

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF: )  
 )  
PETITION OF CITGO PETROLEUM ) AS 2026 - 001  
CORPORATION FOR AN ADJUSTED ) (Adjusted Standard – Air)  
STANDARD FROM 35 ILL. ADM. CODE )  
SECTION 216.121 )

**NOTICE OF FILING**

TO: Mr. Don A. Brown  
Clerk of the Board  
Illinois Pollution Control Board  
60 E. Van Buren Street, Suite 630  
Chicago, Illinois 60605  
[don.brown@illinois.gov](mailto:don.brown@illinois.gov)

Brad Halloran  
Hearing Officer  
Illinois Pollution Control Board  
60 E. Van Buren Street, Suite 630  
Chicago, Illinois 60605  
[brad.halloran@illinois.gov](mailto:brad.halloran@illinois.gov)

**VIA ELECTRONIC MAIL**

**(SEE PERSONS ON ATTACHED SERVICE LIST)**

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois  
Pollution Control Board, **PETITIONER'S RESPONSES TO BOARD'S QUESTIONS**, copies  
of which are hereby served upon you.

Respectfully submitted,

CITGO PETROLEUM CORPORATION

Dated: December 31, 2025

By: /s/ Melissa S. Brown.  
One of Its Attorneys

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**CERTIFICATE OF SERVICE**

I, the undersigned, on oath state the following: That I have served the attached **PETITIONER'S RESPONSES TO BOARD'S QUESTIONS**, via electronic mail upon:

Don Brown  
Clerk of the Board  
Illinois Pollution Board  
60 E Van Buren Street, Suite 630  
Chicago, Illinois 60605  
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That my email address is [Melissa.Brown@heplerbroom.com](mailto:Melissa.Brown@heplerbroom.com).

That the number of pages in the email transmission is 14.

That I have sent the email transmission on December 31, 2025.

Date: December 31, 2025

/s/ *Melissa S. Brown*  
Melissa Brown

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

**IN THE MATTER OF:** )  
 )  
**PETITION OF CITGO PETROLEUM** ) **AS 26 - 1**  
**CORPORATION FOR AN ADJUSTED** ) **(Adjusted Standard – Air)**  
**STANDARD FROM 35 ILL. ADM. CODE** )  
**SECTION 216.121** )

**PETITIONER'S RESPONSES TO BOARD'S QUESTIONS**

Petitioner, CITGO Petroleum Corporation (“CITGO”), by and through its undersigned counsel and pursuant to the December 16 and 17, 2025 Hearing Officer Orders, hereby files its Responses to the Illinois Pollution Control Board’s (“Board”) Questions.

On December 16, 2025, the Hearing Officer entered an Order directing Petitioner to submit responses to the Board’s questions attached to the Hearing Office Order. On December 17, 2025, the Hearing Officer entered a corrected Hearing Officer Order. Both Hearing Officer Orders directed Petitioner to file responses to the Board’s questions by January 7, 2026. Petitioner’s responses to the Board’s questions are provided below and are submitted on or before January 7, 2026.

**I. BACKGROUND AND CLARIFICATION**

As noted by the Board, the Board opened a sub-docket rulemaking, R 23-18(A), to consider alternative emissions limitations (“AEL”) proposals relating to the removal of the startup, malfunction, and breakdown (“SMB”) provisions. The American Petroleum Institute (“API”) filed a proposal in R 23-18(A) to amend the carbon monoxide (“CO”) standards in 35 Ill. Adm. Code 216.361 applicable to petroleum and petrochemical processes. API’s Proposal for Regulations of General Applicability, PCB R 23-18(A) (Aug. 7, 2023). The standards in Section 216.361 are applicable to fluid catalytic cracking units (“FCCUs”) at refineries. As such, FCCUs were the emission units at issue in API’s AEL request in R 23-18(A). *Id.* Petitioner agrees with

the Board's statement that "API's proposal included alternative emission limitations (AELs) for CITGO's Lemont Refinery as one of the refineries impacted by the amendments in R23-18." *See id.* at 43.

However, Petitioner respectfully disagrees with the Board's statement that "the Board did not adopt the AELs for the CITGO refinery." In R 23-18(A), the Board entered an Order on August 22, 2024 adopting API's proposed AEL as to the CO standard in Section 216.361 which applies to FCCUs. Final Opinion and Order, PCB R 23-18(A) (Aug. 22, 2024). The adopted AEL in 35 Ill. Adm. Code 216.361 applies to three refineries in Illinois. Section 216.361(d) of the Board's regulations, as adopted by the Board in R 23-18(A), states as follows:

- d) For the petroleum refinery facilities located in Channahon, Lemont, and Robinson Illinois, regardless of subsections (a) through (c), during startup and hot standby, petroleum catalytic cracking units must comply either with subsections (a) through (c) or the non-numerical standards for these operating modes in 40 CFR 63 Subpart UUU Tables 9, 10, 14, and 41, 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), incorporated by reference in Section 216.104.

35 Ill. Adm. Code 216.361(d) (emphasis added).

As referenced in Section 216.361(d), the adopted AEL applies to the petroleum refinery facilities in Channahon, Lemont, and Robinson, Illinois. *Id.* The Lemont Refinery referenced in Section 216.361(d) is CITGO's Lemont Refinery. *See* API's Proposal for Regulations of General Applicability, PCB R 23-18(A) at 43 (Aug. 7, 2023); *see* Final Opinion and Order, PCB R 23-18(A) at 5 ("Third, API reports that it would affect the Lemont Refinery of CITGO Petroleum Corporation located at 135<sup>th</sup> Street and New Avenue in Lemont, Will County."). In the Board's Second Notice Opinion and Order in R 23-18(A), the Board stated:

ExxonMobil's modeling demonstrated that SMB events from the FCCU unit will not interfere with the relevant NAAQS or cause significantly high ambient CO concentrations. IEPA Test. at 16. CITGO also fully responded to IEPA's request

for information and showed that CO emissions during SMB events from its FCCU units has a minimal potential CO NAAQS exceedance. Id. at 15. Likewise, Marathon's response to IEPA's request for information confirmed that "the FCCU units' SMB events will not threaten the CO NAAQS at or near the source." Id.

Upon its own review, the Board agrees with IEPA and finds that the proposal meets USEPA's seven criteria for AELs, is technically feasible and economically reasonable, and does not harm human health or the environment. The Board includes API's proposal in its proposal for second notice.

Second Notice Opinion and Order, PCB R 23-18(A) at 96. As such, Petitioner disagrees with the Board's statement that the Board did not adopt API's proposed AEL applicable to CITGO's Lemont Refinery in R 23-18(A).

In the Hearing Officer Order, the Board then states that "CITGO filed a petition for adjusted standard from 35 Ill. Adm. Code 216.121 seeking AELs like the relief requested in the API's Proposal." The AEL requested in this proceeding is similar to the AEL requested in API's Proposal only in that both AELs incorporate by reference provisions from an existing National Emissions Standard for Hazardous Air Pollutants ("NESHAP"). *See* API's Proposal for Regulations of General Applicability, PCB R 23-18(A) (Aug. 7, 2023). However, the emissions units, emissions standards, proposed AEL, and justifications at issue in this proceeding differ from API's Proposal. The AEL requested in this proceeding concerns the CO standard in Section 216.121 applicable to fuel combustion emission sources (i.e., boilers and process heaters) at the Lemont Refinery whereas API's AEL in R 23-18(A) concerned the CO standard in Section 216.361 applicable to FCCUs.

The Board is correct that, in R 23-18(A), the Illinois Environmental Protection Agency ("Illinois EPA") requested additional information regarding API's proposal. *See* Illinois EPA's Comments, PCB R 23-18(A), P.C. #5 (Oct. 23, 2023). Illinois EPA's comment as to API's proposal included comments specific to the refineries' FCCUs operation and emissions

(including questions specific to CITGO's FCCU). *See id.* at 15-16. API and CITGO filed responses to those comments on March 15, 2024. API's and CITGO's Supplemental Response to Illinois EPA's Comment, PCB R 23-18(A), P.C. #15 (Mar. 15, 2024). Per Illinois EPA, CITGO fully addressed Illinois EPA's comments. *See* Pre-Filed Testimony of R. Davis, PCB R 23-18(A) at 16-17 (Apr. 2, 2024) ("CITGO comprehensively and effectively responded to all of the Agency's 10/23/23 Comments. The discussion and analysis regarding the FCCU unit's operation with respect to full and partial burn combustion answer the questions from the Agency's 10/23/23 Comments and provide further insight into the worst-case startup and hot standby scenario that the FCCU undergoes."). Additionally, as noted above, the Board determined that CITGO fully responded to Illinois EPA's comments and the Board granted API's proposed AEL, which applies to CITGO's FCCU.

However, the comments and responses relating to CITGO's FCCU in R 23-18(A) are not relevant to this proceeding. In this proceeding, CITGO requests an AEL relating to the CO standard in Section 216.121 applicable to certain fuel combustion emission sources (i.e., boilers and process heaters) at the Lemont Refinery.

In R 23-18(A), the Illinois Environmental Regulatory Group ("IERG") filed an AEL proposal concerning the CO standard in Section 216.121 applicable to fuel combustion emission sources. *See* IERG's Proposal for Regulations of General Applicability, PCB R 23-18(A) (Aug. 7, 2023); *see* CITGO's Petition for Adjusted Standard, AS 26-1 at P-7 (Sept. 10, 2025). Like Petitioner's proposed AEL, IERG proposed to incorporate by reference provisions of NESHAP Subpart DDDDD, 40 C.F.R. 63 Subpart DDDDD. *See id.* The Board did not adopt IERG's proposed AEL in PCB R 23-18(A) as it was not narrowly tailored and IERG did not provide the

technical support requested by Illinois EPA. Second Notice Opinion and Order, PCB R 23-18(A) at 136 (July 11, 2024).

However, in this proceeding, Petitioner's proposed AEL is narrowly tailored because it applies to certain boilers and process heaters at the Lemont Refinery. *See* CITGO's Petition for Adjusted Standard, AS 26-1 at P-14, P-15 and P-59, P-60, P-68 (Sept. 10, 2025). As demonstrated by Illinois EPA's Recommendation in this proceeding, Petitioner has "provided robust and adequate technical support within the TSD included with the proposed adjusted standard Petition." Recommendation of Illinois EPA, AS 26-1 at 10 (Oct. 27, 2025). In its Recommendation, in which Illinois EPA stated that it does not object to the Board granting Petitioner's request, Illinois EPA further stated:

The Agency agrees that CITGO provided with its Petition sufficient information regarding the specific emissions impacts of the SMB events including worst-case quantification, modeling, and information related to modeling including the data inputs and considers this sufficient evidence that operation under the proposed adjusted standard will not result in air quality impacts that are harmful or violate federal air quality standards. USEPA staff also reviewed the technical support provided by CITGO and agreed with this conclusion.

*Id.* at 10-11.

## **II. RESPONSES TO BOARD's QUESTIONS**

Petitioner's responses to the Board's questions are below.

**1. Please provide a description of CITGO's FCCU (fluidized catalytic convertor unit) operation with respect to "full burn unit" and "partial burn unit" as described on page 15 of the TSD from API's Proposal. If CITGO's FCCU typically starts in full burn mode:**

**a. Please provide a description of any operating scenario in which the FCCU starts in full burn mode that is different from routine operation and involves CO concentrations between 10 and 100 ppm.**

**b. Does CITGO consider a "full burn unit" to correspond to the language in 35 III. Adm. Code 216.361(b) that "any existing petroleum or petrochemical process using catalyst regenerators for fluidized catalytic convertors**

**equipped for in situ combustion of carbon monoxide”? If so, please explain why CITGO:**

- i. has not elected to comply with 35 III. Adm. Code 216.361(b) instead of 35 III. Adm. Code 216.361(a) during startup?**
- ii. has not included 35 III. Adm. Code 216.361(b) in the CAAP Permit provisions applicable to the FCCU?**

Question 1 and its subparts relate to the operation of CITGO’s FCCU, which was part of API’s AEL proposal adopted by the Board in R 23-18(A). CITGO responded to these questions as posed by Illinois EPA in CITGO’s March 15, 2024 Supplemental Response to Illinois EPA’s Comment in R 23-18(A). *See* API’s and CITGO’s Supplemental Response to Illinois EPA’s Comment, PCB R 23-18(A), P.C. #15, Exhibit 2 at 1, 4, and 8-10 (Mar. 15, 2024). These questions do not relate to the fuel combustion emission sources that are the subject of the AEL proposal in this proceeding.

**2. Please clarify whether CITGO considers “1% oxygen waste stream concentration requirement under 40 CFR § 63.1565(a)(5)(ii) to be synonymous with the definition of ‘full burn unit’” as described on page 15 of the TSD.**

This question relates to the operation of CITGO’s FCCU, which was part of API’s AEL proposal adopted by the Board in PCB R 23-18(A). CITGO responded to this question as posed by Illinois EPA in CITGO’s March 15, 2024 Supplemental Response to Illinois EPA’s Comment in R 23-18(A). API’s and CITGO’s Supplemental Response to Illinois EPA’s Comment, PCB R 23-18(A), P.C. #15, Exhibit 2 at pp. 1, 4, and 8-10 (Mar. 15, 2024). This question does not relate to the fuel combustion emission sources that are the subject of the AEL proposal in this proceeding.

**3. For each boiler, please provide an analysis of whether the worst-case scenario (for statistical and maximum actual worst case) occurred during startup, hot standby events, FCCU Regenerator breakdown, boiler trips, or refractory repair events.**

The worst-case scenario included in the Technical Support Document (“TSD”) for each fuel combustion emission source at issue was developed based on the set of startups and shutdowns, regardless of whether they occurred because of a startup after a boiler trip, boiler maintenance, or refractory repair. This was intentional to ensure the highest standard deviation to develop a worst-case scenario.

In response to the Board’s question, the data set of fuel combustion emission source startup and shutdown events that formed the basis for determining the worst-case scenarios was reviewed against FCCU startup and hot standby events occurring during that data set’s period. To be consistent with the scope of Petitioner’s requested AEL (fuel combustion emission sources equipped with Continuous Emission Monitoring Systems), the response also expands on the Board’s question by including process heaters (as well as the requested boilers) evaluated in the TSD for this matter. Table 1 below summarizes the drivers for each of these events.

Unit Type	Event Category	Unit							
		109B-62	111B-1A	111B-1B	111B-2	430B-1	430B-24	431B-25	FCCU
Boiler	Excess During Boiler Trip	NA	NA	NA	NA	0	0	0	NA
	Startup after Boiler Trip	NA	NA	NA	NA	3	8	9	NA
	Startup after Boiler Maintenance	NA	NA	NA	NA	8	17	18	NA
	Startup after Required Boiler Inspection	NA	NA	NA	NA	4	3	2	NA
	Startup Including Refractory Dry Out	NA	NA	NA	NA	0	1	3	NA
Process Heater	Startup after Maintenance	8	3	3	6	NA	NA	NA	NA
	Excess during Heater Shutdown	2	0	0	0	NA	NA	NA	NA
	Excess during Heater Trip	0	0	0	0	NA	NA	NA	NA

<p style="text-align: center;"><i>Table 1</i></p> <p style="text-align: center;"><i>Event Types from 1/1/2019 through 12/31/2024 (Boilers and Process Heater 109B-62), 1/1/2012 through 12/31/2024 (Unit 111 Process Heaters), and 1/1/2015 through 12/31/2024 (FCCU)</i></p>								
Unit Type	Event Category	Unit						
		109B-62	111B-1A	111B-1B	111B-2	430B-1	430B-24	431B-25
FCCU	Startup after Heater Trip	5	2	2	1	NA	NA	NA
	Startup After Refractory Repair	0	0	0	0	NA	NA	NA
FCCU	FCCU Startup	NA	NA	NA	NA	NA	NA	3
	FCCU Hot Standby	NA	NA	NA	NA	NA	NA	2
	Startup after Regenerator Breakdown	NA	NA	NA	NA	NA	NA	0
Process Heater and Boiler events during FCCU Events		0	0	0	0	0	0	

A detailed chronological listing of fuel combustion emission source events and FCCU events is shown in Attachment A attached hereto.<sup>1</sup> The data in Attachment A shows that, historically, FCCU startup and hot standby events have not occurred simultaneously with the startup and shutdown events of the fuel combustion emission sources that are the subject of the proposed AEL.

WHEREFORE, Petitioner, CITGO Petroleum Corporation, requests that the Board accept its Responses to the Board's Questions and enter an Order granting Petitioner's Adjusted Standard.

Respectfully submitted,

CITGO PETROLEUM  
CORPORATION

Dated: December 31, 2025

By: /s/ Melissa S. Brown  
One of Its Attorneys

<sup>1</sup> The fuel combustion emission source events listed in Attachment A are included in Appendix D.1. of the TSD. See CITGO's Petition for Adjusted Standard, AS 26-1 at P-76 – P-87 (Sept. 10, 2025). The FCCU events listed in Attachment A, which are FCCU events that fall within the range of the fuel combustion emission source data set, were included in CITGO's March 15, 2024 Supplemental Response to Illinois EPA's Comment in R 23-18(A). See API's and CITGO's Supplemental Response to Illinois EPA's Comment, PCB R 23-18(A), P.C. #15, at Appendix A (Mar. 15, 2024).

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**ATTACHMENT A****Log of Boiler Events, Process Heater Events, FCCU Events, and Event Categories**

Boiler ID	Date	Nominal Event Duration (hrs.)	Event Categories												No. hrs. Excess CO on 1-hr. avg. basis?	No. hrs. Excess CO on 8-hr. avg. basis		
			Boiler Events					Process Heater Events					FCCU Events					
			Boiler Startup	Excess During Boiler Trip	Startup After Boiler Trip	Startup After Required Boiler Refractory Inspection	Startup After Refractory Repair	Process Heater Startup	Process Heater Shutdown	Excess During Heater Trip	Excess After Heater Trip	Startup After Refractory Repair	FCCU Startup	FCCU Hot Standby	FCCU Regenerator Breakdown			
111B-1A	6/5/2012 21:47	22.9						X					No	No	No	6	3	
111B-2	6/6/2012 13:06	7.52						X					No	No	No	0	0	
111B-2	6/8/2012 8:11	10.32						X					No	No	No	0	0	
111B-1B	6/10/2012 2:46	46.08						X					No	No	No	12	11	
111B-1A	6/10/2012 2:51	29.38						X					No	No	No	8	10	
111B-2	6/12/2012 1:51	25.3						X					No	No	No	9	9	
111B-2	10/13/2017 6:51	16.28						X					No	No	No	34	10	
111B-1A	10/13/2017 10:00	32.98						X					No	No	No	8	10	
111B-1B	10/13/2017 10:52	28.17						X					No	No	No	5	10	
431B-25	1/9/2019 10:59	11.75	X										No	No	No	2	3	
431B-25	2/7/2019 18:42	17.83	X		X								No	No	No	2	0	
431B-25	2/15/2019 13:41	15.70	X					X					No	No	No	8	11	
431B-25	3/23/2019 13:26	2.07	X					X					No	No	No	2	0	
430B-1	4/4/2019 17:26	8.62	X		X								No	No	No	0	0	
430B-1	6/12/2019 18:05	20.72	X			X							No	No	No	2	0	
109B-62	6/24/2019 18:47	15:50							X				No	No	No	2	0	
430B-24	7/3/2019 2:32	46.47	X					X					No	No	No	22	25	
109B-62	7/4/2019 11:29	38.05							X				No	No	No	18	23	
431B-25	7/24/2019 7:22	44.57	X					X					No	No	No	23	26	
430B-24	8/9/2019 9:35	3.75	X		X								No	No	No	0	0	
430B-24	8/14/2019 10:09	8.85	X		X								No	No	No	2	0	
431B-25	10/2/2019 14:03	2.92	X										No	No	No	0	0	
430B-1	10/25/2019 9:03	11.70	X										No	No	No	5	0	
431B-25	3/9/2020 12:05	1.88	X		X								No	No	No	0	0	
431B-25	3/24/2020 01:13	0.42	X		X								No	No	No	0	0	
FCCU	3/24/2020 04:25	14.80	No	No	No	No	No	No	No	No	No	No	X	X	No	0	0	
431B-25	5/22/2020 5:19	0.55	X		X								No	No	No	0	0	
431B-25	5/25/2020 15:35	0.25	X		X								No	No	No	0	0	
431B-25	5/25/2020 15:57	1.47	X		X								No	No	No	6	0	
109B-62	6/18/2020 15:53	0.92							X			X		No	No	No	1	0
FCCU	7/13/2020 09:37	106.37	No	No	No	No	No	No	No	No	No	No	X	X		0	0	
431B-25	7/28/2020 15:19	11.28	X		X								No	No	No	4	7	
430B-24	8/8/2020 5:26	10.80	X		X								No	No	No	3	0	
430B-1	11/10/2020 18:18	1.92	X		X								No	No	No	0	0	
109B-62	12/24/2020 3:47	9.92							X			X		No	No	No	4	8

Boiler ID	Date	Nominal Event Duration (hrs.)	Event Categories												No. hrs. Excess CO on 1-hr. avg. basis?	No. hrs. Excess CO on 8-hr. avg. basis	
			Boiler Events					Process Heater Events					FCCU Events				
			Boiler Startup	Excess During Boiler Trip	Startup After Boiler Trip	Startup After Required Boiler Inspection	Startup After Refractory Repair	Process Heater Startup	Process Heater Shutdown	Excess During Heater Trip	Excess After Heater Trip	Startup After Refractory Repair	FCCU Startup	FCCU Hot Standby	FCCU Regenerator Breakdown		
430B-24	3/3/2021 19:19	4.55	X										No	No	No	1	0
430B-24	6/12/2021 20:53	0.97	X		X								No	No	No	0	0
430B-24	6/13/2021 15:33	3.50	X		X								No	No	No	2	1
430B-1	6/21/2021 14:58	23.05	X			X							No	No	No	0	0
431B-25	6/26/2021 3:55	9.77	X		X								No	No	No	1	6
430B-1	8/19/2021 15:25	1.23	X		X								No	No	No	0	0
109B-62	5/18/2022 6:48	32.17								X			No	No	No	2	0
109B-62	6/3/2022 5:10	39.48							X				No	No	No	1	4
430B-24	6/10/2022 15:54	2.15	X		X								No	No	No	0	0
431B-25	6/18/2022 12:59	4.52	X			X							No	No	No	1	0
430B-24	8/3/2022 21:05	2.85	X			X							No	No	No	2	7
111B-1B	8/22/2022 15:01	6.77						X			X		No	No	No	0	0
111B-1A	8/23/2022 0:07	12.55						X			X		No	No	No	0	0
111B-2	8/21/2022 10:14	16.28						X					No	No	No	8	8
111B-2	8/24/2022 0:00	6.77						X			X		No	No	No	0	0
111B-1B	8/27/2022 1:57	12.72						X			X		No	No	No	0	0
111B-1A	8/27/2022 2:01	16.15						X			X		No	No	No	3	0
111B-2	8/27/2022 13:46	62.95						X					No	No	No	42	45
430B-24	12/6/2022 19:06	1.32	X		X								No	No	No	2	0
430B-24	12/19/2022 8:46	2.00	X		X								No	No	No	1	0
431B-25	12/19/2022 9:42	7.22	X		X								No	No	No	0	0
430B-24	1/3/2023 21:38	10.75	X										No	No	No	3	8
FCCU	2/28/2023 20:00	30.77	No	No	No	No	No	No	No	No	No	No	X	X		0	0
430B-1	4/4/2023 12:03	8.18	X		X								No	No	No	0	0
431B-25	5/26/2023 10:54	2.52	X										No	No	No	0	0
430B-24	6/5/2023 8:00	0.42	X										No	No	No	1	0
430B-24	6/9/2023 15:27	1.35	X										No	No	No	0	0
430B-1	6/26/2023 15:36	4.25	X			X							No	No	No	4	0
430B-1	6/28/2023 6:41	11.22	X			X							No	No	No	5	0
430B-24	8/2/2023 17:47	3.75	X		X								No	No	No	2	7
109B-62	9/25/2023 8:47	14.43							X				No	No	No	2	0
109B-62	10/12/2023 4:00	77.70							X				No	No	No	7	13
109B-62	10/15/2023 15:00	5.67							X				No	No	No	0	0
109B-62	10/16/2023 16:20	6.90							X				No	No	No	0	0
109B-62	10/17/2023 7:54	175.77							X				No	No	No	1	0
430B-24	10/27/2023 14:05	10.07	X										No	No	No	1	0
109B-62	10/31/2023 8:59	394.43							X				No	No	No	0	0
431B-25	1/15/2024 12:22	3.75	X		X								No	No	No	1	0

Boiler ID	Date	Nominal Event Duration (hrs.)	Event Categories												No. hrs. Excess CO on 1-hr. avg. basis?	No. hrs. Excess CO on 8-hr. avg. basis		
			Boiler Events					Process Heater Events					FCCU Events					
			Boiler Startup	Excess During Boiler Trip	Startup After Boiler Trip	Startup After Required Boiler Inspection	Startup After Refractory Repair	Process Heater Startup	Process Heater Shutdown	Excess During Heater Trip	Excess After Heater Trip	Startup After Refractory Repair	FCCU Startup	FCCU Hot Standby	FCCU Regenerator Breakdown			
109B-62	2/1/2024 14:22	3.27						X			X		No	No	No	1	0	
109B-62	2/8/2024 11:02	6.57						X			X		No	No	No	0	0	
109B-62	2/9/2024 14:43	0.07						X			X		No	No	No	0	0	
430B-24	6/12/2024 19:27	18.22	X			X							No	No	No	13	17	
431B-25	7/3/2024 14:45	2.93	X			X							No	No	No	0	0	
Count 430B-1			9	0	3	4	0											
Count 430B-24			17	0	8	3	1											
Count 431B-25			18	0	9	2	3											
Count 10B-62								12	2	0	5	0						
Count 111B-1A								5	0	0	2	0						
Count 111B-1B								5	0	0	2	0						
Count 111B-2								7	0	0	1	0						
Count All			44	0	20	9	4	29	2	0	10	0	3	2	0			
Count if during FCCU Event			0	0	0	0	0	0	0	0	0	0						