an adjusted standard consistent with the Act and Board regulations.

Section 104.406(a): *A statement describing the standard from which an adjusted standard is sought. This must include the Illinois Administrative Code citation to the regulation of general applicability imposing the standard as well as the effective date of that regulation.*

ExxonMobil seeks an adjusted standard from 35 Ill. Adm. Code 216.361 (carbon monoxide concentration standards), 216.103 (definitions), and 216.104 (incorporations by reference). Petition at 16. ExxonMobil provides the effective date of Section 216.361, which was April 13, 1972. ExxonMobil states that the Board's removal of the SMB provisions in Part 201 makes Section 216.361 applicable to Petitioner's Joliet Refinery for the first time since the promulgation of the regulation; therefore, Petitioner requests the Board to consider the effective date of the R23-18 amendments, *see*, R23-18, *In the Matter of: Amendments to 35 Ill. Adm. Code Parts 201, 202, and 212*, 47 Ill. Reg. 12089 (August 11, 2023), which is July 25, 2023, as the effective date for purposes of Petitioner's Petition. Petition at 17. As part of its requested adjusted standard, ExxonMobil proposes corresponding revisions to Sections 216.103 and 216.104, governing definitions and incorporations by reference, respectively. Petition at 17. ExxonMobil, however, did not provide the effective dates of Sections 216.103 and 216.104.

The Agency disagrees with ExxonMobil's claim that Section 216.361 was not applicable to FCCUs during periods of SMB prior to July 25, 2023. This provision has been applicable since it was promulgated. 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 CO standards in Section 216.361 or change their applicability to ExxonMobil in any way. ExxonMobil's 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. *See* R23-18, *In the Matter of: Amendments to 35 Ill. Adm. Code Parts 201, 202, and 212*, Board Order (July 20, 2023); R23-18, *Prefiled Testimony of Rory Davis* (January 9, 2023); R23-18, *Illinois EPA's Responses to Post-Hearing Questions Submitted by IERG*; and R23-18, *Illinois EPA's Post-Hearing Comments* (March 7, 2023). The CO standard under 35 Ill. Adm. Code 216.361(a) is also listed as an applicable requirement in ExxonMobil's Clean Air Act Permit Program ("CAAPP") Permit. *See*, 7.0, Unit Specific Conditions, Title V - Clean Air Act Permit Program (CAAPP) Permit and Title I Permit, Mobil Oil Corporation - Joliet Refinery.

[Documents - IEPA Document Explorer \(illinois.gov\)](#)

The Agency would also like to clarify that, while ExxonMobil requests that the Board "revise" its regulations by adding a new subsection and adding sentences to existing subsections, the Agency does not agree that regulations may be revised via an adjusted standard proceeding. Even if granted, ExxonMobil's adjusted standard is not a regulation itself and will not alter the face of the Board's regulations.

Section 104.406(b): *A statement that indicates whether the regulation of general applicability was promulgated to implement, in whole or in part, the requirements of the CWA (33 USC 1251 et seq.), Safe Drinking Water Act (42 USC 300(f) et seq.), Comprehensive Environmental Response, Compensation and Liability Act (42 USC 9601 et seq.), CAA (42 USC 7401 et seq.), or the State programs concerning RCRA, UIC, or NPDES (see 415 ILCS 5/28.1).*

ExxonMobil provided a statement responsive to 35 Ill. Adm. Code 104.406(b) indicating that the Board promulgated Section 216.361 in 1972 as a regulation of general applicability to ensure that the State meets new national ambient air standards set in the CAA Amendments of 1970. Petition at 18. ExxonMobil also provided that the Board, in its Opinion and Order in R23-18 dated July 20, 2023, reiterated that the repeal of the SMB provisions from Parts 201, 202, and 212 was required to be adopted by the CAA. Petition at 18.

The Agency agrees that the CO standards from which ExxonMobil seeks an adjusted standard were required to be adopted to satisfy the CAA.

Section 104.406(c): *The level of justification as well as other information or requirements necessary for an adjusted standard as specified by the regulation of general applicability or a statement that the regulation of general applicability does not specify a level of justification or other requirements.*

Illinois EPA agrees with ExxonMobil that since Sections 216.361, 216.103, and 216.104 do not specify a level of justification for an adjusted standard, the applicable level of justification is the factors identified in Section 28.1(c) of the Act, 415 ILCS 5/28.1(c). Section 28.1 of the Act states that the Board may grant individual adjusted standards from rules of general applicability whenever the Board determines that an applicant can justify an adjustment, and may impose any conditions that may be necessary to accomplish the purposes of the Act. 415 ILCS

5/28.1. In adopting a rule of general applicability, the Board may specify the level of justification required of a petitioner for an adjusted standard. If a rule of general applicability does not contain a level of justification that the petitioner must meet to obtain an adjusted standard, the requirements of Section 28.1(c) of the Act apply. 415 ILCS 5/28.1(c). Section 28.1(c) states that the Board may grant individual adjusted standards whenever the Board determines that: (1) Factors relating to that petitioner are substantially and significantly different from the factors relied upon by the Board in adopting the general regulations applicable to that petitioner; (2) The existence of those factors justifies an adjusted standard; (3) The requested standard will not result in environmental or health effects substantially and significantly more adverse than the effects considered by the Board in adopting the rule of general applicability; and (4) The adjusted standard is consistent with any applicable federal law. 415 ILCS 5/28.1(c).

Section 104.406(d): *A description of the nature of the petitioner's activity that is the subject of the proposed adjusted standard. The description must include the location of, and area affected by, the petitioner's activity. This description must also include the number of persons employed by the petitioner's facility at issue, age of that facility, relevant pollution control equipment already in use, and the qualitative and quantitative description of the nature of emissions, discharges or releases currently generated by the petitioner's activity.*

ExxonMobil provides a sufficient description of its Joliet Refinery, which includes one FCCU. Petition at 19-20. The pollution control equipment already in use at the Joliet Refinery is CO boilers, which are pollution control devices for steady-state operations. Petition at 19.

ExxonMobil states that during periods of SMB, the CO boilers are bypassed for process safety reasons and that it is not aware of any control equipment options available for the Joliet Refinery to comply with the standards in Section 216.361, as applicable, during periods of SMB

given the physical limitations of the FCCU. Petition at 19. ExxonMobil further states, “As discussed herein, relative to emissions authorized in the current operating permit, there are no increases in emissions expected to occur as a result of issuance of the requested adjusted standard.” Petition at 20.

ExxonMobil did not provide a qualitative and quantitative description of the nature of its emissions, discharges, or releases currently generated by its activities, as required by the Board’s regulations. ExxonMobil merely states, “The most recent CAAPP Permit for the Joliet Refinery, which addresses allowable emissions from the facility, was issued by the Illinois EPA on August 15, 2000 and revised via minor modification on December 31, 2002. As discussed herein, relative to emissions authorized in the current operating permit, there are no increases in emissions expected to occur as a result of issuance of the requested adjusted standard.” Petition at 20-21.

While addressed in greater detail later in this Recommendation, ExxonMobil did not provide in its Petition sufficient information regarding whether increases in emissions are “expected to occur as a result of the issuance of the requested adjusted standard.” Specifically, it did not provide data confirming the number or frequency of events with excess emissions in recent years, the duration of such events, and the quantity of excess emissions from such events. ExxonMobil did not describe in sufficient detail modeling it conducted or how it demonstrates the emission consequences, if any, of eliminating those standards during startup and hot standby and replacing them with no standard or express emissions limitation, instead substituting work practices including those set forth in the federal Subpart UUU. Prior to filing its Petition in the current proceeding, the Agency informed representatives of ExxonMobil that such information should be provided to assess environmental impact.

Section 104.406(e): *A description of the efforts that would be necessary if the petitioner was to comply with the regulation of general applicability. All compliance alternatives, with the corresponding costs for each alternative, must be discussed. The discussion of costs must include the overall capital costs as well as the annualized capital and operating costs.*

ExxonMobil states, in part, “FCCUs (and, as a result, refineries) cannot be operated without periods of SMB. As described herein, Petitioner is unable to comply with the standards in Section 216.361, as applicable, during periods of SMB given the physical limitations of FCCUs and process safety reasons.” Petition at 20.

Other than the above, ExxonMobil did not address this Board requirement.

Section 104.406(f): *A narrative description of the proposed adjusted standard as well as proposed language for a Board order that would impose the standard. Efforts necessary to achieve this proposed standard and the corresponding costs must also be presented.*

ExxonMobil petitions the Board for an adjusted standard that revises Section 216.361 because ExxonMobil states that the CO standard under Section 216.361(a) for petroleum and petrochemical processes is unachievable for the Joliet Refinery during periods of SMB. Petition at 21. In addition, ExxonMobil proposes revisions to Sections 216.103 and 216.104, governing definitions and incorporations by reference, respectively. Petition at 21. ExxonMobil did not address corresponding costs.

ExxonMobil proposes an adjusted standard that incorporates by reference select provisions of Subpart UUU. By incorporating the Subpart UUU provisions into 35 Ill. Adm. Code 216.361, ExxonMobil is given the option of complying with the oxygen standard under 40 CFR §63.1565(a)(5)(ii) during startup or hot standby (a mode of FCCU operation that is implemented in response to a malfunction or breakdown) in lieu of the CO standards under

Section 216.361. Petition at 20-32. Specifically, ExxonMobil petitions for an adjusted standard (added language indicated with underlining) that states the following:

Section 216.103 Definitions

The definitions contained in 35 Ill. Adm. Code 201 and 211 apply to this Part. The definitions for “catalytic cracking unit” and “hot standby” in 40 CFR 63.1579 apply to Section 216.361(d) of this Part. The definition of “startup” in 40 CFR 63.2 applies to Section 216.361(d) of this Part.

Section 216.104 Incorporations by Reference

The following materials are incorporated by reference: non-dispersive infrared method, 40 CFR 60, Appendix A, Method 10 (1982); 40 CFR Part 63, Subpart A (2022); 40 CFR Part 63, Subpart UUU (2022).

Section 216.361 Petroleum and Petrochemical Processes

- a) No person shall cause or allow the emission of a carbon monoxide waste gas stream into the atmosphere from a petroleum or petrochemical process unless such waste gas stream is burned in a direct flame afterburner or carbon monoxide boiler so that the resulting concentration of carbon monoxide in such waste gas stream is less than or equal to 200 ppm corrected to 50 percent excess air, or such waste gas stream is controlled by other equivalent air pollution control equipment approved by the Agency according to the provisions of 35 Ill. Adm. Code 201.
- b) Notwithstanding subsection (a), any existing petroleum or petrochemical process using catalyst regenerators of fluidized catalytic converters equipped for in situ combustion of carbon monoxide, may emit a carbon monoxide waste gas stream into the atmosphere if the carbon monoxide concentration of such waste gas stream is less than or equal to 750 ppm corrected to 50 percent excess air.
- c) Notwithstanding subsection (a), any new petroleum or petrochemical process using catalyst regenerators of fluidized catalytic converters equipped for in situ combustion of carbon monoxide, may emit a carbon monoxide waste gas stream into the atmosphere if the carbon monoxide concentration of such waste gas stream is less than or equal to 350 ppm corrected to 50 percent excess air.
- d) Notwithstanding subsections (a) through (c), during periods of startup and hot standby, any new or existing petroleum catalytic cracking units can elect to comply with subsections (a) through (c) or the alternate limitation for these operating modes in 40 CFR 63 Subpart UUU Tables 9, 10, 14, and 41 and 40

CFR 63.1565(a)(5), 40 CFR 63.1570(c) and (f), 40 CFR 63.1572(c) and 40 CFR 63.1576(a)(2) and (d).

This proposed adjusted standard provides that notwithstanding the generally applicable CO standard under Section 216.361(a), an alternative work practice would apply to ExxonMobil during periods of startup and hot standby. The alternative work practice is from 40 CFR §63.1565(a)(5) and would allow ExxonMobil to comply by electing to maintain an oxygen concentration in the exhaust gas at or above 1 volume percent (dry basis) or 1 volume percent (wet basis with no moisture correction) instead of complying with the CO standard under Section 216.361(a). The additional incorporated adjusted standard provisions from Subpart UUU include requirements for continuous monitoring, testing, recordkeeping, and reporting.

As noted above, the Agency disagrees that the Board can amend its regulations via this adjusted standard proceeding. If granted, the adjusted standard should be reflected in a Board Opinion and Order only, not in a regulation, per 35 Ill. Adm. Code 104.428.

Section 104.406(g): *The quantitative and qualitative description of the impact of the petitioner's activity on the environment if the petitioner were to comply with the regulation of general applicability as compared to the quantitative and qualitative impact on the environment if the petitioner were to comply only with the proposed adjusted standard. To the extent applicable, cross-media impacts must be discussed. Also, the petitioner must compare the qualitative and quantitative nature of emissions, discharges or releases that would be expected from compliance with the regulation of general applicability as opposed to that which would be expected from compliance with the proposed adjusted standard.*

ExxonMobil's Petition does not provide the quantitative and qualitative information required by the Board's regulations. ExxonMobil states that the proposed adjusted standard for CO is based upon the federal NESHAP, Subpart UUU, to which the Joliet Refinery is already

subject to. Petition at 32-33. ExxonMobil further states that the CAAPP permit for the Joliet Refinery allowed the FCCU to continue to operate during periods of SMB in spite of the CO limit of Section 216.361. Petition at 33. ExxonMobil states, “No increases in emissions, therefore, are expected to occur as a result of issuance of the requested adjusted standard. Thus, the adjusted standard will not result in any adverse harm to the environment.” Petition at 33.

Essentially, ExxonMobil maintains that the SMB provisions in its permit established an exception to the CO standards in Section 216.361. Further, it contends that since it was not previously required to comply with Section 216.361, the alternative emission limitation it seeks now would have no emissions consequences. 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, which the Agency explained throughout the R23-18 rulemaking.

The SMB language in ExxonMobil’s permit had the following impact, as clearly and definitively set forth in the now-repealed Board regulations:

The granting of permission to operate during a malfunction or breakdown, or to violate the standards or limitations of Subchapter c of this Chapter during startup, and full compliance with any terms and conditions connected therewith, *shall be a prima facie defense to an enforcement action alleging a violation of Section 201.149, of the emission and air quality standards of this Chapter, and of the prohibition of air pollution during the time of such malfunction, breakdown or startup.*

35 Ill. Adm. Code 201.265 (emphasis added). The Part 201 SMB regulations established only a potential affirmative defense. They did not excuse emissions during SMB events, they did not create exceptions, and they did not render excess emissions “non-violations.” 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” 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.

R23-18, *Illinois EPA’s Post-Hearing Comments* (March 7, 2023), at 21. The Agency went on to indicate:

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.

R23-18, *Illinois EPA’s Post-Hearing Comments* (March 7, 2023), at 21-22 (internal citations omitted).

Here, ExxonMobil continues to rely on the same errant “interpretation” of the Board’s SMB regulations as addressed by the Agency above to argue that its proposed adjusted standard would have no emissions impact. Doing so does not address the consequences of granting the adjusted standard. Regardless, ExxonMobil must provide a “quantitative and qualitative description of the impact of the petitioner’s activity on the environment if the petitioner were to comply with the regulation of general applicability as compared to the quantitative and qualitative impact on the environment if the petitioner were to comply only with the proposed

adjusted standard”, and it must compare that impact to the impact of compliance with 35 Ill. Adm. Code 216.361. This is what the Board’s regulations require for the Petition in this proceeding.

ExxonMobil states, “As part of compliance with federal NESHAP and NSPS [New Source Performance Standards] rules, the Joliet Refinery has a CO continuous emissions monitoring system (“CEMS”) that collects continuous emissions data during all periods of operation, including periods when the CO boilers are bypassed. As such, these ‘worst-case emissions’ for all operating scenarios are already reported and captured in the Illinois emission inventory. If the Board grants this adjusted standard, there should be no impact on reported emissions relative to today.” Petition at 33.

Contrary to ExxonMobil’s statements above, captured in the Agency’s emissions inventory are actual emissions as reported by sources, not CEMS data or worst-case emissions. Further, ExxonMobil did not provide information regarding what the source anticipates are “worst-case” emissions on an hourly basis or on an 8-hour basis during SMB events that would be useful in determining whether the National Ambient Air Quality Standard (“NAAQS”) for CO would be threatened.

Additionally, ExxonMobil states the following on CO emissions in Illinois based upon the most recent 2020 Annual Air Quality Report:

- Illinois has never had any portions of the state designated as nonattainment for CO, and has no violating CO monitors for either the 1-hour (35 ppm) or 8-hour (9 ppm) CO National Ambient Air Quality Standards (“NAAQS”).

This has no bearing on whether the proposed adjusted standard may result in a violation at or near the source. 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 proposed adjusted standard. The nearest CO monitor to the source is approximately 34 miles away. It is unlikely that this monitor would be significantly influenced by emissions at that distance. The purpose of that monitor is not to ensure compliance with CO NAAQS statewide or even for the Chicago Metropolitan Area, rather it is meant to monitor much more local pollutant concentrations. CO emitted by the source would be well dispersed to nearly unmeasurable concentrations at the distance of the nearest monitor to the source, but concentrations near the source's property cannot be determined without the further analysis requested by the Agency.

- The CO NAAQS allows for one exceedance per year. 40 CFR 50.8(a)(1)-(2).

It would appear ExxonMobil makes this statement as a suggestion that air quality implications of the proposal are buffered by one allowable exceedance event. However, no source is afforded such benefit.

- 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 (5% and 16% of the standards, respectively).

Again, the nearest monitor to the source is 34 miles away and would not be significantly influenced by the short-term emissions from the source. The appropriate concern is CO concentrations at publicly accessible areas near the source.

- The petroleum refinery CO emissions (as described earlier, FCCU emissions are monitored and quantified using CO CEMS, including non-steady-state periods of operation) are a small fraction of the Illinois point source inventory, only 4.1%.

This is not relevant to near-source air quality impacts. However, just four refineries emitting 4.1% of the total point source inventory in Illinois is very significant for the pollutant. The point source inventory is compiled from over 2,500 permitted point sources and approximately 2,600 additional point sources. The Agency's information indicates that ExxonMobil alone accounted for nearly 1% of statewide point source CO emissions in 2021.

ExxonMobil provides information related to CO emissions in Illinois based upon the 2020 Annual Air Quality Report, and states, "Including mobile source and other inventory sectors, the petroleum refinery CO emissions are an extremely small fraction of the Illinois inventory, only 0.2% (based on 2016 emissions). See Lake Michigan Air Directors Consortium ('LADCO'), 'Attainment Demonstration Modeling for the 2015 Ozone NAAQS, Technical Support Document,' Table 4-2 (Sep. 21, 2022). Given the above, Petitioner's proposal would have no impact on 'worst case' FCCU emissions reported today." Petition at 33-34.

This again is irrelevant to air quality impacts near the source during SMB events. The percentage of the overall statewide CO emissions that are attributable to ExxonMobil does not quantify or qualify the air quality impacts of the SMB events nor of the proposed requested adjusted standard. It does not convey the worst-case emissions nor the impact of same on a 1-hour or 8-hour basis.

ExxonMobil further states, "Finally, the current emissions are a very small fraction of the state's inventory (approximately two one-thousandths). ExxonMobil used AERMOD to conduct

screening modeling of impacts using continuous emission monitoring system ('CEMS') data from recent startup events to conservatively estimate ambient impacts during these events. The incremental emission impacts during startups were less than 3% and 6% of the 1-hour and 8-hour standards, respectively. These emissions in addition to worst-case background (as detailed above) will not cause an exceedance of either of the CO standards." Petition at 34.

It is appropriate that ExxonMobil provide in its Petition to the Board for consideration in this proceeding data regarding the quantity of emissions associated with its proposal. As the existing CO emissions standard in Section 216.361 is an hourly standard and because the applicable NAAQS are hourly (1 hour and 8 hour), that information would be most useful if provided on an hourly basis. Additionally, it is appropriate that ExxonMobil provide the Board more detail regarding its startup process to clarify when worst-case emissions occur and their duration. To this end, ExxonMobil should provide this specific information in this proceeding.

It is likewise appropriate that ExxonMobil include in its Petition a demonstration that these SMB events do not interfere with the maintenance of the 1-hour and 8-hour CO NAAQS. This demonstration should be made through the use of modeling. This is the most appropriate way to make the requisite showing under this adjusted standard request. Also, this demonstration will be necessary if the Agency is to submit the proposed adjusted standard as a SIP revision. The necessity of such a demonstration is also consistent with communications the Agency has had with USEPA Region V.

ExxonMobil was informed modeling would be necessary, and ExxonMobil stated that it conducted modeling. Petition at 34. However, ExxonMobil did not provide in its Petition sufficient information regarding the modeling or the modeling itself.

As stated above, ExxonMobil's Petition does not address the quantitative and qualitative information required by the Board's regulation. Besides the few general statements above, ExxonMobil does not provide any information about the modeling it conducted. It did not include the data inputs or the details of the results of its modeling.

Section 104.406(h): *A statement that explains how the petitioner seeks to justify, under the applicable level of justification, the proposed adjusted standard.*

ExxonMobil's statement of justification first includes the background on Maximum Achievable Control Technology ("MACT"). As stated above, ExxonMobil indicates that its proposed adjusted standard comes from the NESHAP under Subpart UUU that was promulgated by the United States Environmental Protection Agency ("USEPA") in 2015 (80 Fed. Reg. 75178 (December 1, 2015)). Petition at 34-35. ExxonMobil states, "Specifically, USEPA removed the SSM exemption provisions or references from NESHAP Subpart UUU and inserted alternative emission standards during periods of SSM." Petition at 35.

ExxonMobil further states, "USEPA understood the concerns with meeting the generally applicable MACT standard during periods of startup and hot standby. Therefore, it is appropriate that the alternative emission limitation and standards under NESHAP Subpart UUU would apply to periods of startup and hot standby under Section 216.361." Petition at 36.

ExxonMobil then includes an analysis under USEPA's seven criteria for developing and evaluating alternative emission limitations applicable during startup and shutdown as justification for Petitioner's proposed adjusted standard provisions. *State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA's SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls To Amend Provisions Applying to*

Excess Emissions During Periods of Startup, Shutdown and Malfunction (“SSM SIP Call”), 80 Fed. Reg. 33840 (June 12, 2015). Petition at 37-46.

In its discussion, ExxonMobil cites to a USEPA response to a comment in the SSM SIP Call regarding worst-case modeling. Petition at 43. The statement of the USEPA is misconstrued. USEPA did not state that modeling would never be necessary, but rather that it would not *always* be necessary (emphasis added). The facts at hand are distinguishable. Here, based upon information required to be reported by ExxonMobil to the Agency, the quantity of emissions released by ExxonMobil in any one SMB event is substantial. Further, the USEPA has clearly indicated in its SSM SIP Call its expectation for worst-case analysis for alternative emission limits.

In addition, ExxonMobil states, “It is Petitioner’s understanding that other states either do not have CO standards for FCCUs or they exempt units subject to federal regulations. See, e.g., Indiana regulations at 326 IAC 9-1- 1(b)(1), (b)(5), and 9-1-2; see, e.g., California - Bay Area Air Quality Management District regulations at 9-10-305 (explicitly exempting periods of startup, shutdown, and curtailed operation (<30%). Therefore, the 200 ppm [parts per million] CO limit in Section 216.361 is unique to Illinois.” Petition at 44.

This may be, but the point remains that this Recommendation must set forth the justification of the Agency’s position in relation to the Board’s consideration of a requested adjusted standard concerning a rule that has been in effect since April 13, 1972. That justification necessitates an air quality analysis. Furthermore, other state regulations have no bearing on whether SMB events at ExxonMobil could potentially cause NAAQS violations in Illinois.

As stated above, Section 28.1(c) of the Act provides that if a regulation of general applicability does not specify a level of justification required of a petitioner to qualify for an adjusted standard, the Board may grant individual adjusted standards whenever the Board determines, upon adequate proof by petitioner, that:

- (1) factors relating to that petitioner are substantially and significantly different from the factors relied upon by the Board in adopting the general regulation applicable to that petitioner;
- (2) the existence of those factors justifies an adjusted standard;
- (3) the requested standard will not result in environmental or health effects substantially and significantly more adverse than the effects considered by the Board in adopting the rule of general applicability; and
- (4) the adjusted standard is consistent with any applicable federal law.

415 ILCS 5/28.1(c).

As already explained, the Petitioner did not provide with its Petition any information regarding the specific emissions impacts of the SMB events including worst-case quantification, much less modeling or information related to modeling including the data inputs.

Section 104.406(i): *A statement with supporting reasons that the Board may grant the proposed adjusted standard consistent with federal law. The petitioner must also inform the Board of all procedural requirements applicable to the Board's decision on the petition that are imposed by federal law and not required by this Subpart. Relevant regulatory and statutory authorities must be cited.*

ExxonMobil states that the Board may grant the proposed adjusted standard consistent with federal law. Petition at 47. ExxonMobil further states that no additional procedural requirements for Board action are required under the CAA. Petition at 47.

USEPA has provided criteria for developing alternative emission limitations that apply during startup and shutdown, and such alternative emission limitations must meet CAA requirements.

Under Section 110(l) of the CAA, the State must show that a SIP revision will not interfere with any applicable requirement concerning attainment and reasonable further progress or any other applicable requirement of Chapter 85 of Title 42. 42 USC § 7410(l). USEPA's approval is based partially upon consideration of whether an adjusted standard meets the requirements of section 110(l) of the CAA.

The information currently in the Petition is not sufficient to discern air quality impacts or represent to USEPA that the proposed adjusted standard satisfies CAA Section 110(l) requirements.

Section 104.406(j): *A statement requesting or waiving a hearing on the petition (under Section 104.422(a)(4) a hearing will be held on all petitions for adjusted standards filed under 35 Ill. Adm. Code 212.126).*

ExxonMobil indicated that it waives a hearing on the Petition. Petition at 47.

IV. DUPLICATIVE RELIEF

Section 104.414 of the Board's rules provides, in part, that the Board may at any time dismiss a petition if the Board determines that the petition is frivolous, duplicative, or deficient with respect to the requirements of Sections 104.406 [Petition Requirements], 104.408 [Petition Notice Requirements], and 104.410 [Proof of Petition Notice Requirements]. 35 Ill. Adm. Code 104.414(a).

The Petition is deficient for the reasons explained above. Additionally, this Petition and the relief it requests is duplicative of API's rule proposal in the R23-18(A) rulemaking with

respect to ExxonMobil. Relief in both contexts is not necessary, nor is it appropriate or advisable. In post-hearing comments recently filed by API in the rulemaking, API requests that the Board “move forward expeditiously with adopting API’s Rule Proposal.” *See*, R23-18(A), *API’s and Citgo Petroleum Corporation’s Post-Hearing Comment* (May 13, 2024). If the Board indeed intends to proceed toward adoption of API’s rule proposal, the rule from which API seeks relief in this proceeding will no longer exist as currently written; it will instead contain rule language that provides ExxonMobil the exact relief sought here. Under that scenario, an adjusted standard will not only be unnecessary and duplicative but also inappropriate since at least two of the necessary criteria set forth in Section 28.1 of the Act will not be satisfied. Namely, ExxonMobil will not be able to demonstrate that the factors relating to it are substantially and significantly different from the factors relied upon by the Board in adopting the (new) general regulations applicable to ExxonMobil or that the existence of those factors justifies an adjusted standard.

To the extent that the Board intends to proceed with adoption of API’s rule proposal in R23-18(A) with respect to ExxonMobil, the Agency recommends denial of the Petition as duplicative and because the criteria for an adjusted standard are not satisfied as described above.

V. RECOMMENDATION

WHEREFORE, for the above and foregoing reasons, the Illinois EPA recommends that the Board DENY Petitioner’s request for an adjusted standard from 35 Ill. Adm. Code 216.361, 216.103, and 216.104, as ExxonMobil’s Petition fails to include certain required information and, to the extent that the Board intends to proceed with adoption of API’s rule proposal in R23-18(A) with respect to ExxonMobil, the adjusted standard is duplicative and the criteria for an adjusted standard are not satisfied as described above.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: /s/ Gina Roccaforte
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DATED: June 10, 2024

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CERTIFICATE OF SERVICE

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

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The number of pages in the e-mail transmission is 26.

The e-mail transmission took place before 5:00 p.m. on June 10, 2024.

ILLINOIS ENVIRONMENTAL
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