

**BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

IN THE MATTER OF:	)	
	)	
Clean Air Act Title V Operating Permit	)	PETITION FOR OBJECTION
No. 0180-00237-V0	)	
	)	
Issued to CF Industries Blue Point LLC	)	Louisiana Air Quality Permit
	)	No. 0180-00237-V0
	)	
Issued by the Louisiana Department	)	
of Environmental Quality	)	
	)	

**PETITION TO OBJECT TO INITIAL TITLE V OPERATING
PERMIT NO. 0180-00237-V0 FOR CF INDUSTRIES BLUE POINT, LLC**

Pursuant to Section 505(b)(2) of the Clean Air Act, 42 U.S.C. 7661d(b)(2), and 40 C.F.R. 70.8(d), Rural Roots Louisiana, Louisiana Bucket Brigade, and the Environmental Integrity Project (“Petitioners”) petition the Administrator of the U.S. Environmental Protection Agency (“EPA”) to object to the initial Title V operating permit No. 0180-00237-V0 (“Initial Permit”)¹ issued by the Louisiana Department of Environmental Quality (“LDEQ”) on July 9, 2026, to CF Industries Blue Point LLC (“CFI”) to operate a new ammonia production facility in Modeste, Ascension Parish, Louisiana (“CFI Plant”).

The Initial Permit incorporates the requirements of Prevention of Significant Deterioration (“PSD”) Permit No. PSD-LA-859 (“PSD Permit”),² which LDEQ issued concurrently with the Initial Permit. LDEQ proposed drafts of both permits for public comment on October 17, 2025. Petitioners jointly submitted timely comments raising all issues in this petition on December 5, 2025.³ LDEQ submitted the final permits to EPA on May 20, 2026, and issued the final permits on July 9, 2026. As discussed further below, EPA must object to the Initial Permit because it fails to assure compliance with all applicable requirements of the Clean Air Act, including the requirements of Part 70. Specifically, the Initial Permit:

- (1) Contains short-term and annual emission limits—including limits purported to keep CFI below major PSD thresholds—that are plainly unenforceable as either a legal or practical matter for multiple units at the CFI Plant.

¹ A copy of the Initial Permit is included as Attachment 1 to this Petition.

² A copy of the PSD Permit is included as Attachment 2.

³ A copy of Petitioners’ comments is included as Attachment 3. The Report and additional comments of Petra Pless, D.Env., which Petitioners submitted with their comments, is included as Attachment 4. Failure to assert as claims here any comment made to LDEQ on the proposed permit does not constitute agreement with LDEQ’s responses.

- (2) Fails to include adequate monitoring, testing, recordkeeping, and reporting requirements to ensure continuous compliance with numerous short-term and long-term emission limits from multiple emission sources, including:
- The CO2 Vent (RLP 0004);
 - Fugitive ammonia emissions (FUG 1);
 - The CRG 2 Heaters (EQT 5, 28); and
 - The Auxiliary Boiler (EQT 11).
- (3) Impermissibly authorizes emissions for a “commissioning period” that are higher than the annual limits authorized by the underlying PSD Permit PSD-LA-859.

As required, Petitioners are filing this Petition with the Administrator via email at titleVpetitions@epa.gov and providing copies to LDEQ and CFI.

PETITIONERS

Rural Roots Louisiana is a non-profit organization founded in 2023, in Donaldsonville, Ascension Parish, with a mission to educate children in its community on issues relating to environmental and social justice, and to promote community stewardship and care of the earth. Rural Roots Louisiana’s officers and members live in Ascension Parish, and several reside and own property in Modeste near the proposed site and will be directly and adversely affected by CFI’s proposed project.

Louisiana Bucket Brigade uses grassroots action to hold the petrochemical industry and government accountable for the true cost of pollution, including industrial pollution like that which is proposed by CFI’s project. The Louisiana Bucket Brigade works to create an informed, healthy society where all people can thrive.

The **Environmental Integrity Project** is a non-profit organization whose mission is to protect public health and our natural resources by holding polluters and governmental agencies accountable under the law, advocating for tough but fair environmental standards, and empowering communities to fight for clean air and clean water.

FACILITY DESCRIPTION AND PERMITTING HISTORY

This Petition asks EPA to object to the initial Title V Operating Permit for CFI’s proposed ammonia production facility in Modeste, LA (AI No. 149554, Permit No. 0180-00237-V0).

The area around Modeste is one of the most heavily industrialized regions in the United States, and the town is surrounded by heavy industrial facilities to its southeast as well as just across the Mississippi River. It lies in the heart of a region long known as the River Parishes, and more recently as “Cancer Alley” as a result of the proliferation of heavy industrial facilities lining the river between Baton Rouge and New Orleans, placing those who live there among the

highest risk categories in the country for cancer and other pollution-related illnesses.⁴ Though Ascension Parish is currently in attainment with all relevant National Ambient Air Quality Standards (“NAAQS”), it was in nonattainment with the ozone NAAQS from 1992-2017,⁵ and ozone data from several monitors in close proximity to the proposed CFI Plant site indicate that the Parish is on the edge of nonattainment with the 8-hour ozone NAAQS.⁶ Multiple parcels of land neighboring the CFI site are also planned for industrial development in coordination with the governments of the State of Louisiana and Ascension Parish, in a massive industrial project that the government of Louisiana refers to as the “RiverPlex MegaPark.” To date, the MegaPark project is slated to include two proposed ammonia plants, a proposed steel plant, a 3.1-gigawatt natural gas-fired power plant, and a road network intended to connect these facilities.

CFI’s proposed ammonia plant in Modeste will have a production capacity of 4,400 tons of ammonia per day. The facility will produce ammonia from natural gas and rely on carbon capture and sequestration (“CCS”) to capture the CO₂ stream from the facility’s CO₂ absorber and CO₂ flash stripper and remove CO₂ emissions generated during the process for transport to an as-of-yet unidentified third-party CCS provider. The final ammonia product will be withdrawn as a liquid and sent to storage tanks. From the storage tanks, ammonia will be loaded into ships at the facility’s marine vessel terminal for transport off-site.

The CFI Plant will be a major source of air pollutants, including toxic air pollutants such as ammonia and methanol, and its considerable air pollution emissions would add to the significant environmental and health burdens already borne by the communities who live in close proximity to the proposed MegaPark, making it imperative for LDEQ and EPA to ensure that the Initial Permit is capable of ensuring continuous compliance with all requirements of the Clean Air Act. The CFI Plant will be permitted to emit 144 tons per year (“TPY”) of ammonia, and 27.15 TPY of methanol. In addition, the table below shows the total emissions in TPY for criteria pollutants putatively authorized by the Initial Permit.

Pollutant	Emissions (TPY)
Particular Matter <10 microns (PM ₁₀)	13.65
Particular Matter <2.5 microns (PM _{2.5})	9.23
Sulfur Dioxide (SO ₂)	0.78
Nitrogen Oxides (NO _x)	292.31
Carbon Monoxide (CO)	585.17
Volatile Organic Compounds (VOC)	38.62
Carbon dioxide equivalents (CO ₂ e)	467,982

⁴ See, e.g., Ellis S. Robinson et al., *Total cancer risk estimates from measured concentrations of volatile organic compounds in industrialized southeastern Louisiana*. Proceedings of the National Academy of Sciences, 2025 Vol. 122 No. 41, <https://www.pnas.org/doi/10.1073/pnas.2504770122>; Josie Abugov, *Cancer risk in Louisiana’s industrial parishes is underestimated by EPA, study says*, NOLA.COM (Oct. 8, 2025), https://www.nola.com/news/environment/cancer-chemicals-louisiana-industry-research/article_84f4dd30-bbb0-4248-be18-c842d223b778.html

⁵ https://www3.epa.gov/airquality/greenbook/phistory_la.html

⁶ Data from the closest and only regional scale O₃ monitor in Ascension Parish, the Carville monitor, already indicates ozone values above the NAAQS (74 ppb for 2022-2024 and 73 ppb for 2023-2025). These design values may be found on Tab 6, “Site Trends,” of EPA’s ozone design value spreadsheet available at: https://www.epa.gov/system/files/documents/2026-06/o3_designvalues_2023_2025_final_06_08_26.xlsx

The facility's CO₂ stream will contain a high concentration of methanol, a VOC and toxic air pollutant formed from the reaction of CO₂ with hydrogen in the water-gas shift reactors. As a result, the largest source of VOCs at the CFI Plant will be the CO₂ Vent, which will vent emissions when the CO₂ stream is not being captured for transport to a third-party sequestration facility. The CO₂ Vent ordinarily has an uncontrolled maximum potential to emit ("PTE") of ~260 TPY of VOCs—however, the Initial Permit contains an annual limit purporting to limit VOC emissions from the CO₂ Vent to no more than 28.60 TPY. Though neither the PSD Permit nor the Initial Permit actually state this, CFI's permit application and LDEQ's Response to Comments ("RTC")⁷ makes clear that this purported 28.60 TPY annual limit is based on CFI's assumption that 89% of all CO₂ emissions will in fact be successfully removed via CCS.

CFI submitted its original application for the facility's PSD and Title V permits on September 11, 2023. CFI updated its application in November 2023 to revise its assumed CCS capture rate upwards from 78.4% to 78.9%. Draft Permit Package at 673,⁸ 770.⁹ In February of 2025, CFI submitted a revised application to reflect that CFI had chosen to replace the steam methane reforming process with an autothermal reforming process. In the revised application, CFI assumed its CCS rate upwards again, from 78.9% to 89%. Draft Permit Package at 260.

On October 17, 2025, LDEQ issued public notice of the proposed draft Initial Permit. The Initial Permit incorporates the requirements of PSD Permit No. PSD-LA-859, which LDEQ proposed concurrently. The deadline for public comment on both permits was December 5, 2025, and Petitioners timely submitted extensive and comprehensive comments to LDEQ on the proposed permits. LDEQ issued the final permits on July 9, 2026.

STANDARD OF REVIEW FOR TITLE V PETITIONS

Title V permits, which must list and assure compliance with all federally enforceable requirements that apply to each major source of air pollution, are the primary method for enforcing and assuring compliance with the Clean Air Act's pollution control requirements for major sources. 57 Fed. Reg. 32250, 32251 (July 21, 1992). As EPA explained when promulgating its Title V regulations, one of the primary purposes of Title V is to "enable the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements. Increased source accountability and better enforcement should result." *Id.*

Section 502(d)(1) of the CAA, 42 U.S.C. 7661a(d)(1), requires each state to develop and submit to EPA an operating permit program intended to meet the requirements of Title V. Louisiana's approved Title V program is incorporated into the Louisiana Administrative Code and Louisiana State Implementation Plan at LAC 33:III.507. It is the Title V permitting authority's responsibility to ensure that the permit "'set[s] forth"' conditions sufficient "'to assure compliance with all applicable requirements"' of the Clean Air Act. *In the Matter of Sandy Creek Services, LLC, Sandy Creek Energy Station, McLennan County, TX*, Order on Petition No. III-2018-1 (June 30, 2021) ("Sandy Creek Order") at 12 (quoting 42 U.S.C.

⁷ EDMS No. 15284549. Available at <https://edms.deq.louisiana.gov/app/doc/view?doc=15284549>

⁸ All page numbers cited in this petition are PDF page numbers.

⁹ EDMS No. 14956329. Available at: <https://edms.deq.louisiana.gov/app/doc/view?doc=14956329>

7661c(c)). The permitting authority's rationale for any proposed permit conditions must be clear and documented in the permit record, 40 C.F.R. 70.7(a)(5), and "permitting authorities have a responsibility to respond to significant comments" received on a proposed permit. *In the Matter of CITGO Refining and Chemicals Co., L.P., West Plant, Corpus Christi, TX*, Order on Petition No. VI-2007-01 (May 28, 2009) ("CITGO Order") at 7.

Title V does not impose new substantive air quality control requirements or provide a vehicle to modify existing applicable requirements. 57 Fed. Reg. at 32251; 40 CFR 70.1(b). However, it does require permits to contain monitoring, recordkeeping, reporting, and other requirements sufficient to assure compliance with all such applicable requirements. 57 Fed. Reg. at 32251; 40 CFR 70.1(b). "Applicable requirements" include, among other things, any requirements of a federally enforceable state implementation plan ("SIP"), and any requirements of a preconstruction permit that must be incorporated into the Title V permit. *In the Matter of Pac. Coast Bldg. Prods., Inc.*, Permit No. A00011, Clark County, NV (Dec. 10, 1999) ("Pac. Coast Order") at 7 ("applicable requirements include the requirement to obtain preconstruction permits that comply with preconstruction review requirements under the Act, EPA regulations, and State Implementation Plans."). If applicable requirements themselves contain no periodic monitoring, EPA's regulations require permitting authorities to add "periodic monitoring sufficient to yield reliable data from the relevant time period and are representative of the source's compliance with the permit." 40 C.F.R. 70.6(a)(3)(i)(B); *see also*, *In the Matter of Mettiki Coal, LLC*, Order on Petition No. III-2013-I (Sept. 26, 2014) ("Mettiki Order") at 7. The D.C. Circuit has also acknowledged that the mere existence of periodic monitoring requirements may not be sufficient. *Sierra Club v. EPA*, 536 F.3d 673, 676-77 (D.C. Cir. 2008). For example, the court noted that annual testing is unlikely to assure compliance with a daily emission limit. *Id.* at 675. In other words, the frequency of monitoring must bear a relationship to the averaging time used to determine compliance. 40 C.F.R. 70.6(c)(1) of EPA's regulations acts as a "gap filler" and requires that the permit writers must supplement a periodic monitoring requirement inadequate to assure continuous compliance with the permit. 536 F.3d at 675; Mettiki Order at 7.

Finally, any emission limit in a Title V permit must be enforceable as both a legal and practical matter. For a limit to be enforceable as a practical matter, a proposed permit must clearly specify how emissions will be measured or determined for purposes of demonstrating compliance with the limit. *See, e.g.*, *In the Matter of Hu Honua Bioenergy Facility, Pepeekeo, HI*, Order on Petition No. IX-2011-1 (Feb. 7, 2014) ("2014 Hu Honua Order") at 10. This requires that any proposed emission limits "be accompanied by terms and conditions that require a source to effectively constrain its operations so as to not exceed the relevant emissions threshold... whether by restricting emissions directly or through restricting specific operating parameters," and supported by monitoring, recordkeeping, and reporting requirements "sufficient to enable regulators and citizens to determine whether the limit has been exceeded and, if so, to take appropriate enforcement action." *In the Matter of Orange Recycling and Ethanol Production Facility, Pencor-Masada Oxynol, LLC*, Order on Petition No. II-2001-05 (Apr. 8, 2002) ("Pencor-Masada Order") at 7.

EPA must object to any Title V permit that fails to include and assure compliance with all applicable requirements of the CAA. 42 U.S.C. 7661d(b)(1); 40 C.F.R. 70.8(c), (d). If EPA does not object to a Title V permit, "any person" may petition EPA to object to a proposed permit

within 60 days after the expiration of EPA's 45-day review period. 42 U.S.C. § 7661d(b)(2); *see also* 40 C.F.R. 70.8. EPA must grant or deny a petition to object within 60 days of its filing. 42 U.S.C. 7661d(b)(2); 40 C.F.R. 70.8(d). The CAA provides that EPA "shall issue an objection... if the petitioner demonstrates to the Administrator that the permit is not in compliance with the requirements of the Act". 42 U.S.C. 7661d(b)(2); 40 C.F.R. 70.8(c)(1); *see also N.Y. Pub. Interest Group v. Whitman*, 321 F.3d 316, 333 n.12 (2nd Cir. 2003) (explaining that EPA's duty to object to non-compliant permits "is nondiscretionary").

EPA's 45-day review period ended on July 6, 2026. This petition is submitted within 60 days of the end of EPA's 45-date review period and is thus timely.

GROUND FOR OBJECTION

EPA must object to the Initial Permit because it fails to comply with the applicable requirements of the CAA, in that it:

- (1) Contains short-term and annual emission limits that are plainly unenforceable as either a legal or practical matter for numerous units at the CFI Plant;
- (2) Fails to include adequate monitoring, testing, recordkeeping, and reporting requirements to ensure continuous compliance with numerous short-term and long-term emission limits from multiple emission sources; and
- (3) Impermissibly authorizes emissions for a "commissioning period" that are higher than the annual limits authorized by the underlying PSD Permit PSD-LA-859.

Each of these claims is further explained below.

I. Claim 1: The Initial Permit's "Emission Rates Tables" contains short-term and long-term emission limits—including synthetic minor limits—that are unenforceable as a legal or practical matter for many units at the facility.

a. Applicable Requirement or Part 70 Requirements

Pursuant to 40 C.F.R. 70.1(b), "[a]ll sources subject to [the Title V regulations] shall have a permit to operate that assures compliance by the source with all applicable requirements." Additionally, any emissions limit in a Title V permit must be enforceable as both a legal and practical matter. For a limit to be enforceable as a practical matter, a proposed permit must clearly specify how emissions will be measured or determined for purposes of demonstrating compliance with the limit. *See, e.g.,* 2014 Hu Honua Order at 10. This requires that any proposed emission limits "be accompanied by terms and conditions that require a source to effectively constrain its operations so as to not exceed the relevant emissions threshold... whether by restricting emissions directly or through restricting specific operating parameters," and supported by monitoring, recordkeeping, and reporting requirements "sufficient to enable regulators and citizens to determine whether the limit has been exceeded and, if so, to take appropriate enforcement action." *Pencor-Masada Order* at 7.

Determining whether monitoring contained in a Title V permit is sufficient to assure compliance with any term or condition is a context-specific, case-by-case inquiry. *In the Matter of United States Steel Corporation, Clairton Coke Works Permit No. 0052-OP22*, Order on Petition Nos. III-2023-5 and III-2023-6 (Sept. 18, 2023) (“Clairton Order”) at 9. To aid permitting authorities and the public in this fact-specific exercise, EPA has identified a non-exhaustive list of factors that permitting authorities “may consider as a starting point in determining appropriate monitoring” for a facility, including: (1) the variability of emissions from the unit in question; (2) the likelihood of a violation of the requirements; (3) whether add-on controls are being used for the unit to meet the emission limit; (4) the type of monitoring process, maintenance, or control equipment data already available for the emission unit; and (5) the type and frequency of the monitoring requirements for similar emission units at other facilities. *Id.* (quoting CITGO Order at 7–8). In the case of preconstruction permitting requirements derived under Title I of the Act, EPA’s oversight role under Title V is to both ensure that the terms and conditions derived under Title I are properly included in the Title V permit as “applicable requirements,” and to ensure “that the title V permit contains monitoring, recordkeeping, and reporting sufficient to assure compliance with those permit terms and conditions.” *In the Matter of Big River Steel, LLC*, Order on Petition VI-2013-10 (Oct. 31, 2017) (“Big River Steel Order”) at 17; *see also id.* at 20 (stating EPA’s review of preconstruction conditions under Title V includes review of “whether the title V permit includes adequate monitoring, recordkeeping, and reporting requirements to assure compliance with the terms and conditions of the preconstruction permit.”).

“In all cases, the rationale for the selected monitoring requirements must be clear and documented in the permit record.” CITGO Order at 7–8 (granting petition because permitting authority “did not articulate a rationale for its conclusions that the monitoring requirements... are sufficient to assure compliance”); *see also* 40 C.F.R. § 70.7(a)(5). Further, “permitting authorities have a responsibility to respond to significant comments.” CITGO Order at 7; *In the Matter of Onyx Environmental Services*, Petition V-2005-1 (February 1, 2006).

b. Citation to Permit Terms

The Initial Permit includes two tables of emission rates. One is entitled “Emission Rates for Criteria Pollutants and CO₂e” (“CP Emission Rates Table”). Initial Permit at 25–28. The other is entitled “Emission Rates for TAP/HAP & Other Pollutants.” (“TAPs Rates Table”). Initial Permit at 30–32. For each emission unit, these tables list up to three emission rates for each criteria pollutant or TAP (if there is an applicable limit):

- An “average” hourly emission rate in pounds per hour (“avg lb/hr”);
- A “maximum” hourly emission rate (“max lb/hr”); and
- An annual emissions rate in tons per year (“tons/year”). *Id.*

For some units, the average hourly emission rate and max hourly emission rate are identical, while for others, the max hourly emission rate is substantially higher than the average hourly rate. In all cases, the annual emission rate appears to have been calculated using the average hourly rate (and not the max hourly rate). For example, for the CO₂ Vent (RLP 0004), the CP Emission Rates table lists the following emission rates for CO and VOC:

Pollutant	Average hourly (lb/hr)	Max hourly (lb/hr)	Tons per year
CO	6.12	6.12	2.95
VOC	59.36	80.32	28.60

Multiple units have “maximum” hourly emission rates that are higher (often, *much* higher) than their corresponding “average” hourly emission rates, while some units only have an “average” hourly rate and no “maximum” rate:

Units with max hourly rates higher than average hourly rates

Unit	PM10	PM2.5	SO2	NOx	CO	VOC
EQT 0003	-	-	-	Yes	Yes	Yes
EQT 0004	-	-	-	Yes	Yes	Yes
EQT 0006	-	-	-	Yes	Yes	Yes
EQT 0007	-	-	-	Yes	Yes	Yes
EQT 0011	Yes	Yes	Yes	Yes	Yes	Yes
EQT 0029	Yes	Yes	-	Yes	Yes	Yes
RLP 0004 (CO2 Vent)	-	-	-	-	-	Yes
SCN 0003 23U510 (SU)	Yes	Yes	Yes	Yes	Yes	Yes

Units with average hourly rates but no max hourly rate

Unit	PM10	PM2.5	SO2	NOx	CO	VOC
EQT 0010	Yes	Yes	-	-	-	-
FUG 0001	-	-	-	-	Yes	Yes
RLP 0003	Yes	Yes	Yes	Yes	Yes	Yes

CP Emission Rates Table, Initial Permit at 25-28.

Nearly all of the emission rates listed in both tables appear to be entirely stand-alone requirements, in that they are never referenced in the specific requirements sections (which list the requirements actually applicable to each emission unit), and in nearly all cases, are not connected to any monitoring, reporting, or testing requirements that either reference or could be used to determine compliance with those limits. Several units will be discussed, one-by-one, below.

Though the CP Emission Rates Table does not make this explicitly clear, many of the emission rates listed are in fact **synthetic-minor** limits, as the permit record makes clear that LDEQ used the annual emission rates listed for each unit in the CP Emission Rates Table to calculate the CFI Plant’s total “potential to emit” for purposes of determining major PSD

applicability.¹⁰ LDEQ's PSD analysis shows that permitted emissions, based on these annual emission rates, were barely under the major PSD thresholds for PM10, PM2.5, and VOCs:

Pollutant	LDEQ's Claimed Total Project Increases (TPY)	Major PSD Threshold (TPY)
PM10	13.71	15
PM2.5	9.29	10
VOC	39.69	40

Initial Permit at PDF page 5.

c. Part 70 Requirement Not Met, Issue Raised in Public Comment

All emissions limits in a Title V permit must be federally enforceable as both a legal and practical matter. For a limit to be enforceable as a practical matter, a proposed permit must clearly specify how emissions will be measured or determined for purposes of demonstrating compliance with the limit. *See, e.g.*, 2014 Hu Honua Order at 10. This requires that any proposed emission limits “be accompanied by terms and conditions that require a source to effectively constrain its operations so as to not exceed the relevant emissions threshold... whether by restricting emissions directly or through restricting specific operating parameters,” and supported by monitoring, recordkeeping, and reporting requirements “sufficient to enable regulators and citizens to determine whether the limit has been exceeded and, if so, to take appropriate enforcement action.” *Pencor-Masada Order* at 7; *see also* 57 Fed. Reg. at 32251 (a primary purpose of Title V is to make ascertaining applicable requirements and compliance easier).

The two emission rates tables violate the requirements of Title V in several respects. First, none of the “average” hourly emission rates listed in either table are enforceable emission limits at all. As Petitioners explained in their comments, the fact that the Initial Permit lists “maximum” hourly emission rates that are often different from (and substantially higher than) “average” hourly emission rates, with no explanation anywhere in the permit of which emission rate applies to what circumstance or time, strongly indicates that the “average” rate in fact is *not* an enforceable emission limit. And in fact, LDEQ confirms in the RTC that exceedances of the “average” hourly emission rates “do not represent violations of the permit.” RTC at 76, n. 78.

Second, most of the limits in either of these tables are not enforceable as a practical matter. As noted above, nearly all of the emission rates listed in both tables appear to be entirely stand-alone requirements, are never referenced in the specific requirements sections for their respective unit, and in nearly all cases, are not connected to any monitoring, reporting, or testing requirements that either reference or could be used to determine compliance with those limits.

Petitioners raised these issues with LDEQ in multiple comments. First, Petitioners’ comments included an extensive discussion of the legal and practical unenforceability of the “average” hourly emission rate and the annual TPY emissions rate for VOCs applicable to the

¹⁰ *See* Draft Permit Package, EDMS No. 14956329, at pp. 139-143 (Project emissions summary for New Source Review Applicability, showing PTE emissions that are largely identical to annual emission rates in Initial Permit’s emission rates tables). Available at: <https://edms.deq.louisiana.gov/app/doc/view?doc=14956329>

CO2 Vent specifically throughout Section I.A of their comments, as well as II.D.1.h. Comments at 3-19, 69. Petitioners included an extensive discussion of the CO2 Vent's limits separately, because the permit record makes clear that LDEQ relied on an assumed CCS capture rate of 89% to calculate the CO2 Vent's purported annual emission rate of 28.60 TPY, which raised significant issues of legal and practical unenforceability that were unique to the CO2 Vent.¹¹ LDEQ's Response to Comments document divided Section I.A into four separate comments, Comments Nos. 2-5, and LDEQ's response to these comments may be found on pages 32-45 of the RTC. LDEQ's response to Comment II.D.1.h is labeled as response to comment 41 and can be found on page 97 of the RTC.

Petitioners explained the enforceability issues related to the emission rates listed in the Emission Rates Tables at length in Section II.B of their Comments (pages 43-46), as well in Section IV.B.2 of the Pless Report included with their Comments, Pless Report at 26. LDEQ's Response to Comments labeled these as Comments Nos. 29 and 61, respectively, and these responses can be found on pages 73-77 and 127 of the RTC.

d. Analysis of LDEQ's Response to Petitioners' Comments Regarding the Unenforceability of the Limits in the Emission Rates Table Generally

Whether a limit is "legally" enforceable is typically fairly straightforward and satisfied by including an explicit limit or condition in a permittee's Title V permit. In its response to Petitioners' comments noting that it was not clear that the average hourly emission rates in the emission rates tables were in fact intended to be enforceable emission limits at all, LDEQ stated that the average pound per hour, maximum pound per hour, and tons per year emission rates set forth in the "Emission Rates for Criteria Pollutants and CO₂e" and "Emission Rates for TAP/HAP & Other Pollutants" sections of Permit No. 0180-00237-V0 "are *all* enforceable limitations with which CF Industries Blue Point must comply." LDEQ's Response to Comment No. 29, RTC at 76. LDEQ cites to Louisiana General Condition III of LAC 33:III.537.A, which states that the "Emission Rates for Criteria Pollutants, Emission Rates for TAP/HAP and Other Pollutants, and Specific Requirements sections of the permit establish the emission limitations and are a part of the permit." *Id.* Yet in the same paragraph immediately following this statement, LDEQ *also* states that "short-term exceedances of the average pound per hour emission rate *do not represent violations of the permit.*" RTC at 76, n. 78 (emphasis added). If LDEQ does not consider an exceedance of the average hourly emission rate a violation of the permit, then the average hourly emission rate is plainly not an enforceable emission limit.

The remainder of LDEQ's response similarly does not address Petitioners' concerns and misses the point. For example, LDEQ's response states generally that maximum hourly emission rates "reflect the maximum amount of the pollutant allowed to be emitted in any 60-minute period" and "account for operational scenarios that cannot be sustained for extended periods." RTC at 76. Conversely, LDEQ asserts, the average hourly emission rates reflect the TPY divided by hours of operation. *Id.* Petitioners do not understand how this is responsive to their comment. As Petitioners explained in their comments, they are aware of *how* LDEQ calculated the average

¹¹ Because LDEQ also used the 28.60 TPY VOC emission as a synthetic minor limit to keep the CFI Plant below the major PSD threshold for VOCs, the sections containing the discussion of the limit's legal and practical enforceability also heavily discuss the (in)validity of LDEQ's PTE calculations.

hourly emission rates, and that maximum hourly emission rates “reflect the maximum amount of the pollutant allowed to be emitted.” The problem, which LDEQ not only failed to address but has in fact confirmed, is that the average hourly emission rates *do not appear to be enforceable emission limits at all* and the only *actual* short-term emission limits applicable to any of these units in the CP Emission Rates Table are the *maximum* hourly rates. LDEQ’s vague assertion that the maximum hourly rates “cannot be sustained for extended periods” is completely irrelevant. As Petitioners’ comments noted, the fact that for multiple units, the emission rates tables lists both an average hourly emission rate along with a *substantially higher* maximum hourly emission rate, and there is nothing in the permit that actually indicates *when* the maximum hourly emission rate applies or even attempts to limit how many hours CFI may operate up to the maximum rate, means that the average hourly emission rate *is not an enforceable limit*. A conclusion that, again, LDEQ has now expressly confirmed in its RTC.

The fact that the average hourly emission rates are not enforceable limits also has consequences on the enforceability of each of the annual emission rates listed in the CP Emission Rates Table.¹² As Petitioners noted in our comments (and LDEQ’s response to comments confirms), all of the annual TPY emission rates identified in the CP Emission Rates Table are tied to their respective unit’s *average* hourly emission rate—*not* its maximum hourly emission rate (if it has one). Because the average hourly emission rates are not enforceable limits, this means that for any unit that either has a max hourly rate that is higher than its average hourly rate, or only an average hourly rate (and no identified max hourly rate), there is *no short-term compliance demonstration* for the blanket annual TPY limit.

The failure to tether the annual TPY emission rates with a short-term limit, or other short-term compliance demonstration period, is especially problematic because, as Petitioners explained in our comments, for many of the rates listed in the CP Emission Rates Table, the table is the only place in the Initial Permit they appear. The limits are not referenced in the specific requirements sections for their respective unit, and in many cases, the specific requirements do not appear to identify specific monitoring, reporting, or testing requirements that either reference or state that they can or will be used to determine compliance with those limits. Comments at 46.

The rest of LDEQ’s response does not adequately address this concern. First, LDEQ generically asserts that “[t]he Specific Requirements include the federal and state applicable requirements and any additional testing, monitoring, record-keeping, and reporting requirements necessary to assure compliance with the terms and conditions of the permit.” RTC at 77. Second, LDEQ cites LAC 33:III.919.G, which it avers requires CFI to report “actual emissions calculated using the best data available.” *Id.* Finally, LDEQ notes that EPA’s credible evidence provisions under 40 CFR 60.11(g) allow any credible evidence to be used to determine CFI’s compliance with its applicable requirements. *Id.* All of these points fail to address the issue raised by Petitioners’ comment and do nothing to enhance the enforceability of these limits.

First, LDEQ’s assertion that the Initial Permit’s Specific Requirements include “any additional testing, monitoring, record-keeping, and reporting requirements necessary to assure compliance with the terms and conditions of the permit” does not address Petitioners’ comment. Again, Petitioners’ point was that in many cases, it is not clear that the specific requirements

¹² At least for all units that do not explicitly have average and maximum hourly emission rates that are identical.

actually include specific monitoring, reporting, or testing requirements that could be used to determine compliance with each of the separate hourly and annual limits in the CP Emission Rates Table, or that even reference those limits at all.

For example, the CP Emissions Rate Table establishes the following hourly and annual emission rates for the Auxiliary Boiler (EQT 0011):

Pollutant	Average hourly lb/hr	Max hourly lb/hr	TPY
PM10	3.38	4.22	7.39
PM2.5	3.38	4.22	7.39
SO2	0.27	0.33	0.58
NOx	4.46	6.18	19.51
CO	37.31	46.63	81.7
VOC	2.44	3.05	5.35

Initial Permit at 25-26.

As Petitioners explained in Section II.D.1.f of their comments, it is not clear that the Specific Requirements applicable to the Auxiliary Boiler, Specific Requirements 106-143, establish sufficient monitoring and testing to assure compliance with each of these limits. Comments at 65-67. Specific Requirements 110–111 require CFI to install and operate continuous monitoring systems (“CMS”) to continuously measure NOx, oxygen, and carbon dioxide emissions, which Petitioners generally agree should be adequate to monitor for NOx emissions. Specific Requirement 118 generally requires CFI to keep records of daily fuel rates, while Specific Requirements 124 and 127 requires CFI to conduct a tune-up of the auxiliary boiler once every five years as specified in 40 CFR 63.7540—however, as Petitioners noted in our comments, nothing in the permit indicates how these requirements can or will be used to demonstrate compliance with any of the applicable hourly or annual emission limits for PM, CO, and VOCs at the auxiliary boiler. Comments at 66-67. LDEQ’s Response to Comment No. 35, states that:

...the periodic tune-up and continuous parametric monitoring requirements of Subpart DDDDD ensure that optimal combustion efficiency is maintained at all times, thereby minimizing products of incomplete combustion, hydrocarbons that are not fully combusted, and emissions attributed to poor air-fuel mixing, and provide a reasonable assurance of ongoing compliance with the emission limits for PM, CO, and VOC.

RTC at 96.

However, this does not actually explain *how* the tune-up assures compliance with these specific limits, *what* parameters will be monitored, or *how* those parameters can be used to determine the auxiliary boiler’s continuous compliance with its emission limits—particularly since the permit does not seem to include a requirement to perform a test to actually measure emissions of PM, CO, or VOCs, or establish a correlation between emission levels and specific parameter levels. It is also unclear how a requirement to perform a tune-up once every five years,

with no testing or other monitoring, could be sufficient to demonstrate compliance with the hourly lb/hr emission limits identified in the CP Emissions Rate Table.¹³

LDEQ's vague assertions that emissions at the CFI Plant can be calculated using "the best data available" and "any credible evidence" are similarly unhelpful. RTC at 77. It is LDEQ's obligation as the permitting authority to ensure that the permit "set[s] forth" conditions sufficient "to assure compliance with all applicable requirements" of the Clean Air Act. Sandy Creek Order at 12 (quoting 42 U.S.C. 7661c(c)). LDEQ is required to make its rationale for any proposed permit conditions clear and documented in the permit record. 40 C.F.R. 70.7(a)(5). LDEQ cannot simply just state that the Initial Permit assures compliance because "data" and "credible evidence" can be used to determine CFI's compliance with its limits. The Initial Permit must actually identify at least *some* parameters that can be used to determine CFI's compliance with its limits, and at least *some* explanation of how those parameters are correlated to emissions at this facility. *See* CITGO Order at 7–8 (granting petition because permitting authority "did not articulate a rationale for its conclusions that the monitoring requirements... are sufficient to assure compliance"); *see also* 40 C.F.R. 70.7(a)(5).

Determining whether monitoring contained in a Title V permit is sufficient to assure compliance with any term or condition is a context-specific, case-by-case inquiry. Clairton Order at 9. To aid permitting authorities and the public in this fact-specific exercise, EPA has identified a non-exhaustive list of factors that that permitting authorities "may consider as a starting point in determining appropriate monitoring" for a facility, including: (1) the variability of emissions from the unit in question; (2) the likelihood of a violation of the requirements; (3) whether add-on controls are being used for the unit to meet the emission limit; (4) the type of monitoring process, maintenance, or control equipment data already available for the emission unit; and (5) the type and frequency of the monitoring requirements for similar emission units at other facilities. *Id.* (quoting CITGO Order at 7–8). Neither LDEQ's response to comments nor the Initial Permit adequately address these factors.

e. Analysis of LDEQ's Response to Petitioners' Comments Regarding the CO2 Vent Specifically

The CP Emission Rates Table establishes the following hourly and annual emission rates for VOCs from the CO2 Vent:

Pollutant	Average hourly lb/hr	Max hourly lb/hr	Annual TPY
VOC	59.36	80.32	28.60

¹³ Petitioners emphasize again that the enforceability of both the annual TPY and average hourly emission rates is especially important because LDEQ is relying upon these emission rates to restrict the facility's PTE, and the annual emission rates are synthetic minor limits keeping the facility below the PSD threshold for PM and VOCs. If these limits are not enforceable, the CFI Plant's PTE emissions exceed the relevant thresholds. For example, the auxiliary boiler's annual emission rates for PM2.5 and VOC are currently listed as 7.39 TPY and 5.35 TPY, respectively, which LDEQ calculated by multiplying the average hourly lb/hr emission rate X 4,380 hours of operation. If this is calculated using the *maximum* hourly emission rate instead, these annual emission rates become 9.24 TPY for PM2.5 and 6.68 TPY for VOCs—which would both cause the facility to trigger major PSD.

Initial Permit at 28.¹⁴

Petitioners' comments included an extensive discussion of the legal and practical unenforceability of the "average" hourly emission rate and the annual TPY emissions rate for VOCs applicable to the CO₂ Vent specifically throughout Section I.A of their comments, as well as II.D.1.h. Comments at 3-19, 69. Petitioners' comments noted that though the permit record made clear that LDEQ's calculated annual TPY emission rate of 28.60 TPY was predicated on an assumed CCS capture rate of 89%¹⁵ of all CO₂ emissions from the CO₂ vent, the draft Initial Permit itself contained only three specific requirements applicable to the CO₂ Vent. These three requirements only generally required limited recordkeeping for equipment and operational data and proper design and maintenance according to the manufacturer's specifications of the CO₂ compressor, CO₂ absorber, and CO₂ flash/stripper, and authorized additional annual emissions for a 1-year commissioning period. Comments at 11-12. We noted that the draft Initial Permit did not include any requirements that would actually ensure that the CO₂ Vent is meeting its hourly VOC limits or annual VOC emission limit of 28.60 TPY, or enable regulators or citizens to determine and enforce CFI's noncompliance with this limit—such as (but not limited to) a requirement to maintain its assumed CCS uptime of 89%, to limit the maximum throughput or annual hours of operation for the CO₂ Vent, or to periodically test, monitor, or report emissions of VOCs actually emitted as a part of the CO₂ stream. *Id.* at 12.

LDEQ's Response to Comments document divided Section I.A into four separate comments, Comments Nos. 2-5, and LDEQ's response to these comments may be found on pages 32-45 of the RTC. In response to Petitioners' comments, LDEQ revised the permit to include two new specific requirements applicable to the CO₂ Vent. Specific Requirement 169 states that in order to demonstrate compliance with the CO₂ Vent's VOC limits, CFI shall perform an initial performance test within 180 days of startup, and at least once annually thereafter. Initial Permit at 48. Specific Requirement 170 states that CFI shall "continuously monitor and record the flow of gas vented to the atmosphere by technically sound method." *Id.* LDEQ also revised the CP Emission Rate Table to include a footnote stating that the tons/year limit applied on a "12 consecutive month rolling basis." *Id.* at 29. LDEQ asserted that these conditions were sufficient to ensure compliance with the VOC emission limits for the CO₂ Vent. RTC at 35, 40. LDEQ's response also asserted that the annual limit of 28.60 TPY was based on the "on-site operation of the applicant's facility" and compliance was not dependent on the potential availability of third-party CCS provider because CFI can "choose not to construct and/or operate the Low Carbon Ammonia Plant until the CO₂ pipeline and Class VI (CO₂)

¹⁴ As noted above, LDEQ has stated that the average hourly emission rate is not actually an enforceable permit condition. RTC at 76, n. 78 ("short-term exceedances of the average pound per hour emission rate do not represent violations of the permit.").

¹⁵ Though it is not a focus of this petition, Petitioners' comments also explained that LDEQ does not justify this assumed 89% capture rate, and evidence indicates that it is a wildly unrealistic overestimate that is likely not achievable, as demonstrated by much lower capture rates in practice at other facilities. Comments at 15-19. Petitioners also do not agree that the 28.60 TPY blanket limit constitutes a physical or operational limit on the design capacity of the CO₂ Vent sufficient to represent a valid limitation on the facility's PTE, and are challenging this conclusion in a separate petition for review of the PSD Permit.

injection well(s) are in place or, after operations commence, to shut down the facility in the event of an extended outage of the CO₂ pipeline and/or Class VI injection well(s).” *Id.* at 35.¹⁶

LDEQ’s responses fail to adequately address the issues raised by Petitioners’ comments.

As a general matter, “the time period associated with monitoring or other compliance assurance provisions must bear a relationship to the limits with which the monitoring assures compliance.” Clairton Order at 9; *see also* 40 C.F.R. § 70.6(a)(3)(i)(B). EPA has frequently determined that a requirement for periodic stack testing alone—even on an annual basis—is generally insufficient to assure compliance with hourly or 12-month rolling limits and has repeatedly directed permitting authorities “to consider a multi-pronged monitoring approach of periodic stack testing accompanied by other clearly identified permit terms such as parametric monitoring.” *In the Matter of Cove Point LNG, L.P., Cove Point LNG Terminal*, Order on Petition III-2022-14 (March 8, 2023) (“Cove Point Order”) at 15-16; *see, e.g.*, Clairton Order at 8-11 (objecting to permit on grounds that permitting authority failed to provide a rationale or “reasoned explanation” for why stack tests performed every two, four, or five years were sufficient assure compliance with both hourly and 12-month rolling emission limits contained in the permit; “EPA has explained in previous orders that it is the permitting authority’s responsibility to ensure that the title V permit itself sets forth monitoring sufficient to assure compliance with all applicable requirements”); *see also In the Matter of Northeast Maryland Waste Disposal Authority, Montgomery County Resource Recovery Facility*, Order on Petition No. III-2019-2 at 10 (Dec. 11, 2020) (objecting to permit on grounds that annual stack testing alone was insufficient to demonstrate compliance with an hourly limit for hydrochloric acid (HCl) that applied at all times).¹⁷

Determining whether monitoring contained in a Title V permit is sufficient to assure compliance with any term or condition is a context-specific, case-by-case inquiry. Clairton Order at 9. To aid permitting authorities and the public in this fact-specific exercise, EPA has identified a non-exhaustive list of factors that that permitting authorities “may consider as a starting point in determining appropriate monitoring” for a facility, including: (1) the variability of emissions from the unit in question; (2) the likelihood of a violation of the requirements; (3) whether add-on controls are being used for the unit to meet the emission limit; (4) the type of monitoring process, maintenance, or control equipment data already available for the emission unit; and (5) the type and frequency of the monitoring requirements for similar emission units at other facilities. *Id.* (quoting CITGO Order at 7–8).

LDEQ has not demonstrated that the additional monitoring requirements that LDEQ has included in the revised Initial Permit are sufficient to assure compliance with the CO₂ Vent’s hourly and annual VOC limits. For one, LDEQ has not explained why it believes a requirement to perform a single stack test once per year is sufficient monitoring to assure compliance with

¹⁶ LDEQ should revise the Initial Permit to include a specific requirement explicitly prohibiting CFI from operating its facility more than a certain number of hours per year without CCS. Without an explicit condition requiring CFI to cease operations, the possibility that CFI might voluntarily delay constructing its facility or simply shut down its facility whenever there is a CCS outage is not a credible restriction on CFI’s operation of the facility.

¹⁷ *See also, e.g., In the Matter of Oak Grove Management Company, Oak Grove Steam Electric Station*, Order on Petition No. VI-2017-12 at 25–26 (October 15, 2021); *In the Matter of Owens-Brockway Glass Container, Inc.*, Order on Petition No. X-2020-2 at 14–15 (May 10, 2021).

either the CO2 Vent's hourly or annual VOC limits. A single stack test by itself yields very little information and provides only a brief snapshot of performance over a few hours at most under optimal conditions. The Initial Permit does not identify any parameters that could be correlated with VOC emissions or performance, does not require CFI to identify any such parameters, let alone continuously monitor such parameters or maintain those parameters at the levels reported during the previous stack test. The only continuous monitoring requirement is a requirement to record the flow of gas vented to the atmosphere "by technically sound method." Initial Permit at 48. LDEQ has not explained in the permit record how monitoring the flow of gas alone is sufficient parametric monitoring, which would include addressing, for example, if and by how much VOC concentrations in the vent gas may be expected to vary, and how monitoring the flow of gas alone can account for these potential variations. The Initial Permit also does not specify the actual method by which CFI will be required to record gas flow. Further, while the CP Emission Rate Table now includes a brief footnote stating that the tons/year limit will be applied on a "12 consecutive month rolling basis," Initial Permit at 29, the Initial Permit does not actually include a required method for how CFI will calculate monthly and annual emissions of VOCs. The Initial Permit also does not explain how CFI's compliance with its hourly VOC limit(s) will be determined.

LDEQ also does not address any of the five factors EPA has identified as a "starting point in determining appropriate monitoring." CITGO Order at 7–8. Ensuring that the CO2 Vent has adequate monitoring to assure compliance with its VOC limits is especially crucial because emissions from the CO2 Vent are likely to be highly variable, and CFI's compliance with its VOC limits is entirely reliant on the availability of an unidentified third-party CCS provider to actually capture its CO2 emissions. Further, CFI's compliance with its limits is predicated on an assumed CCS uptime rate of 89%. As Petitioners pointed out in their comments, this capture efficiency estimate is unrealistic and not actually supported by any evidence, beyond LDEQ's citation to an advertisement blurb from the manufacturer's website. RTC at 41. LDEQ ignores any number of real-life factors that are likely to result in much lower-than-advertised capture efficiency rates, including the possibility that CO2 may need to be vented to the atmosphere for reasons other than startups, shutdowns, and malfunctions (e.g., the third-party CCS infrastructure is down for maintenance), and the fact that average rates of CO2 removal are likely to be much lower than the assumed instantaneous capture rates observed under perfect conditions, as various pieces of equipment malfunction or degrade with time and must be replaced or taken offline for maintenance. These factors suggest that there is a heightened need for monitoring and testing requirements to ensure continuous compliance with the CO2 Vent's emission limits.

It is LDEQ's responsibility as the permitting authority to ensure that that the permit "set[s] forth" conditions sufficient "to assure compliance with all applicable requirements" of the Clean Air Act. Sandy Creek Order at 12 (quoting 42 U.S.C. 7661c(c)). For all the reasons explained above, it is plain that that LDEQ has failed to demonstrate that the Initial Permit contains sufficient monitoring and testing to assure continuous compliance with either the CO2 Vent's hourly or annual limits.

II. Claim 2: The Initial Permit Fails to Include Monitoring, Recordkeeping, and Reporting Requirements Adequate to Ensure Compliance with Short-term and Long-term Emission Limits at Multiple Units.

Applicable Requirement or Part 70 Requirements

“Each permit issued under [Title V] shall set forth inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions.” 42 U.S.C. 7661c(c); *see also* 40 C.F.R. 70.6(c)(1). It is LDEQ’s responsibility, as the relevant permitting authority, “to ensure that the [T]itle v permit ‘set[s] forth’ monitoring to assure compliance with all applicable requirements.” Sandy Creek Order at 12 (quoting 42 U.S.C. 7661c(c)). Further, any emission limit in a Title V permit must be enforceable as both a legal and practical matter. For a limit to be enforceable as a practical matter, a proposed permit must clearly specify how emissions will be measured or determined for purposes of demonstrating compliance with the limit. *See, e.g.*, 2014 Hu Honua Order at 10. This requires that any proposed emission limits “be accompanied by terms and conditions that require a source to effectively constrain its operations so as to not exceed the relevant emissions threshold... whether by restricting emissions directly or through restricting specific operating parameters,” and supported by monitoring, recordkeeping, and reporting requirements “sufficient to enable regulators and citizens to determine whether the limit has been exceeded and, if so, to take appropriate enforcement action.” Pencor-Masada Order at 7.

As a general matter, “the time period associated with monitoring or other compliance assurance provisions must bear a relationship to the limits with which the monitoring assures compliance.” Clairton Order at 9; *see also* 40 C.F.R. 70.6(a)(3)(i)(B). EPA has frequently determined that a requirement for periodic stack testing alone—even on an annual basis—is generally insufficient to assure compliance with hourly or 12-month rolling limits and has repeatedly directed permitting authorities “to consider a multi-pronged monitoring approach of periodic stack testing accompanied by other clearly identified permit terms such as parametric monitoring.” Cove Point Order at 15-16.¹⁸

However, determining whether monitoring contained in a Title V permit is sufficient to assure compliance with any term or condition is a context-specific, case-by-case inquiry. Clairton Order at 9. To aid permitting authorities and the public in this fact-specific exercise, EPA has identified a non-exhaustive list of factors that that permitting authorities “may consider as a starting point in determining appropriate monitoring” for a facility, including: (1) the variability of emissions from the unit in question; (2) the likelihood of a violation of the requirements; (3) whether add-on controls are being used for the unit to meet the emission limit; (4) the type of monitoring process, maintenance, or control equipment data already available for the emission unit; and (5) the type and frequency of the monitoring requirements for similar emission units at other facilities. *Id.* (quoting CITGO Order at 7–8).

¹⁸ *See also, e.g., In the Matter of Oak Grove Management Company, Oak Grove Steam Electric Station*, Order on Petition No. VI-2017-12 at 25–26 (October 15, 2021); *In the Matter of Owens-Brockway Glass Container, Inc.*, Order on Petition No. X-2020-2 at 14–15 (May 10, 2021).

“In all cases, the rationale for the selected monitoring requirements must be clear and documented in the permit record.” CITGO Order at 7–8 (granting petition because permitting authority “did not articulate a rationale for its conclusions that the monitoring requirements... are sufficient to assure compliance”); *see also* 40 C.F.R. 70.7(a)(5). Further, “permitting authorities have a responsibility to respond to significant comments.” CITGO Order at 7; *In the Matter of Onyx Environmental Services*, Petition V-2005-1 (February 1, 2006).

1. Fugitive Emissions

a. Citation to Permit Terms

The CP Emission Rates and TAPs Emission Rates tables establish the following hourly and annual TPY limits for Fugitive Emissions (FUG 0001) from the CFI Plant:

Pollutant	Average hourly lb/hr	Annual TPY
CO	0.81	3.54
VOC	0.32	1.40
Ammonia	3.56	15.48

Initial Permit at 28, 31.

Specific Requirement 163 requires that “audio, olfactory, and visual checks for ammonia leaks within the operating and storage areas shall be made daily.” If a leak is detected, within one hour, the permittee shall isolate the leak, commence repair, and use a leak collection or containment system to prevent the leak until repair or replacement can be made. This is the Initial Permit’s only monitoring requirement for fugitive ammonia emissions.

b. Part 70 Requirement Not Met, Issue Raised in Public Comment

Petitioners raised this issue in Section II.D.1.j of their comments, Comments at 71, as well in Section IV.C.2(d) of the Pless Report included with their Comments, Pless Report at 36. LDEQ’s Response to Comments labeled these as Comments Nos. 43 and 62, respectively, and its responses can be found on pages 100-101 and 128-129 of the RTC.

As Petitioners emphasized in their comments, audio, olfactory, and visual checks are insufficient to reliably detect fugitive emission leaks. Comments at 71. That is because, per CDC’s National Institute for Occupational Safety and Health notes, persons with prolonged exposure to ammonia lose their ability to detect odor due to olfactory fatigue. Relatedly, pure form ammonia gas is colorless—rendering visual inspections unreliable. Petitioners recommended that LDEQ should require a fenceline monitoring program for ammonia vapor, noting that the methodology had demonstrated feasibility at other sites in the country. Comments at 71-72. Further, Petitioners’ Comments noted that a requirement for a daily AVO inspection alone did not constitute sufficient monitoring to assure compliance with the emission rates applicable to FUG 0001. Comments at 71, Pless Report at 36.

c. Analysis of LDEQ's Response

LDEQ states that Specific Requirement 163 mirrors TCEQ's 28AVO inspection program, which was developed to minimize leaks of odoriferous compounds. RTC at 101. LDEQ also stated that based on the results of air modeling showing that max modeled ammonia concentration is only 26 percent of its AAS, LDEQ does not believe fenceline monitoring is warranted. LDEQ's response fails to address Petitioners' concerns for several reasons.

First, daily AVO alone is not sufficient to assure continuous compliance with the hourly and annual limits applicable to fugitive emissions from the CFI Plant. Even if AVO inspections can be used to minimize leaks, they are not actually a means of monitoring emissions, and LDEQ's response does not sufficiently explain why it believes AVO inspection alone will be sufficient to assure compliance with the permit's limits.

Second, Petitioners note that though LDEQ states that Specific Requirement 163 mirrors TCEQ's 28AVO program, it actually appears to be less stringent than the minimum requirements of TCEQ's 28AVO program. The TCEQ guidance referenced by LDEQ states that AVO inspections should generally be required *every four hours*, and that under no circumstance should inspection frequency be less frequent than once per shift.¹⁹ Specific Requirement 163, however, requires only a "daily" inspection.

Finally, TCEQ's guidance document notes that 28AVO was developed in the 1980s for the purpose of addressing specific chemicals with high odor nuisance "that cannot be monitored." APDGV2 at 30. As our comments explained, numerous refineries in California have in fact installed monitoring systems that measure real-time concentrations of ammonia, and EPA has recently required the use of fenceline monitoring to detect fugitive ammonia at other ammonia plants, such as Dyno Nobel, Inc.'s ammonia facility in St. Helens, Oregon. Comments at 71-72. Though LDEQ responds that fenceline monitoring is not warranted because the 28AVO will minimize leaks of odoriferous compounds, it does not address the fact that the 28AVO program was not intended to supplant more reliable monitoring where such monitoring may be available, but rather was intended for chemicals that cannot be monitored. RTC at 77. LDEQ also does not address Petitioners' comments regarding the unreliability of AVO as the sole means of monitoring ammonia, due to issues of olfactory fatigue. Comments at 71.

2. CRG 2 Heaters (EQT 5, 28)

a. Citation to Permit Terms

The Emission Rate tables list the following "emission rates" for criteria pollutants and TAPs/HAPs from these two heaters.

¹⁹ TCEQ, "Air Permit Technical Guidance for Chemical Sources, Fugitive Guidance" (APDGV2) at 12. Available at: <https://downloads.regulations.gov/EPA-HQ-OAR-2022-0730-2768/content.pdf>

Steam Superheater (EQT 5)

Pollutant	Average hourly (lb/hr)	Max hourly (lb/hr)	Annual (TPY)
CO ₂ e	-	-	-
PM ₁₀	-	0.17	-
PM _{2.5}	-	0.17	-
SO ₂	-	0.01	-
NO _x	-	3.90	-
CO	-	2.17	-
VOC	-	0.12	-
Ammonia	-	1.60	-
Formaldehyde	-	<0.001	-
n-Hexane	-	0.002	-
Zinc and compounds	-	<0.001	-

Fired Process Heater (EQT 28)

Pollutant	Average hourly (lb/hr)	Max hourly (lb/hr)	Annual (TPY)
CO ₂ e	-	-	-
PM ₁₀	-	0.14	-
PM _{2.5}	-	0.14	-
SO ₂	-	0.01	-
NO _x	-	3.19	-
CO	-	1.77	-
VOC	-	0.10	-
Ammonia	-	1.31	-
Formaldehyde	-	<0.001	-
n-Hexane	-	0.001	-
Zinc and compounds	-	<0.001	-

Initial Permit at 25-28.

Specific Requirement 12 requires CFI to conduct a tune-up of each heater once every five years. Specific Requirement 34 requires CFI to perform a performance test at each heater:

- (1) Within 180 days of initial startup (or restart-up after modification);
- (2) Within 60 days of achieving normal production of completing shakedown period;
and/or
- (3) Within 5 years, “plus or minus 6 months,” from when the previous performance test was performed.

Specific Requirement 35 specifies that these performance tests shall be conducted using EPA Method 10 for determining CO emissions from stationary sources, and that such tests must be completed within 80 percent of maximum permitted load, or within 90% of “maximum

achievable load.” Finally, Specific Requirement 36 requires CFI to install and operate continuous emission monitoring systems (“CEMS”) at these heaters to measure NOx emissions.

b. Part 70 Requirements Not Met, Issues Raised in Public Comment

Petitioners raised concerns regarding the sufficiency of the monitoring and testing requirements for the CRG Heaters in Section II.D.1.b of their comments, Comments at 57-60. This included a request that LDEQ clarify how existing requirements, such as a requirement to use sweet natural gas and the requirement to perform periodic tune-ups, were sufficient to demonstrate compliance with the hourly and annual limits at the heaters.

LDEQ’s response is labeled as Response to Comment No. 35, and may be found on pages 86-90 of the RTC. In part, LDEQ’s response explained that LDEQ believed the periodic tune-up and continuous parametric monitoring requirements of Subpart DDDDD, which are designed ensure that optimal combustion efficiency is maintained, would be sufficient to provide a reasonable assurance of ongoing compliance with the emission limits for PM, CO, and VOC. RTC at 89-90. LDEQ’s response also noted that the process heaters will be equipped with continuous oxygen trim systems, which is a system of monitors used to maintain excess air at the desired level in a combustion device, and that the use of the oxygen trims would ensure air-to-fuel ratio is continually optimized for combustion. *Id.* at 89. Because the Initial Permit does not include a requirement to use or maintain a continuous oxygen trim system and Petitioners did not have this explanation before them during the comment period, Petitioners did not comment specifically on the oxygen trim system.

c. Analysis of LDEQ’s Response

The Initial Permit currently does not have any requirement to use or maintain a continuous oxygen trim system at these process heaters, or note anywhere that these units have this system installed, despite the fact that the oxygen trim systems are apparently a key component in ensuring a continually optimized air-to-fuel ratio for combustion. The Initial Permit should be revised to include an actual specific requirement to use and maintain a continuous oxygen trim system in order to ensure that CFI maintains an optimized air-to-fuel ratio for combustion at these units.

3. **Auxiliary Boiler (EQT 0011)**

a. Citation to Permit Terms

As discussed *supra* 11-13, the emissions rate tables establish the following hourly and annual emission rates for the Auxiliary Boiler (EQT 0011):

Pollutant	Average hourly lb/hr	Max hourly lb/hr	TPY
PM10	3.38	4.22	7.39
PM2.5	3.38	4.22	7.39
SO2	0.27	0.33	0.58
NOx	4.46	6.18	19.51

CO	37.31	46.63	81.7
VOC	2.44	3.05	5.35
Ammonia	1.83	5.09	8.03

Initial Permit at 25-26.

Specific Requirements 110–111 require CFI to install and operate continuous monitoring systems (“CMS”) to continuously measure NO_x, oxygen, and carbon dioxide emissions, which Petitioners generally agree should be adequate to monitor for NO_x emissions. Specific Requirement 118 generally requires CFI to keep records of daily fuel rates, while Specific Requirements 124 and 127 require CFI to conduct a tune-up of the auxiliary boiler once every five years as specified in 40 CFR 63.7540.

b. Part 70 Requirements Not Met, Issues Raised in Public Comment

Petitioners raised this issue in Section II.D.1.f of their comments, Comments at 65-67. LDEQ responded to this comment as Response to Comment No. 39, RTC at 94-96.

c. Analysis of LDEQ’s Response

As discussed *supra* 11-13, LDEQ does not explain how a requirement to perform one tune-up every five years, with no testing or other monitoring, is sufficient to ensure compliance with the hourly or annual limits applicable to the auxiliary boiler.

III. Claim 3: The Initial Permit Impermissibly Authorizes Emissions for a “Commissioning” Period That are Higher than the Annual TPY Limits Authorized by the Underlying PSD Permit PSD-LA-859.

a. Applicable Requirement or Part 70 Requirements

All Title V permits must identify and assure compliance with all applicable requirements, and “shall specify and reference the origin of and authority for each term or condition, and identify any difference in form as compared to the applicable requirement upon which the term or condition is based.” 40 CFR 70.6(a)(1)(i). “Applicable requirements” include, among other things, any requirements of a federally enforceable SIP, and any requirements of a preconstruction permit that must be incorporated into the Title V permit. Pac. Coast Order at 7. Title V itself does not impose new substantive air quality control requirements or provide a vehicle to modify existing applicable requirements. 57 Fed. Reg. at 32251; 40 CFR 70.1(b).

b. Citation to Permit Terms

For multiple units, the Title V Permit authorizes additional emissions beyond the permitted hourly and annual limits during a 180-day “commissioning” period. Each condition includes identical language reading:

For a period of 180 days after initial startup of the facility, it is expected that there will be a commissioning period which will require additional emissions from cold starts, startups, shutdowns, and CO₂ pipeline commissioning. During the commissioning period, the commissioning scenario emissions in addition to the proposed annual emissions are authorized... as follows...

See Initial Permit Specific Requirements 5, 29, 137, 155, 168.

These conditions authorize the following emissions (TPY) during the commissioning period “in addition to the proposed annual emissions” at these units:

Unit	Specific Requirement	PM10	PM2.5	SO ₂	NO _x	CO	VOC	Ammonia
Syngas Flare & Ammonia Gas Flare	5	<0.01	<0.01	<0.01	106.87	233.11	0.51	20.26
Steam Superheater & Fired Process Heater	29	0.70	0.70	0.06	15.45	8.73	0.51	5.11
Auxiliary Boiler ²⁰	137	3.70	3.70	0.29	9.76	40.85	2.68	4.02
Ammonia Synthesis Loop Startup Heater	155	0.03	0.03	<0.01	0.16	0.26	0.02	-
CO ₂ Vent	168	-	-	-	-	13.40	130.01	123.30

c. Part 70 Requirement Not Met, Issue Raised in Public Comment

Petitioners raised numerous concerns related to the origin, calculation, and enforceability of the “commissioning” emissions in Section II.C of their comments, Comments at 47-51. Among other issues, Petitioners expressly noted that it was not clear whether LDEQ was intending to authorize “commissioning emissions” that exceeded the CFI Plant’s annual emission rates (which purportedly represented PTE), that the PSD Permit did not mention commissioning emissions at all and that these were a creation of the Title V permit, and that LDEQ did not have the authority to authorize alternate emissions during a “commissioning period” in the Title V permit that exceeded the emission levels authorized by the underlying PSD permit.

LDEQ divided its response to these comments as Response to Comments 30-33 and 82, which may be found on pages 78-84 and 148 of the Response to Comments document.

²⁰ Specific Requirement 137 also authorizes minor annual emissions of a number of TAPs from the Auxiliary Boiler.

d. Analysis of LDEQ's Response

LDEQ stated in its Response to Comment No. 30 that the proposed specific requirements “authorize emissions in excess of the annual ton per year emission rates set forth in the ‘Emission Rates for Criteria Pollutants and CO₂e’ and ‘Emission Rates for TAP/HAP & Other Pollutants’ sections of [the Initial Permit], but *not* in excess of the maximum pound per hour emission rates set forth therein.” RTC at 79.

Concerning the Title V discrepancy concerning these “Commissioning” emissions, LDEQ responded stating (1) that “[c]ommissioning represents a one-time, temporary operating scenario that is not reflective of the Low Carbon Ammonia Plant’s ‘physical or operational design’ (i.e., its potential to emit)” such that these emissions should not be considered for NSR purposes,²¹ and (2) that LDEQ “disagrees” with Petitioners, stating that LAC 33:III.507.G.5 “expressly provides” LDEQ with the authority to approve reasonably anticipated alternative operating scenarios. LDEQ attests that these emissions are not in excess of permitted limits but “instead...[are] *separate* emission limits that apply during the commissioning period.”²²

LDEQ’s response does not adequately address Petitioners’ concerns. As Petitioners’ comments noted, as currently drafted, the Initial Permit appears to be authorizing additional TPY emissions *in excess* of the annual TPY emissions contemplated by the PSD Permit. A Title V permit authorizing emissions that exceed the emission limits required by its underlying PSD permit would plainly be impermissible. This is why Petitioners specifically requested that LDEQ clarify whether its intention was, in fact, to authorize emissions in excess of the annual TPY rates identified in the emission rate tables.

LDEQ’s muddled response, which states that the Initial Permit does in fact “authorize emissions in excess of the annual ton per year emission rates” but not in excess of the maximum pound per hour emission rates, does little to clarify its intentions. If what LDEQ is intending to say is that these units are authorized to exceed the average hourly lb/hour emission rates during the commission period, but *not* the maximum hourly lb/hour or annual TPY emission limits, LDEQ must revise the permit to state so clearly and unambiguously. As it is, LDEQ’s response seems to confirm that the annual TPY emissions authorized during the commissioning period are intended to be emissions authorized *in excess* of the annual TPY emissions (which purportedly represent the PTE of the facility).

To the extent that this is the case, it is plainly impermissible. LDEQ’s authority to authorize alternative operating scenarios in a Title V permit does not include the authority to authorize emissions *in excess* of applicable requirements of the PSD Permit. A Title V Operating permit is an instrument that compiles and applies “applicable requirements” to a source. It may not independently create, expand, or relax substantive emissions limits, nor does it effectively create a mechanism for a modification of what was contemplated in the PSD permit. The CAA establishes a distinct preconstruction program, which includes the PSD analysis, that governs new emissions, and evaluates the physical or operational limitations *before* they occur, such to ensure that any CAA permit is sufficient to ensure compliance with air quality standards when

²¹ LDEQ Response at 58.

²² *Id.* at 59.

the facility is operating pursuant to the Title V operating permit. *See* 42 U.S.C. 7475 (PSD preconstruction requirements); 40 C.F.R. Part 52 (PSD implementation); *compare* 42 U.S.C. 7661a-7661f. In other words, Title V is designed to assure compliance with “all applicable requirements,” not establish them in the first instance, as the PSD program dictates what emission limits are required under the Clean Air Act. 42 U.S.C. 7661a; 40 C.F.R. 70.2, 70.6(a).

EPA’s Part 70 rules further confirm this distinction between the Title V and PSD program. While a Title V permit must include and ensure compliance with applicable requirements, including those PSD-derived limits and conditions, it may not authorize additional limitations or effectively relax the limitations set forth in the Title I process. *See* 40 C.F.R. 70.2 (defining “applicable requirement”); 70.6(a)(1)-(a)(2) (permit content and enforceability); 70.7 (permit issuance and revision procedures). Indeed, per the structure of the CAA, any increase in allowable emissions beyond that which is considered in the PSD permit would require New Source Review before such changes can be reflected in the Title V permit. 42 U.S.C. 7475; 40 C.F.R. 52.21.

LDEQ plainly cannot authorize “separate” emissions in a Title V permit that exceed those limits authorized by its underlying PSD permit; a Title V permit that reduces the stringency of an applicable requirement certainly cannot be said to “assure compliance” with the applicable requirement. *In the Matter of Century Aluminum of South Carolina, Inc.*, Order on Petition No. IV-2023-09 (Nov. 2, 2023) (citing 42 U.S.C. 7661c(a); 40 C.F.R. 70.6(a)(1)).

At a minimum, EPA must require LDEQ to revise the Initial Permit to make explicitly clear that emissions during the commissioning period *cannot exceed* the average hourly lb/hr emission rates, the maximum hourly lb/hr emission rates, or the total annual TPY for each unit listed in the CP Emission Rates Table; or alternatively, deny the permit until LDEQ has incorporated commissioning emissions into the PSD permit through the Facility’s PTE analysis. Until and unless these emissions are authorized in the PSD Permit, they are not applicable requirements that can be incorporated into the Title V permit.

CONCLUSION

For the reasons set forth above, EPA must object to the Initial Permit. As clearly raised in Petitioners’ Comments, the Permit contains numerous short-term and annual emission limits that are unenforceable as a legal or practical matter, does not contain adequate monitoring, testing, recordkeeping, and reporting requirements to ensure continuous compliance with numerous short-term and long-term emission limits, and impermissibly authorizes emissions for a “commissioning period” that are in excess of the limits authorized by the underlying PSD Permit. Accordingly, Petitioners respectfully request EPA to object to the issuance of the Permit and require that LDEQ revise the Initial Permit to:

- (1) Ensure that all hourly and annual emission rates listed in the permit’s Emission Rates tables are enforceable as a legal and practical matter;
- (2) Include adequate testing, monitoring, recordkeeping, or reporting requirements sufficient to assure continuous compliance with the hourly and annual limits applicable to units identified above; and

- (3) Make explicitly clear that emissions during the commissioning period *cannot exceed* the average hourly lb/hr emission rates, the maximum hourly lb/hour emission rates, or the total annual TPY for each unit listed in the CP Emission Rates Table; or alternatively, remove the authorizations altogether until such time as LDEQ has revised the underlying PSD Permit to incorporate these additional limits as applicable requirements that can properly be incorporated into the Initial Permit.

Respectfully submitted this 4th day of September, 2026,

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Enclosed

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| <i>Attachment 1</i> | Title V Operating Permit No. 0180-00237-V0 (“Initial Permit”) |
| <i>Attachment 2</i> | Prevention of Significant Deterioration Permit PSD-LA-859 (“PSD Permit”) |
| <i>Attachment 3</i> | Petitioners’ Comments on the Initial Permit and PSD Permit (Dec. 5, 2025) |
| <i>Attachment 4</i> | Comments of Petra Pless, D.Env., accompanying Petitioners’ Comments (“Pless Report”) |