

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

IN THE MATTER OF:)
)
SCAQMD Title V Operating Permit)
) Permit No. 181667
For Torrance Refining Company LLC’s)
Petroleum Refinery in Torrance,)
California)
)
Issued by the South Coast Air Quality)
Management District)
)

**PETITION TO OBJECT TO THE TITLE V OPERATING PERMIT FOR
THE TORRANCE REFINING COMPANY LLC**

Under § 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), and 40 C.F.R. § 70.8(d), Del Amo Action Committee (“Petitioner”)¹ petitions the Administrator of the U.S. Environmental Protection Agency (“EPA”) to object to the above-referenced proposed Title V permit issued by the South Coast Air Quality Management District (“District”) for the petroleum refinery owned and operated by Torrance Refining Company LLC (“Torrance Refinery” or “Refinery”) in Torrance, California.

The proposed Title V permit for the Torrance Refinery fails to comply with Title V requirements. Specifically, the permit fails to include monitoring and testing requirements sufficient to ensure compliance with applicable limits; contains unlawful exemptions to major New Source Review limits for periods of startup, shutdown, and malfunction; and neglects to create a compliance plan to address recurring and ongoing violations of State Implementation Plan (“SIP”) approved rules at the Refinery, among other deficiencies.

The Torrance Refinery operates within the South Coast Air Basin, which has the dirtiest air in the country as the Basin remains in extreme nonattainment of various air quality standards established under the federal Clean Air Act. The Refinery is surrounded by overburdened² low-income communities of color and operates near schools and other sensitive receptors. These

¹ The undersigned attorneys submit this petition on behalf of the Petitioner.

² The term “overburdened” is used to describe “the minority, low-income, tribal and indigenous populations or communities in the United States that potentially experience disproportionate environmental harms and risks due to exposures or cumulative impacts or greater vulnerability to environmental hazards. This increased vulnerability may be attributable to an accumulation of negative and lack of positive environmental, health, economic, or social conditions within these populations or communities.” EPA, *What is the Definition of “Overburdened Community” That is Relevant for EPA Actions and Promising Practices?*, <https://www.epa.gov/caa-permitting/what-definition-overburdened-community-relevant-epa-actions-and-promising-practices> [<https://perma.cc/5THJ-6GAG>].

environmental justice concerns require EPA’s focused attention to confirm adequate monitoring and conditions are in place to ensure compliance.

BACKGROUND

I. THE PROPOSED PERMIT ON WHICH THIS PETITION IS BASED

This petition requests that the EPA object to the proposed Title V permit for Torrance Refining Company LLC (Facility ID No. 181667), which operates a petroleum refinery located in Torrance, California. The permit action at issue here is a permit renewal. The application number is 612922.

The District released the draft Title V permit renewal for public comment on August 30, 2022.³ On behalf of Petitioner and in consultation with technical expert Dr. Ranajit (Ron) Sahu, Ph.D., QEP, CEM, Earthjustice submitted comments to the District regarding the draft permit on November 16, 2022.⁴ The Torrance Refinery Action Alliance joined the comments. These comments requested that the District address various technical and legal deficiencies in the draft permit, including inadequate monitoring and testing requirements that do not ensure compliance with applicable limits; failure to provide standards or emission limits for various pieces of equipment, creating challenges for identifying violations; unauthorized loopholes during startup, shutdown, and malfunction periods that allow for excess pollution into nearby communities without consequences; and lack of a compliance plan to address recurring and ongoing rule violations by the Refinery, among other deficiencies.⁵ Furthermore, the comments encouraged the District to host a public workshop to discuss the permit renewal process and draft permit, so that the District could listen to and respond to community concerns regarding the Refinery and draft permit.⁶ These comments raised all objections discussed in this petition.

On March 29, 2024, the District issued a response to Petitioner’s comments and released a proposed Title V permit, making certain administrative amendments to the permit; however, the District disagreed with Petitioner’s substantive comments, and the District’s proposed permit did not resolve the concerns raised in this petition.⁷ The District sent the proposed permit and response to comments to EPA for a 45-day review period.⁸ In turn, based on its review of the District’s submission, EPA provided the District with comments on May 8, 2024.⁹ EPA identified insufficient details in the proposed permit record and recognized that the proposed permit was substantively inadequate to comply with federal regulations.¹⁰ For instance, regarding particulate

³ **Ex. A**, South Coast AQMD’s Responses to Del Amo Action Committee’s Comments (“RTC”) at 1 (Mar. 29, 2024).

⁴ **Ex. B.1**, Public Comments by Del Amo Action Committee (“DAAC Public Comments”) (Nov. 16, 2022); *see also* CV of Dr. Ranajit (Ron) Sahu, Ph.D., QEP, CEM (noting Dr. Sahu’s qualifications) (**Ex. 1** to DAAC Public Comments).

⁵ DAAC Public Comments, *supra* note 4 at 5.

⁶ *Id.* at 5.

⁷ *See* RTC, *supra* note 3.

⁸ 42 U.S.C. § 7661d(b)(1); 40 C.F.R. § 70.8(c)(1).

⁹ **Ex. C**, EPA Comments on Proposed Permit Package (“Region 9 Comments”) (May 8, 2024).

¹⁰ *Id.*

matter 10 micrometers and smaller (“PM₁₀”) emission limits under District Rule 1105.1 for the Refinery’s fluid catalytic cracking unit (“FCCU”), EPA commented that the District must either provide gap filling or adequate justification for using an annual source test for monitoring, which is not sufficient to ensure compliance on an hourly basis.¹¹ Further, EPA wrote that, for various units, the District should consider five factors to determine appropriate monitoring to ensure compliance with emissions limits that are averaged over a short time period (e.g., 15 minutes, 60 minutes, and 3-hours).¹²

The District responded to the EPA’s comments, noting that EPA did not formally object and the Title V permit renewal was issued on May 30, 2024.¹³ The District made one administrative revision to the permit but disagreed with EPA’s substantive comments.¹⁴

Petitioner is timely filing this petition by the deadline of July 12, 2024, to petition the EPA to object to the Proposed Title V Permit. This date is within the 60 days of the expiration of EPA’s 45-day review period, which ended on May 13, 2024.¹⁵

II. PETITIONER

Del Amo Action Committee is a non-profit community-based environmental justice organization located in an unincorporated area of Los Angeles County. Del Amo is situated between Torrance, West Carson, Gardena, and Harbor City.¹⁶ Del Amo Action Committee has members and organizing efforts in Torrance, California, where the Refinery is located. Del Amo Action Committee organizes its neighborhood, comprised predominantly of blue-collar workers, people of color and immigrant communities. The Del Amo Action Committee aims to empower the community through education about environmental preservation and contamination, and advocacy against toxic contamination and hazardous waste disposal.

III. GENERAL TITLE V PERMIT REQUIREMENTS

The Clean Air Act’s purpose is to “protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population.”¹⁷ Title V was enacted as a part of the 1990 Clean Air Act Amendments to increase compliance and enforcement with the statute.¹⁸ To protect public health and the environment, the

¹¹ *Id.* See also 40 C.F.R. § 70.6(a)(3)(i)(B).

¹² Region 9 Comments, *supra* note 9. See also 40 C.F.R. § 70.6(a)(3)(i)(B).

¹³ **Ex. D**, South Coast AQMD Response to EPA Comments (“District Response to Region 9”) (May 30, 2024). This email should not be considered part of the permit record, since it was sent after the District had already issued the proposed permit. See 40 C.F.R. § 70.13. Out of an abundance of caution, Petitioner addresses this response to EPA’s comments on the proposed permit.

¹⁴ *Id.*

¹⁵ 42 U.S.C. § 7661d(b)(2); see also Region 9 Comments, *supra* note 9; **Ex. E**, EPA Email Confirming Start of Petition Period and End of 45-Day Review Period (May 9, 2024).

¹⁶ Del Amo Action Committee, *About Us*, <https://delamoactioncommittee.org/about-us/> [https://perma.cc/MHF3-YZS7].

¹⁷ 42 U.S.C. § 7401(b)(1).

¹⁸ 42 U.S.C. § 7661c(a)–(c); S. Rep. No. 101-228, at 11(1989), as reprinted in 1990 U.S.C.C.A.N. 3385, 3397.

Clean Air Act prohibits stationary sources of air pollution from operating without or in violation of a Title V permit, which must include conditions to “assure compliance” with all applicable requirements.¹⁹ These “applicable requirements” include all standards, emissions limits, and other requirements under the Clean Air Act.²⁰ A Title V permit should “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.”²¹ To achieve this objective, Title V permits must include, among other things, testing, monitoring, reporting, and recordkeeping requirements to assure that the stationary source complies with the permit’s terms and conditions.²² Indeed, Title V requires that a “monitoring requirement insufficient ‘to assure compliance’ with emission limits has no place in a permit unless and until it is supplemented by more rigorous standards.”²³

When applicable requirements do not contain periodic monitoring, the permitting authority must add “periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the permit.”²⁴ In evaluating the sufficiency of monitoring requirements, EPA has, on occasion, stated that there are five factors a permitting authority should consider as a starting point to determine appropriate monitoring: (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.”²⁵ Moreover, the mere existence of periodic monitoring requirements may not be sufficient in some cases, such as annual testing to ensure compliance with a daily emission limit.²⁶ For this reason, EPA’s regulations act as a “gap filler” and require that the permitting authority supplement a periodic monitoring requirement inadequate to assure compliance.²⁷

If a permitting authority proposes a Title V permit that does not include the necessary provisions to assure compliance with all applicable Clean Air Act requirements, EPA must object to the permit’s issuance before the end of its 45-day-review period.²⁸ If EPA does not make such an objection to the permit, then “any person may petition the Administrator within 60 days after the expiration of the Administrator’s 45-day review period . . . to take such action.”²⁹ The Clean

¹⁹ 42 U.S.C. § 7661c(a), (c); 40 C.F.R. § 70.6(a)(1), (c)(1).

²⁰ 40 C.F.R. § 70.2.

²¹ Operating Permit Program, Final Rule, 57 Fed. Reg. 32,250, 32,251 (July 21, 1992).

²² 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1).

²³ See *Sierra Club v. EPA*, 536 F.3d 673, 677 (D.C. Cir. 2008).

²⁴ 40 C.F.R. § 70.6(a)(3)(i)(B).

²⁵ *In re United States Steel Corporation, Edgar Thomson Plant*, Order on Petition No. III-2023-15 at 12 (EPA Feb. 7, 2024); Region 9 Comments, *supra* note 9 at 14 (this reference is to the order attached to EPA’s comments to South Coast AQMD).

²⁶ *Sierra Club v. EPA*, 536 F.3d at 675–77.

²⁷ *Id.* at 675; 40 C.F.R. § 70.6(c)(1).

²⁸ 42 U.S.C. § 7661d(b)(1); 40 C.F.R. § 70.8(c)(1).

²⁹ 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d).

Air Act 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.³⁰ In other words, although a petitioner has the burden to demonstrate that the permit is objectionable, once that showing is made, EPA’s duty to object is mandatory. EPA must grant or deny a petition to object within 60 days of its filing.³¹

GROUNDS FOR OBJECTION

For the reasons detailed below, EPA must object to the proposed Title V permit for the Torrance Refinery because the permit fails to meet the requirements of the Clean Air Act and Title V regulations.

I. ENVIRONMENTAL JUSTICE CONCERNS MANDATE INCREASED FOCUS AND ACTION BY EPA TO ENSURE THAT THE PERMIT’S PROVISIONS ARE STRONG AND COMPLY WITH TITLE V AND OTHER CLEAN AIR ACT REQUIREMENTS.....	6
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³⁰ 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d); *see also N.Y. Pub. Interest Group v. Whitman*, 321 F.3d 316, 333 n.12 (2d Cir. 2003) (“EPA’s duty to object to non-compliant [Title V] permits is nondiscretionary”).

³¹ 42 U.S.C. §7661d(b)(2); 40 C.F.R. § 70.8(d).

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I. ENVIRONMENTAL JUSTICE CONCERNS MANDATE INCREASED FOCUS AND ACTION BY EPA TO ENSURE THAT THE PERMIT’S PROVISIONS ARE STRONG AND COMPLY WITH TITLE V AND OTHER CLEAN AIR ACT REQUIREMENTS.

As Petitioner’s comments explained, the areas surrounding the Refinery are communities of color with a large, dense, and low-income population that is overburdened by hazardous and other air pollution from various industrial operations and legacy contamination.³² As a result,

³² DAAC Public Comments, *supra* note 4, at 5–16.

this permit involves significant environmental justice concerns and requires particular focus and action by EPA to ensure that the surrounding community can determine whether the Refinery is actually meeting its limits.

The Refinery is located within the City of Torrance, California. Communities within five miles of the Torrance Refinery are approximately 75 percent people of color and low-income with an average income of \$41,405 per capita.³³ A significant percentage of these residents are sensitive receptors, with about 23 percent age 17 and younger and 12 percent age 65 years and older.³⁴ These communities have a higher pollution burden and population vulnerability than 95 percent of all other census tracts in California, including ranking among the most polluted for exposure to ozone, toxic air releases, and PM_{2.5} and proximity to hazardous waste and Superfund sites.³⁵

Torrance residents are highly environmentally overburdened. Torrance sits within the South Coast Air Basin, which has the dirtiest air in the United States and is in “extreme” nonattainment of several air quality standards under the Clean Air Act, including federal ozone standards.³⁶ Ozone compromises children’s lung function, and causes aggravated lung diseases, increased risk of heart attacks, and increased mortality.³⁷ Moreover, communities around the Refinery are directly exposed to substantial amounts of criteria pollutants and ozone precursors from oil refining operations, which have long-lasting and severe health impacts, including reduced lung function, asthma, irregular heartbeat, and stroke.³⁸ The Refinery is also a major

³³ EPA, ECHO, Detailed Facility Report for the Torrance Refining Company (FRS ID 110069359063): Demographic Profile of Surrounding Area (5 miles), <https://echo.epa.gov/detailed-facility-report?fid=110069359063> (Nov. 16, 2022) (**Ex. 2** to DAAC Public Comments); Earthjustice, *Crossing the Fenceline* at 7, tbl.1 (2022), https://earthjustice.org/wp-content/uploads/fenceline_2022.pdf [<https://perma.cc/45DN-FXNP>].

³⁴ EPA, ECHO, Detailed Facility Report for the Torrance Refining Company, *supra* note 33.

³⁵ Earthjustice, *Crossing the Fenceline*, *supra* note 33, at 7 tbl.1; EPA, ECHO, Detailed Facility Report for the Torrance Refining Company (FRS ID 110069359063), *supra* note 33.

³⁶ South Coast AQMD, *2022 Air Quality Management Plan (AQMP)*, <http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan> [<https://perma.cc/Y2QH-B5Q4>].

³⁷ EPA, *Health Effects of Ozone Pollution*, <https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution> [<https://perma.cc/9WAA-PUT2>] (last updated Apr. 9, 2024); *see also* Ind. Dept. of Env’t Mgmt., Fact Sheet: Criteria Pollutants Ozone (O₃), https://www.in.gov/idem/files/factsheet_oaq_criteria_o3.pdf [<https://perma.cc/NE5E-9A76>].

³⁸ **Ex. F**, South Coast AQMD, AER/AB2588 Database, Torrance Refining Company 2021, <http://www3.aqmd.gov/webapp/aearesearch/search.aspx> (Select Reporting Year “2021”, Facility ID “181667”); Cal. Office of Env’t Health Hazard Assessment (“OEHHA”), *Analysis of Refinery Chemical Emissions and Health Effects* at 21–26, A-1 to A-23 (Mar. 2019), <https://oehha.ca.gov/media/downloads/faqs/refinerychemicalsreport032019.pdf> [<https://perma.cc/8CBX-RAAP>]; **Ex. G**, Michelle C. Turner et al., *Long-Term Ozone Exposure and Mortality in a Large Prospective Study*, 193 *Am. J. Respir. Crit. Care Med.* at 1140 (May 2016), <https://doi.org/10.1164/rccm.201508-1633OC> (impact of long-term ambient ozone on respiratory and circulatory mortality risks).

source of benzene and other toxic air contaminants that have confirmed impact on human health, including cancer and development and reproductive harms.³⁹

In addition to its proximity to the Refinery, the Torrance community lives near two major Superfund sites: the Del Amo Facility and Montrose Chemical Corporation. The Del Amo Facility previously produced various industrial products, including synthetic rubber, styrene, and butadiene.⁴⁰ The site closed in 1972, and cleanup has been active since April 1996.⁴¹ Montrose Chemical Corporation was previously the largest manufacturer of dichloro-diphenyl-trichloroethane (“DDT”) in the country, operating on a 13-acre site from 1947 to 1982.⁴² Montrose released DDT, chlorobenzene, and other byproducts into the soil, groundwater, and drainage channels.⁴³ The location was designated a Superfund site in 1989, and cleanup has been underway since April 1996.⁴⁴ The pollution burden created by the Refinery’s operations increases the cumulative risk for Torrance residents who are exposed to the aftermath of these contaminated sites.

Indoor areas by the Refinery also have heightened concentrations of pollutants due to legacy contamination and other industrial operations in the area. In an indoor air sampling of homes near the Refinery to assess vapor intrusion from legacy pollution, the EPA found “seven VOCs that exceed[ed] long-term health protective levels” inside many homes.⁴⁵ These findings are in line with similar studies of other refinery communities. For example, researchers studied PM_{2.5} concentrations inside homes at the fenceline of a refinery in Richmond, California—in about half of the homes, concentrations exceeded California’s annual ambient air quality standard.⁴⁶ In a study of rates of various cancers near oil refineries in Texas, researchers found

³⁹ Earthjustice, *Crossing the Fenceline*, *supra* note 33 at 6; OEHHA, *Analysis of Refinery Chemical Emissions and Health Effects*, *supra* note 38, at 21–26, A-1 to A-23.

⁴⁰ Cal. Dept. of Toxic Substances Control (“DTSC”), EnviroStor, *Del Amo Facility*, https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19300230 [<https://perma.cc/U4JM-J48A>].

⁴¹ *Id.*

⁴² DTSC, EnviroStor, *Montrose Chemical Corporation* (19280024), https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19280024 [<https://perma.cc/2FA2-EDYU>]; EPA, *Montrose Chemical Corporation Cleanup Activities*, <https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Cleanup&id=0900993#bkground> [<https://perma.cc/CA9Y-XUKH>].

⁴³ DTSC, EnviroStor, *Montrose Chemical Corporation*, *supra* note 42; EPA, *Montrose Chemical Corporation Cleanup Activities*, *supra* note 42.

⁴⁴ DTSC, EnviroStor, *Montrose Chemical Corporation*, *supra* note 42; EPA, *Montrose Chemical Corporation Cleanup Activities*, *supra* note 42.

⁴⁵ EPA, *Montrose & Del Amo Superfund Sites* (Apr. 2016), <https://semspub.epa.gov/work/09/100007428.pdf> [<https://perma.cc/MQ6G-VFEX>].

⁴⁶ Julia Green Brody et al., *Linking Exposure Assessment Science with Policy Objects for Environmental Justice and Breast Cancer Advocacy: The Northern California Household Exposure Study*, 99 Am. J. Public Health S600 at S605-606 (2009), <https://doi.org/10.2105/AJPH.2008.149088> (Ex. 3 to DAAC Public Comments).

that proximity to the “refinery was associated with a statistically significantly increased risk of incident cancer diagnosis across all cancer types.”⁴⁷

In addition to exposure to high levels of air pollution, residents near the Refinery are subjected to hazardous life-threatening conditions due to the inherently dangerous nature of oil refining operations. In 2015, for example, an explosion in the Refinery’s Electrostatic Precipitator (“ESP”) sent a large piece of debris right by a chemical tank of hydrofluoric acid that could have seriously harmed or killed people.⁴⁸ The U.S. Chemical Safety and Hazard Investigation Board concluded the “incident was preventable” and noted the Refinery’s inadequate process safety management program that resulted in this near miss incident.⁴⁹ Following the explosion, the California Division of Occupational Safety and Health (“Cal/OSHA”) issued over 19 citations and concluded the Refinery “intentionally failed to comply with state safety standards.”⁵⁰ Furthermore, Cal/OSHA found that management at the Refinery knew about the risk of explosion with the ESP but did not fix the issue.⁵¹

Due to these environmental justice concerns, EPA—in reviewing this petition to object to the Title V permit for the Refinery—must devote increased, focused attention to ensure that the Refinery complies with all Title V requirements. In responding to prior Title V permit petitions, EPA has recognized this obligation. *See, e.g.*, Granite City Works Order (because of “potential environmental justice concerns” raised by the fact that the “immediate area around the . . . facility is home to a high density of low-income and minority populations and a concentration of industrial activity,” “[f]ocused attention to the adequacy of monitoring and other compliance assurance provisions [was] warranted”)⁵² (citing in part to Executive Order 12898);⁵³

⁴⁷ **Ex. H**, Stephen B. Williams et al., *Proximity to Oil Refineries and Risk of Cancer: A Population-Based Analysis*, 4 JNCI Cancer Spectr. at 1 (Oct. 2020), <https://doi.org/10.1093/jncics/pkaa088>; *see also id.* at 4–6.

⁴⁸ Tony Barboza, *Air Board Kills Regulation of Dangerous Refinery Acid in Favor of Oil Industry Plan*, L.A. Times (Sept. 6, 2019) (**Ex. 5** to DAAC Public Comments); Shannon McNary, *Five Years After Torrance Refinery Blast, Residents Still Want Chemical Ban*, LAist (Feb. 18, 2020) (**Ex. 6** to DAAC Public Comments); *see also* U.S. Chem. Safety and Hazard Investigation Bd. (“CSB”), Rep. No. 2015-02-I-CA, *ExxonMobil Torrance Refinery, Electrostatic Precipitator Explosion Investigation Report* at 23 (May 2017), https://www.csb.gov/assets/1/20/exxonmobil_report_for_public_release.pdf?15813 [<https://perma.cc/FBQ8-9CP2>].

⁴⁹ CSB, Rep. No. 2015-02-I-CA, *ExxonMobil Torrance Refinery, Electrostatic Precipitator Explosion Investigation Report*, *supra* note 48 at 56.

⁵⁰ **Ex. I**, Jaelyn Cosgrove and Irfan Khan, *Torrance Residents Fear Continued Use of Hydrofluoric Acid at Torrance Refinery Endangers Community*, LA Times at 3–4 (Feb. 17, 2024), <https://www.latimes.com/california/story/2024-02-17/torrance-residents-fear-use-of-hydrofluoric-acid-at-torrance-refinery-endangers-community>.

⁵¹ *Id.* at 4.

⁵² *In re United States Steel Corp. – Granite City Works*, Order on Petition No. V-2011-2 (“Granite City Works Order”) at 4–6 (EPA Dec. 3, 2012), https://www.epa.gov/sites/default/files/2015-08/documents/uss_2nd_response2009.pdf [<https://perma.cc/C7AZ-8985>].

⁵³ Exec. Order No. 12,898, 59 Fed. Reg. 7,629 (Feb. 11, 1994); *see also* EPA, No. EPA-300-B-1-6004, *EJ 2020 Action Agenda* at 1, 9, 32 (Oct. 2016), <https://www.epa.gov/sites/default/files/2016->

ExxonMobil Order (acknowledging that the area surrounding the refinery is home to a high density of low-income and minority populations and a concentration of industrial activity and noting that EPA had given “focused attention to the adequacy of monitoring” (as well as other concerns raised by the Petitioners))⁵⁴; Valero Houston Order (same).⁵⁵

In its response to Petitioner’s comments, the District acknowledged the environmental justice concerns.⁵⁶ The District did not dispute that: (1) the communities near the Torrance Refinery are predominantly communities of color with a large, dense, low-income population; (2) these communities include large numbers of residents who face increased vulnerability due to their age; (3) the Refinery annually emits many tons of hazardous air and other criteria pollutants; and (4) the communities near the Refinery are also burdened by multiple other industrial sources and legacy contamination. Instead, the District argued, based on guidance from EPA, that Title V permitting “does not appear to be an effective mechanism for establishing new, substantive control requirements to address environmental considerations regarding impacts on or participation by communities with environmental justice concerns.”⁵⁷ The District’s response is misleading and misapprehends EPA’s authority.

The guidance the District quotes states that “generally” Title V does not authorize “direct imposition of substantive emission control requirements”, but acknowledges the public’s role in raising environmental justice considerations that might otherwise be overlooked by permitting authorities.⁵⁸ This public participation is critical to not only ensure that “each title V permit contains all of a source’s applicable requirements” but also for permitting authorities to impose “other conditions necessary to assure the source’s compliance with those requirements.”⁵⁹ As EPA has recognized, the “determination whether monitoring is adequate in a particular circumstance generally is a context-specific determination, made on a case-by-case basis.”⁶⁰ As

05/documents/052216_ej_2020_strategic_plan_final_0.pdf [https://perma.cc/XC2P-GKSJ]; EPA, *Plan EJ 2014: Considering Environmental Justice in Permitting* at 2 (Sep. 2011), <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100ETRR.PDF?Dockey=P100ETRR.PDF> [https://perma.cc/55PN-KSGS].

⁵⁴ *ExxonMobil Fuels & Lubricant Co.*, Order on Petition Nos. VI-2020-4, VI-2020-6, VI-2021-1, and VI-2021-2 (“Exxon Baton Rouge Order”) at 11–12 (EPA Mar. 18, 2022), https://www.epa.gov/system/files/documents/2022-04/exxonmobil-baton-rouge-order_3-18-22.pdf [https://perma.cc/ZG6V-29FV].

⁵⁵ *Valero Refining-Texas*, Order on Petition No. VI-2021-8 (“Valero Houston Order”) at 9–11 (EPA June 30, 2022), https://www.epa.gov/system/files/documents/2022-07/Valero%20Houston%20Order_6-30-22_0.pdf [https://perma.cc/B4SH-KJBX].

⁵⁶ RTC, *supra* note 3 at 3.

⁵⁷ *Id.*

⁵⁸ EPA, *Legal Tools to Advance Environmental Justice*, No. 360R22001 at 49, <https://www.epa.gov/system/files/documents/2022-05/EJ%20Legal%20Tools%20May%202022%20FINAL.pdf> [https://perma.cc/QX23-6T48].

⁵⁹ *Id.*

⁶⁰ *In re Northeast Maryland Waste Disposal Authority – Montgomery County Resource Recovery Facility*, Order on Petition No. III-2019-2 at 8–9 (EPA Dec. 11, 2020), https://www.epa.gov/sites/default/files/2020-12/documents/montgomery_response2019.pdf [https://perma.cc/E8YN-KEZE].

part of that case-by-case determination, environmental justice considerations, including the demographics of the surrounding community and amount of pollution burden borne by the community, are factors that should be considered in assessing whether a particular facility's monitoring are adequate to ensure compliance with the relevant applicable requirements.

In sum, the District's response to comments does not rebut the fact that this permit involves significant environmental justice concerns—and does nothing to change EPA's responsibility to ensure that the Title V permit at issue here fully complies with the Clean Air Act and to protect the overburdened, low-income communities of color near the Refinery from disproportionate adverse impacts of air pollution from oil refining operations.

II. THE PROPOSED PERMIT FAILS TO INCLUDE ADEQUATE MONITORING, TESTING, REPORTING AND RECORDKEEPING REQUIREMENTS TO ASSURE COMPLIANCE WITH APPLICABLE LIMITS.

As discussed below, the proposed permit cannot ensure compliance with limits for key units at the Torrance Refinery, including the FCCU, flares, heaters, and boilers.

A. The Proposed Permit's Monitoring and Testing Requirements Cannot Ensure Compliance with SIP PM₁₀ Limits for the FCCU.

As Petitioner's comments explained, the proposed Title V permit does not include adequate monitoring, testing, reporting or recordkeeping requirements to ensure compliance with three different PM₁₀ limits for the Refinery's FCCU (D151).⁶¹ Specifically, in violation of 40 C.F.R. § 70.6(c)(1), as well as the requirements from 42 U.S.C. §§ 7661c(a) and 7661c(c), the proposed permit's monitoring, testing, and other requirements cannot ensure compliance with the SIP PM₁₀ limits—from District Rule 1105.1⁶²—of 0.005 grains/dscf, 2.8 lbs/1000 barrels of fresh feed, and 3.6 lbs/hour.⁶³ These limits apply as follows: the 2.8 lbs/1000 bbl limit applies only when the fresh feed to the FCCU is 105,000 barrels per day or less; the 0.005 grains/dscf limit applies only when the flow rate is 320,000 dscfm or less; and the 3.6 lbs/hour limit applies only when the fresh feed exceeds 105,000 barrels per day and the flow rate exceeds 320,000 dscfm.⁶⁴

In an attempt to ensure compliance with these PM₁₀ limits, the proposed permit requires annual performance tests with a “District-approved averaging time.”⁶⁵ The tests are to be

⁶¹ DAAC Public Comments, *supra* note 4 at 17–22.

⁶² Rule 1105.1 has been approved by EPA as part of the SIP. 40 C.F.R. § 52.220(c)(331)(i)(B)(2).

⁶³ See **Ex. J**, Proposed Permit at 35 (note that all page number references to the proposed permit package are to the PDF pagination of this exhibit). These limits are for the filterable—*i.e.*, not including the condensable—portion of PM₁₀. Rule 1105.1(d)(1). Because Rule 1105.1(e)–(f) lists certain testing and parametric monitoring requirements for PM₁₀ from the FCCU but those requirements cannot ensure compliance with the PM₁₀ limits, C.F.R. § 70.6(c)(1) requires the District to supplement the SIP's original testing requirements to add monitoring and other requirements sufficient to ensure compliance.

⁶⁴ See Proposed Permit, *supra* note 63 at 303–04 (Device Conditions A99.1–99.3).

⁶⁵ *Id.* at 364–67 (Device Condition D29.4). Although the proposed permit lists the FCCU itself (Unit ID. No. D151) as being subject to the PM₁₀ limits (Proposed Permit at 35), the permit lists the testing and

“conducted when the FCCU is operating with at least 80 percent of total feed rate (or 84 thousand barrels per day of total feed) with the two ESPs in full operating mode.”⁶⁶

Additionally, in an attempt to ensure compliance with the PM₁₀ limits, the proposed permit requires certain parametric monitoring, which involves continuously monitoring the total power input across the ESPs.⁶⁷ The Refinery is required to record power input values at least hourly.⁶⁸ The proposed permit requires the Refinery to maintain the “ESP daily average voltage and secondary current (or total power input)” at levels “greater than or equal to the average value in the most recent source test which demonstrated compliance with the emission limits.”⁶⁹ The permit additionally provides: “If the daily average ESP total power input falls below the level measured in the most recent source test which demonstrated compliance with the emission limit, a source test shall be performed within 90 days at the new minimum daily average ESP total power level.”⁷⁰

The proposed permit also requires monitoring the temperature of the flue gas at the inlet to the FCCU’s two ESPs, as well as the flow rate in scfm (wet) of the flue gas,⁷¹ but the District, in its response to comments, indicates that these parameters are not monitored to ensure compliance with the SIP PM₁₀ limits; they are monitored to determine which of the three SIP PM₁₀ limits apply at any given time.⁷² Indeed, the proposed permit does not require the Refinery to keep the flue gas inlet temperature to the ESPs or the flow rate of the flue gas within any particular operating ranges, much less operating ranges from a passing performance test.

These testing and monitoring provisions cannot ensure compliance with the SIP PM₁₀ limits of 0.005 grains/scf, 2.8 lbs/1000 barrels of fresh feed and 3.6 lbs/hour for four different reasons:

First, the proposed permit does not require testing or monitoring with sufficient frequency to ensure compliance with the hourly limit of 3.6 lbs/hour or the continuously applicable limits of 0.005 grains/scf and 2.8 lbs/1000 barrels of fresh feed. An annual performance test cannot ensure compliance with hourly or continuously applicable limits.⁷³ EPA Region 9 recognized this in commenting on the proposed permit’s inadequate monitoring for the

monitoring requirements as being applicable to the FCCU’s two electrostatic precipitators (ESPs) (Unit ID Nos. C2283, C2284, *see* Proposed Permit at 39–40)—not the FCCU itself. As discussed below, this is one of the reasons the proposed permit cannot ensure compliance with the PM₁₀ limits.

⁶⁶ Proposed Permit, *supra* note 63 at 366 (Device Condition D29.4).

⁶⁷ *Id.* at 377–78 (Device Condition D90.10).

⁶⁸ *Id.* at 378.

⁶⁹ *Id.* at 353–54 (Device Condition C12.2).

⁷⁰ *Id.* at 354.

⁷¹ *Id.* at 376–77 (Device Conditions D90.8 – 90.9).

⁷² RTC, *supra* note 3 at 3–4, 5.

⁷³ *Cf. Sierra Club v. EPA*, 536 F.3d 673, 675 (annual testing is unlikely to assure compliance with a daily emission limit).

SIP PM₁₀ limits: “As the commenter correctly asserts, one cannot determine compliance on an hourly basis with an annual source test.”⁷⁴

PM rates from FCCUs are variable and can change from hour to hour, week to week, and month to month based on the condition of the FCCU’s controls, the additives used to achieve NO_x and SO₂ reductions (including agents such as ammonia for NO_x control, which the Refinery clearly uses given its selective catalytic reduction (“SCR”) systems and ammonia slip limit), the manner in which the regenerator is operating, the temperature of regeneration, and other factors. Here, an annual test would leave undetected any violations of the three PM₁₀ limits that occur in the 364-plus days in between tests.

In its recent final revised “technology review” of the National Emission Standards for Hazardous Air Pollutants (“NESHAP”) from power plants (also known as the Mercury and Air Toxics Standards or “MATS”), EPA required coal-fired power plants to demonstrate compliance with a limit for filterable PM (as a surrogate for non-mercury metals) through continuous emission monitoring systems (“CEMS”) and removed the ability of plants to demonstrate compliance through periodic stack tests.⁷⁵ There, EPA explained why CEMS were far preferable to periodic stack tests—even when stack tests are coupled with parametric monitoring, which MATS previously allowed⁷⁶—for ensuring compliance with the continuously applicable MATS limits. That same reasoning applies here in the context of the PM₁₀ emissions from the Refinery’s FCCU and helps demonstrate why the proposed permit’s testing and parametric monitoring requirements are inadequate:

Continuous measurement of emissions accounts for changes to processes and fuels, fluctuations in load, operations of pollution controls, and equipment malfunctions. By measuring emissions across all operations, power plant operators and regulators can use the data to ensure controls are operating properly and to assess compliance with relevant standards. Because CEMS enable power plant operators to quickly identify and correct problems with pollution control devices, it is possible that continuous monitoring could lead to lower fPM emissions for periods of time between otherwise required intermittent testing, currently up to 3 years for some units.

To illustrate the potentially substantial differences in fPM emissions between intermittent and continuous monitoring, the EPA analyzed emissions at several EGUs for which both intermittent and continuous monitoring data are available For example, one 585-MW bituminous-fired EGU, with a cold-side ESP for PM control . . . is currently required to demonstrate compliance with an emission standard of 0.015 lb/MMBtu

⁷⁴ Region 9 Comments, *supra* note 9 at 1–2.

⁷⁵ National Emission Standards for HAPs, Final Rule, 89 Fed. Reg. 38,508, 38,535–37 (May 7, 2024).

⁷⁶ 40 C.F.R. § 63, Subpt. UUUUU, Tbl. 7. MATS still allows integrated gasification combined cycle units to use parametric monitoring in lieu of PM CEMS. *Id.*

using intermittent stack testing every 3 years. In the most recent . . . compliance report, submitted on February 25, 2021, the unit submitted the result of an intermittent stack test with an emission rate of 0.0017 lb/MMBtu. In the subsequent 36 months over which this unit is currently not subject to any further compliance testing, continuous monitoring demonstrates that the fPM emission rate increased substantially. At one point, the continuously monitored 30-day rolling average emissions rate [footnote omitted] was nine times higher than the intermittent stack test average, reaching the fPM . . . limit of 0.015 lb/MMBtu. In this example, the actual continuously monitored daily average emissions rate over the February 2021 to April 2023 period ranged from near-zero to 0.100 lb/MMBtu. *Emissions using either the stack test average or hourly PM CEMS data were calculated for 2022 for this unit.* Both approaches indicate fPM emissions well below the allowable levels for a fPM limit of 0.010 lb/MMBtu, while *estimates using PM CEMS are about 2.5 times higher than the stack test estimate.*⁷⁷

Here too, as with power plants, periodic performance tests would miss emissions spikes at the FCCU in between tests. The proposed Title V permit's requirement to maintain the ESP daily average voltage and secondary current (or total power input) at or above the average value from the most recent test cannot ensure compliance with the PM₁₀ limits because daily values cannot ensure compliance with hourly or continuous limits. Using daily values could allow significant dips in ESP power that, when averaged together with other hourly values, would still yield a daily value at or above the value from the most recent performance test. Thus, this parametric monitoring could also allow violations of the hourly and continuous PM₁₀ limits to go undetected.

EPA, in its 2014-15 "risk and technology review" of the NESHAP for the petroleum refinery sector, recognized the inadequacy of daily averages from PM parametric monitoring at FCCUs, including parametric monitoring of ESP power levels. In its proposed rule, EPA explained:

Typically, the averaging time for operating limits is based on the duration of the performance test used to establish those operating limits. As the performance test duration is 3 hours (three 1-hour test runs) and compliance with the PM (or Ni) emission limit is based on the average emissions during this 3-hour period, the most appropriate averaging period for these operating limits is 3 hours. Using a daily average could allow poor performance (i.e., control equipment for shorter periods (e.g., 3-hour averages that are higher than the PM emissions limit in Refinery NSPS Ja). For example, assume an operating limit developed from a performance test has a value of 1 and that values exceeding this level would suggest that the control system is not operating as well as during

⁷⁷ 89 Fed. Reg., *supra* note 75 at 38,536 (emphasis added).

the performance test (*i.e.*, potentially exceeding the PM emission limit). If the control system is run for 18 hours operating at a level of 0.9 and 6 hours at a level of 1.2, the unit would be in compliance with the daily operating limit even though the unit may have 6 consecutive hours during which the operating limit was exceeded We are proposing that it is necessary, pursuant to CAA section 112(d)(6), to incorporate the use of 3-hour averages rather than daily averages for parameter operating limits in Refinery MACT 2 for both the PM and Ni limits, because this is a cost-effective development in monitoring practice.⁷⁸

In its final rule, EPA finalized the requirement for three-hour averages rather than daily averages for parametric monitoring.⁷⁹ Here, the District states that performance tests for PM₁₀ from the FCCU generally last four hours.⁸⁰ Thus, the Title V permit must require parametric monitoring with—at the longest—four-hour averaging periods. The District could easily make this change.

Second, the proposed permit cannot ensure compliance across the varying operating conditions when the PM₁₀ limits apply because it does not require testing or monitoring during those varying conditions. As noted above, the 2.8 lbs/1000 bbl PM₁₀ limit applies only when the fresh feed to the FCCU is 105,000 barrels per day or less; the 0.005 grains/scf limit applies only when the flow rate is 320,000 dscfm or less; and the 3.6 lbs/hour limit applies only when the feed exceeds 105,000 barrels per day and the flow rate exceeds 320,000 dscfm. To begin with, because the proposed permit allows annual performance tests to be conducted when the FCCU is operating at feed rates as low as 84,000 barrels per day, this testing cannot ensure compliance with the 2.8 lbs/1000 bbl limit when fresh feed rates are between 84,000 and 105,000 barrels per day (when this limit would apply) or the 3.6 lbs/hour limit when feed rates exceed 105,000 barrels per day (when this limit might apply, depending on flow rates). When the feed rates are higher during day-to-day operations than during testing, these different operating conditions could result in higher PM₁₀ rates than reflected in the testing.

Further, the proposed permit does not require any specific flow rates during performance tests. Testing could possibly occur only at flow rates above 320,000 dscfm—and thus would be unable to ensure compliance with the 0.005 grains/scf limit, which applies only when the flow

⁷⁸ Petroleum Refinery Risk and Technology Review, Proposed Rule, 79 Fed. Reg. 36,880, 36,929–30 (June 30, 2014).

⁷⁹ Petroleum Refinery Risk and Technology Review, Final Rule, 80 Fed. Reg. 75,178, 75,183 (Dec. 1, 2015) (“[W]e are finalizing requirements . . . including 3-hour averages rather than daily averages for parameter operating limits, and . . . including 3-hour averages rather than daily averages for the site-specific opacity operating limit.”); 40 C.F.R. § 63, Subpt. UUU, Tbl. 2 (for FCCUs with ESPs subject to New Source Performance Standards (“NSPS”) Subpart Ja or electing to comply with Subpart Ja, listing an operating limit of maintaining the 3-hour rolling average total power and secondary current above the limit established in the most recent performance test; listing 3-hour operating limits for other FCCUs, including maintaining 3-hour rolling average opacity no higher than 20 percent or no higher than site-specific opacity limit established during performance test).

⁸⁰ RTC, *supra* note 3 at 4 (“The current PM10 testing time, taken from pervious source tests, is four (4) hours.”).

rate is 320,000 dscfm or less. Or testing could possibly occur only at flow rates at or below 320,000 dscfm, which would mean that the testing could not ensure compliance with the 3.6 lbs/hr limit that only applies at flow rates above 320,000 dscfm. EPA has recognized that flow rates can affect PM emission rates: one of the allowed NESHAP parametric monitoring options for PM from certain FCCUs with ESPs requires maintaining the daily average flow rate no higher than the limit established in the most recent performance test.⁸¹

Because the proposed permit does not require testing across the varying operating conditions in which the PM₁₀ limits apply, the ESP voltage and secondary current (or total power input) levels established during that testing also cannot ensure compliance across these varying operating conditions.

Third, the proposed permit's parametric monitoring cannot ensure compliance with the three PM₁₀ limits because it does not require the Refinery to limit other parameters—specifically coke burn-off rates or average flow rates—to levels from the most recent performance test. In its refinery NESHAP, EPA also requires FCCUs that parametrically monitor ESP power levels (by maintaining 3-hour rolling average total power and secondary current above limits established in the most recent test) to either maintain the daily average coke burn-off rate or daily average flow rate no higher than the limits for these parameters established in the test.⁸² Monitoring ESP power levels alone is not sufficient to ensure compliance with the PM₁₀ limits here.

Fourth, the proposed permit cannot ensure compliance with the PM₁₀ limits because it does not tie the relevant testing and monitoring to those limits. The proposed permit lists the PM₁₀ limits as applicable to the FCCU—not the FCCU's ESPs.⁸³ But the permit lists the testing and monitoring discussed above as only applicable to the FCCU's two ESPs—not the FCCU itself.⁸⁴ In its comments on the proposed permit, EPA Region 9 raised this same concern with respect to the FCCU's ammonia limits, stating:

The Rule 1105.1 limit for ammonia slip is unclear, and the resulting permit limit at Condition A195.2 does not correctly identify both the ESP and the SCR devices to which the limit applies. The fact that the ammonia slip limit applies to the ESP and the SCR, and not the FCCU should be clarified in a revised statement of basis and the permit conditions appropriately tagged.⁸⁵

The FCCU is also subject to certain additional PM-related requirements from NESHAP Subpart UUU, NSPS Subpart J, and District Rule 404: a 30% opacity limit; the requirement to continuously monitor opacity; a PM limit of 1 lb/1,000 lbs of coke burn-off; an operating limit of 20% opacity averaged over three hours; and very high PM limits from Rule 404 (ranging from

⁸¹ 40 C.F.R. § 63, Subpt. UUU, Tbl. 2.

⁸² *Id.*

⁸³ Proposed Permit, *supra* note 63 at 35, 39–40 (listing equipment and applicable emission limits and standards).

⁸⁴ *Id.*

⁸⁵ Region 9 Comments, *supra* note 9 at 1–2.

0.196 down to 0.010 grains/scf, depending on the volume discharged).⁸⁶ These requirements cannot ensure compliance with the PM₁₀ limits from Rule 1105.1 because nothing in the proposed permit or permit record ties these NESHAP, NSPS or Rule 404 requirements—or correlates these NESHAP, NSPS or Rule 404 limits—to specific, actual PM₁₀ emission rates or the three different SIP PM₁₀ limits applicable to the FCCU here.

To ensure compliance with the PM₁₀ limits, EPA should mandate that the Title V permit require PM CEMS, which are widely available from several vendors, for the FCCU and continuous flow and temperature measurements. PM CEMS would better ensure compliance with the PM₁₀ limits than parametric monitoring—as EPA recognized for power plants in its recent final MATS rule (discussed above)—and would also solve the problem regarding testing or monitoring across the varying operating conditions when these three PM₁₀ limits apply.

Strong monitoring and testing requirements for the FCCU are especially important because, as discussed above, environmental justice concerns here mandate increased, focused attention to ensure that all Title V requirements—including monitoring, recordkeeping, and reporting requirements—have been complied with. Strong monitoring and testing requirements are also important because the information submitted by the Refinery in response to EPA’s Information Collection Request (“ICR”) for the 2014-15 refinery NESHAP risk and technology review indicated that, as of the time of the ICR, the FCCU emitted a significant amount of filterable PM₁₀—23.04 tons/year.⁸⁷

1. The District’s response to comments is inadequate to address the problems with the proposed permit’s monitoring and testing requirements for PM₁₀ from the FCCU.

The District’s response to comments is inadequate to address any of the above-discussed problems with the proposed permit’s monitoring and testing requirements for the FCCU’s SIP PM₁₀ limits.

To begin with, it is worth noting Petitioner’s significant comments that, in violation of Title V requirements⁸⁸, the District failed to respond to the arguments (discussed above) that the Title V permit: (1) cannot ensure compliance across the varying operating conditions when the PM₁₀ limits apply because it does not require testing or monitoring during those varying conditions; and (2) cannot ensure compliance with the PM₁₀ limits because it does not tie the relevant testing and monitoring to those limits. In failing to respond, the District effectively concedes these points. Nor does the District directly address Petitioner’s argument that the permit’s parametric monitoring cannot ensure compliance with the three PM₁₀ limits because it

⁸⁶ Proposed Permit, *supra* note 63 at 35, 302–03 (Device Condition A63.4, listing 30% opacity limit), 373–74 (Device Condition D90.4, requiring continuous monitoring of opacity at stack), 551 (listing NESHAP operating limit of 20% opacity averaged over three hours).

⁸⁷ See **Ex. B.2**, ICR Data Reported by the Refinery (“ICR Data”) at row 44754 (**Ex. 12** to DAAC Public Comments).

⁸⁸ See 40 C.F.R. § 70.7(h)(6) (“The permitting authority must respond in writing to all significant comments raised during the public participation process, including any such written comments submitted during the public comment period . . .”).

does not require the Refinery to limit parameters such as coke burn-off rates or average flow rates to levels from the most recent performance test.

First, in its response to comments, the District argues that “[p]ast annual source tests indicated that Torrance Refinery complied with all applicable emissions limits and requirements under Rule 1105.1.”⁸⁹ The fact that past testing showed emissions within the SIP PM₁₀ limits on one day per year, however, does not mean that the permit’s testing and monitoring requirements can ensure compliance with the hourly and continuously applicable PM₁₀ limits. To the contrary, annual tests cannot ensure compliance in the 364-plus days in between tests for all the reasons discussed above. Nor can annual tests ensure compliance even in the hours that testing occurs because the permit does not require testing or monitoring across the varying operating conditions when the PM₁₀ limits apply.

Further, the District has not actually provided the past PM₁₀ test results for the FCCU. Thus, it is impossible to evaluate how close those emissions have been to the SIP limits or how variable emissions have been from annual test to annual test (though, again and importantly, annual tests cannot adequately capture the variability of PM₁₀ emissions in between tests).⁹⁰ As EPA Region 9 noted in its comments on the proposed permit, this type of data can be relevant to the adequacy of the permit’s monitoring and testing requirements for short-term emissions limits (which include the FCCU’s hourly and continuously applicable SIP PM₁₀ limits):

There are several instances where the commenter assert[s] the proposed permit contains inadequate monitoring against emission limits averaged over a relatively short time-period (e.g., 15 minutes, 60 minutes, 3-hours). The commenter raises valid points in this regard that should be addressed in a revised statement of basis and, if necessary, revised permit conditions . . . The District should refer to a recent Petition Order No. III-2023-15 . . . in which EPA described five factors permitting authorities may consider as a starting point in determining appropriate monitoring for a particular facility:

- a. Variability of emissions from the unit in question
- b. Likelihood of a violation of the requirements
- c. Whether add-on controls are being used for the unit to meet the emission limit
- d. The type of monitoring, process, maintenance, or control equipment data already available for the emission unit

⁸⁹ RTC, *supra* note 3 at 4.

⁹⁰ See Exxon Baton Rouge Order, *supra* note 54 at 36–37 (“[I]t could be the case that this [past] data show significant (albeit well-understood) variability, in which case more frequent sampling might be necessary. However, without a clear explanation and supporting quantitative information from LDEQ, it is impossible to know.”).

- e. The type and frequency of the monitoring requirements for similar emission units at other facilities.⁹¹

Second, the District argues that “[t]he daily average in total power input is sufficient to determine the performance of the ESP, since its operation does not vary significantly on a daily basis.”⁹² The District continues:

The overall operation of the FCCU and its emission control devices needs to be maintained as steady as possible, with only gradual variation in throughput in order to avoid *any potential upset*. As such, the ESP operation is also *expected to be steady*, with only slight variation on a daily basis. The comment assumes that, during normal operation, large dips in ESP power can occur during the day, while the daily average can still be maintained above the minimum. Although such assumption can be theoretically possible, in actual operation, the FCCU does not operate in such a manner and *such large dips in ESP powers would indicate that the FCCU is not in a stable operating condition which would trigger operator intervention*.⁹³

The District, however, fails to provide any data to support its bald claim that ESP power levels are relatively stable and invariable from hour to hour.⁹⁴ Presumably the District has no such data, since it only hypothesizes that ESP operation is “expected to be steady.”⁹⁵ And, in fact, the District admits that significant dips in ESP power and malfunctions can occur, referring to “potential upset[s]” and stating that “large dips in ESP powers would indicate that the FCCU is not in a stable operating condition which would trigger operator intervention.” Such dips are why EPA, in its risk and technology review for the refinery NESHAP, required three-hour averaging periods for FCCU PM operating limits instead of daily averages, as discussed above.⁹⁶ The District states that the “only instance of 3-hour averaging as recommended by EPA and required under federal rules . . . is for monitoring of the opacity”⁹⁷ The District, however, ignores that NESHAP Subpart UUU includes three-hour averaging periods for ESP power levels, as discussed above.

⁹¹ Region 9 Comments, *supra* note 9 at 2.

⁹² RTC, *supra* note 3 at 6.

⁹³ *Id.* (emphasis added).

⁹⁴ See Exxon Baton Rouge Order, *supra* note 54 at 36–37 (“[I]t could be the case that this [past] data show significant (albeit well-understood) variability, in which case more frequent sampling might be necessary. However, without a clear explanation and supporting quantitative information from LDEQ, it is impossible to know.”).

⁹⁵ RTC, *supra* note 3 at 6.

⁹⁶ *Id.* See 79 Fed. Reg. at 36,929–30, *supra* note 78 (“Using a daily average could allow poor performance (i.e., control equipment for shorter periods (e.g., 3-hour averages that are higher than the PM emissions limit in Refinery NSPS Ja).”).

⁹⁷ RTC, *supra* note 3 at 6.

Third, the District points out that the FCCU here is subject to NSPS Subpart J and NESHAP Subpart UUU.⁹⁸ The District also points to an initial performance test at the FCCU from over two decades ago—in 2001—showing PM emissions of 0.203 lb/1,000 lbs of coke burn-off, as well more recent NESHAP tests with results less than 0.15 g/kg of coke burn-off.⁹⁹ The District, however, fails to provide the actual results of these tests so that the public and EPA can assess them (to, for example, determine if there is variability between test runs). Nor does the District provide or refer to other test results, which could show variability of emissions (as outlined above, periodic tests cannot accurately capture variability of emissions in between tests). And, importantly (and as discussed above), the District does not tie the applicable NESHAP and NSPS requirements—or correlate NESHAP or NSPS limits or test results—to the three different applicable SIP PM₁₀ limits here or specific, actual PM₁₀ emission rates in terms of the SIP limits (*i.e.*, grains/scf, lbs/1000 barrels of fresh feed, and lbs/hour).

Fourth, the District argues that the permit “includes all *applicable* requirements for monitoring, testing, reporting and recordkeeping required under South Coast AQMD and federal rules and regulations.”¹⁰⁰ The District ignores that 40 C.F.R. § 70.6(c)(1) and 42 U.S.C. §§ 7661c(a) and 7661c(c) require the District to supplement any SIP monitoring and testing requirements that are inadequate to ensure compliance with applicable SIP limits. This obligation exists regardless of whether the permit might include all applicable NESHAP and NSPS requirements. As discussed above, the monitoring and testing requirements from Rule 1105.1, which are carried over into the permit, cannot ensure compliance with the three different SIP PM₁₀ limits applicable to the FCCU. Thus, § 70.6(c)(1) and §§ 7661c(a) and 7661c(c) require the District to add monitoring requirements to this Title V permit sufficient to assure compliance with the three different PM₁₀ limits.

Relatedly, in a response to EPA Region 9’s comments on the proposed Title V permit, the District argues that EPA approved Rule 1105.1 into the SIP “after Title V rules came into effect and when South Coast AQMD was cognizant of the forward-going need for its rules to specify adequate monitoring for requirements for its SIP-approved, federally enforceable rules”—and that “in its rule development, South Coast AQMD, EPA, and all stakeholders understood, in practical terms, that Rule 1105.1 sources were also Title V sources.”¹⁰¹ However, Section 110 of the Clean Air Act, which details the SIP approval and revision process, includes no requirement that SIP limits be accompanied by monitoring and testing requirements sufficient to ensure compliance with those limits before being approved by EPA into the SIP.¹⁰² Nor does the District point to any findings by EPA, in approving Rule 1105.1 into the SIP, that the rule’s testing and monitoring provisions were sufficient to ensure compliance with the limits in all situations that those limits might apply to specific sources. More importantly though, the District’s obligations to include monitoring and testing requirements in Title V permits sufficient to assure compliance

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ *Id.* at 7 (emphasis in original).

¹⁰¹ District Response to Region 9, *supra* note 13 at 2.

¹⁰² 42 U.S.C. § 7410.

with applicable limits under 40 C.F.R. § 70.6(c)(1) and 42 U.S.C. §§ 7661c(a) and 7661c(c) exist independent of the SIP revision process.

Fifth, regarding monitoring daily flow rates and keeping those rates to levels no higher than that from the most recent passing performance test, the District argues: “The FCCU is subject to the NSPS Subpart J §60.102 requirements; therefore, the facility need only to comply with Subpart J requirements to demonstrate compliance with [the NESHAP PM requirements from] § 63.1564.”¹⁰³ The District misses the point and fails to directly address Petitioner’s argument that monitoring ESP power levels alone is insufficient to ensure compliance with the SIP PM₁₀ limits here because the permit does not require the Refinery to limit other parameters—specifically coke burn-off rates or average flow rates—to levels from the most recent performance test. It may be true that, to comply with applicable NESHAP requirements, the Refinery’s FCCU need only comply with NSPS Subpart J requirements and thus not need to keep daily flow (or coke burn-off) rates at or below levels from the most recent test. However, to ensure compliance here for an FCCU that parametrically monitors ESP Power levels with the three different SIP PM₁₀ limits, parametric monitoring must also keep daily flow or coke burn-off rates to levels no higher than that from the most recent test.

Sixth, in its response to EPA Region 9’s comments on the proposed Title V permit, the District argues: “In past Title V Orders, EPA has explained that ‘gap-filling’ monitoring applies in cases where the underlying regulation has no periodic monitoring or the monitoring required consists of only a one-time monitoring occurrence (e.g., one stack test over the life of the unit).”¹⁰⁴ To the extent the District is asserting that these are the only occasions when Title V gap-filling requirements apply, the District is simply wrong and misunderstands a fundamental requirement of Title V.¹⁰⁵ The District’s apparent assertion is directly contradicted by, among other things, the plain language of 40 C.F.R. § 70.6(c)(1), which requires all Title V permits to include “compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit.” Section 70.6(c)(1)’s requirements are in no way limited to the situations the District describes.

Finally, in response to Petitioner’s point that the permit should require the use of PM CEMS to ensure compliance with the SIP PM₁₀ limits, the District asserts that it “does not have a protocol to certify PM CEMS at this time,” is “not aware of any EPA certification protocol for PM CEMS,” and that “PM CEMS cannot be utilized to monitor the ‘filterable PM₁₀’ emission standards required under Rule 1105.1.”¹⁰⁶ The District ignores that NESHAP Subpart UUU allows FCCUs to measure PM using PM CEMS.¹⁰⁷ Further, it is Petitioner’s understanding that

¹⁰³ RTC, *supra* note 3 at 7.

¹⁰⁴ District Response to Region 9, *supra* note 13 at 2.

¹⁰⁵ See, e.g., *In re Mettiki Coal*, Order on Petition No. III-2013-1 (“Mettiki Order”) at 7 (EPA Sept. 26, 2014), https://www.epa.gov/sites/default/files/2015-08/documents/mettiki_decision2013.pdf [<https://perma.cc/9YHQ-MT9A>] (“[I]f there is some periodic monitoring in the applicable requirement, but that monitoring is not sufficient to assure compliance with permit terms and conditions, permitting authorities must supplement monitoring to assure such compliance.”).

¹⁰⁶ RTC, *supra* note 3 at 7–8.

¹⁰⁷ 40 C.F.R. § 63, Subpt. UUU, Tbl. 2.

PM CEMS only measure filterable PM CEMS—not condensable PM. Thus, the District’s concern that CEMS cannot separate out filterable PM is unfounded.

B. The Proposed Permit’s Monitoring and Testing Requirements Cannot Ensure Compliance with the SIP Ammonia Limit for the FCCU.

As Petitioner’s comments explained, the proposed Title V permit does not include adequate monitoring, testing, reporting or recordkeeping requirements to ensure compliance with a SIP ammonia limit for the FCCU.¹⁰⁸ Specifically, in violation of 40 C.F.R. 70.6(c)(1), as well as the requirements from 42 U.S.C. §§ 7661c(a) and 7661c(c), the proposed permit’s monitoring, testing, and other requirements cannot ensure compliance with Rule 1105.1’s ammonia limit of 10 ppmv corrected to 3% oxygen dry, averaged over 60 consecutive minutes.¹⁰⁹

In an attempt to ensure compliance with this ammonia limit, the proposed permit requires annual performance tests with a one-hour averaging time.¹¹⁰ Also, to try to ensure compliance with the ammonia limit, the proposed permit requires the Refinery to continuously monitor the ammonia injection rate in lb/hr at the inlet to the FCCU’s ESPs “in accordance with the monitoring plan as approved by SCAQMD.”¹¹¹

In addition, a November 4, 2016, letter from the District in the draft permit package discusses the requirements of a monitoring plan under Rule 1105.1(e)(3) for the FCCU’s ESP and SCR.¹¹² Under that plan, the Refinery is required to continuously monitor the ammonia injection rate at the inlet to the SCR (as well as the ESPs) and wet and dry oxygen, and use an ammonia mass flowmeter for the ESPs and SCR.¹¹³

These testing and monitoring provisions cannot ensure compliance with the FCCU’s ammonia limit for three different reasons:

First, the proposed permit does not require testing or monitoring with sufficient frequency to ensure compliance with the hourly ammonia limit. As noted above, an annual performance test cannot ensure compliance with an hourly limit. An annual test would leave undetected any violations of the hourly ammonia limit that occur in the 364-plus days in between tests.

¹⁰⁸ DAAC Public Comments, *supra* note 4 at 22–24.

¹⁰⁹ *See* Proposed Permit, *supra* note 63 at 35, 40, 305 (Device Condition A195.2). Because Rule 1105.1(e)–(f) lists certain testing and parametric monitoring requirements for ammonia from the FCCU but those requirements cannot ensure compliance with the ammonia limits, § 70.6(c)(1) requires the District to supplement the SIP’s original testing requirements to add monitoring and other requirements sufficient to ensure compliance.

¹¹⁰ *Id.* at 364–67 (Device Condition D29.4).

¹¹¹ *Id.* at 378 (Device Condition D90.11).

¹¹² **Ex. K**, Draft Permit Excerpts at 10–11 (South Coast AQMD Letter to Torrance Refining Company LLC (Nov. 4, 2016) (note that all page number references to the Draft Permit Excerpts throughout this petition are to the PDF pagination of this exhibit)). This letter is not included with the proposed permit in Petitioner’s possession.

¹¹³ *Id.*

The requirement to continuously monitor the ammonia injection rate at the inlet to the FCCU's ESPs and SCR cannot somehow solve this frequency problem because the proposed permit does not require the Refinery to limit injection rates to any particular values over any particular averaging period. The November 2016 letter discussing the FCCU's monitoring plan (appended to the draft Title V permit) lists a "monitoring frequency" of "continuous" and "recording frequency" of "hourly," but these are not averaging periods.¹¹⁴ The letter also mentions a "typical operating range" of 1,200,000 – 2,200,000 scfd for the ammonia injection rate, but the proposed permit does not require the FCCU to stay within such a "typical operating range."¹¹⁵

In its comments on the proposed Title V permit, EPA Region 9 echoed the frequency problem, stating that the District "should justify why lack of continuous monitoring for ammonia is unlikely to cause¹¹⁶ an exceedance of the ammonia slip limit."¹¹⁷ In making this point, Region 9 also referenced its fourth comment (also discussed above), which reads:

There are several instances where the commenter assert[s] the proposed permit contains inadequate monitoring against emission limits averaged over a relatively short time-period (e.g., 15 minutes, 60 minutes, 3-hours). The commenter raises valid points in this regard that should be addressed in a revised statement of basis and, if necessary, revised permit conditions The District should refer to a recent Petition Order No. III-2023-15 . . . in which EPA described five factors permitting authorities may consider as a starting point in determining appropriate monitoring for a particular facility:

- a. Variability of emissions from the unit in question
- b. Likelihood of a violation of the requirements
- c. Whether add-on controls are being used for the unit to meet the emission limit
- d. The type of monitoring, process, maintenance, or control equipment data already available for the emission unit
- e. The type and frequency of the monitoring requirements for similar emission units at other facilities.¹¹⁸

Second, related to Petitioner's first point above, the proposed permit cannot ensure compliance with the ammonia limit because it does not require the Refinery to maintain ammonia injection rates within the ranges from a passing performance test.

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ "Cause" should presumably read "miss" or something similar instead.

¹¹⁷ Region 9 Comments, *supra* note 9 at 1.

¹¹⁸ *Id.* at 2.

Third, the proposed permit cannot ensure compliance with the ammonia limit because the permit does not adequately tie the relevant testing and monitoring requirements to this limit. The proposed permit lists the ammonia limit as applicable to both the FCCU (D151) and the FCCU's SCR (C1772).¹¹⁹ But the proposed permit lists the testing requirement discussed above as applicable to the FCCU's ESPs (C2283-84) and SCR—not the FCCU itself.¹²⁰ And the proposed permit lists the requirement to continuously monitor the ammonia injection rate as only applicable to the ESPs—not the FCCU or SCR.¹²¹

EPA Region 9's comments also raised this point, stating that the "Rule 1105.1 limit for ammonia slip is unclear, and the resulting permit limit at Condition A195.2 does not correctly identify both the ESP and the SCR devices to which the limit applies."¹²² In responding to Region 9's comments, the District stated that, "for additional clarity, the ammonia limit will also be tagged to the ESP, since the SCR is already tagged with this limit."¹²³ The proposed permit that is petitioned here, however, does not include this change. Further, this change would not fix the problem that the Title V permit lists the requirement to continuously monitor the ammonia injection rate as only applicable to the ESPs—not the FCCU or SCR.

To ensure compliance with the FCCU's SIP ammonia limit, EPA should mandate that the Title V permit require ammonia CEMS for the FCCU. Strong monitoring and testing requirements for the FCCU are especially important because, as discussed above, environmental justice concerns here mandate increased, focused attention to ensure that all Title V requirements—including monitoring, testing, recordkeeping, and reporting requirements—have been complied with. Strong monitoring and testing requirements are also important because the information that the Refinery submitted in response to EPA's ICR for the 2014-15 petroleum refinery sector risk and technology review indicated that the FCCU emits significant amounts of ammonia—as of the time of the ICR, 59.38 tons/year.¹²⁴

1. The District's response to comments is inadequate to address the problems with the permit's monitoring and testing requirements for ammonia from the FCCU.

The District's response to comments is inadequate to address any of the above-discussed problems with the proposed permit's monitoring and testing requirements for the FCCU's SIP hourly ammonia limit.

To begin, it is worth noting Petitioner's significant comment that the District failed to directly address, in violation of Title V requirements¹²⁵—the argument (discussed above) that the proposed permit cannot ensure compliance with the ammonia limit because it does not require

¹¹⁹ Proposed Permit, *supra* note 63 at 35, 40.

¹²⁰ *Id.* at 35, 39–40.

¹²¹ *Id.*

¹²² Region 9 Comments, *supra* note 9 at 1–2.

¹²³ District Response to Region 9, *supra* note 13 at 4.

¹²⁴ ICR Data, *supra* note 87 at row 44752.

¹²⁵ See 40 C.F.R. § 70.7(h)(6) ("The permitting authority must respond in writing to all significant comments raised during the public participation process, including any such written comments submitted during the public comment period . . .").

the Refinery to maintain ammonia injection rates within the ranges from a passing performance test.

First, in its response to comments, the District argues: “[T]he Draft permit incorporates the periodic monitoring or testing requirements of Rule 1105.1 as approved by EPA. Therefore, supplemental monitoring for ammonia is not required to assure compliance with the permit limits.”¹²⁶ Relatedly, the District argues that “Rule 1105.1 does not specify averaging times for the parametric operating parameters identified in Attachment A.”¹²⁷ As discussed above with respect to the FCCU’s SIP PM₁₀ limits, however, the District ignores that 40 C.F.R. § 70.6(c)(1) and 42 U.S.C. §§ 7661c(a) and 7661c(c) require the District to supplement any SIP monitoring and testing requirements that are inadequate to ensure compliance with applicable SIP limits. This obligation is separate from, and independent of, the SIP revision process.

Second, in response to Petitioner’s point that the permit should require the use of ammonia CEMS, the District argues: “While South Coast AQMD staff recognizes that ammonia CEMS are commercially available, there is no approved protocol that has been developed by either EPA or South Coast AQMD to certify the ammonia CEMS. We are also not aware of any other agency that may have developed certification protocol for NH₃ CEMS.”¹²⁸ Since the District concedes that ammonia CEMS are commercially available (and thus in use), a certification protocol presumably exists. Further, the District does not explain why it could not develop such a protocol. Even assuming (for the sake of argument) ammonia CEMS could not be used, this would not change the fact that, under Title V, the District must strengthen the permit’s monitoring requirements to ensure compliance with the FCCU’s SIP ammonia limit.

C. The Proposed Permit’s Monitoring Requirements Cannot Ensure Compliance with 15-Minute Average CO and PM Emission Limits for Thermal Oxidizer 29F-4.

As Petitioner’s comments explained, the proposed Title V permit does not include adequate monitoring, testing, reporting or recordkeeping requirements to ensure compliance with CO and PM emission limits for the thermal oxidizer 29F-4 (C952).¹²⁹ Consequently, the proposed permit violates 40 C.F.R. § 70.6(c)(1), as well as the requirements from 42 U.S.C. §§ 7661c(a) and 7661c(c).

The Refinery’s thermal oxidizer 29F-4 is a significant source of criteria pollutants that released 249.75 tons/year of CO and 8.93 tons/year of PM₁₀ as of the time of EPA’s ICR.¹³⁰ The proposed permit incorporates SIP limits for the thermal oxidizer of 2,000 ppmv CO and 0.1 grains/scf PM, both averaged over 15 consecutive minutes under SIP-approved Rules 407 and 409.¹³¹ Under condition D28.25, the Refinery is required to conduct source tests “once every

¹²⁶ RTC, *supra* note 3 at 10.

¹²⁷ *Id.* at 9.

¹²⁸ *Id.* at 10.

¹²⁹ DAAC Public Comments, *supra* note 4 at 24–25.

¹³⁰ ICR Data, *supra* note 86 at rows 46246, 46249.

¹³¹ Proposed Permit, *supra* note 63 at 110; 40 C.F.R. § 52.220(c)(103)(xviii)(A), (124)(iv)(A).

three years” to determine whether the CO and PM emissions are exceeding applicable limits.¹³² However, as detailed by Petitioner, due to the potential variability of these emissions, these testing requirements are insufficient to ensure compliance during the three years in between tests with applicable short-term CO and PM emission limits with 15-minute averaging periods.¹³³ The permit includes no monitoring or other requirements that apply in between tests that could possibly assure compliance with these short-term limits during these three years in between tests. The District failed to include emissions data or technical analysis in its statement of basis and permit record that purportedly (1) shows that the underlying emissions lack such variability to justify source testing every three years, and (2) demonstrates the adequacy of the permit’s monitoring and testing requirements to ensure compliance with these limits.¹³⁴ Additionally, Petitioner’s comments explained the District should consider the implementation of CEMS to monitor CO and PM emissions or more frequent testing rather than source testing every three years.¹³⁵

The District’s response to comments is inadequate to address any of the above-discussed problems with the proposed permit’s monitoring and testing requirements for thermal oxidizer 29F-4’s CO and PM limits, both averaged over 15 consecutive minutes.

First, in violation of Title V requirements that mandate permitting authorities to respond to significant comments, the District entirely ignores the variability issues raised by Petitioner.¹³⁶ In failing to respond, the District effectively concedes this point. The District failed to revise its statement of basis or provide in its response to comments and permit record the technical analysis and other data demonstrating that the underlying emissions do not require continuous or parametric monitoring, or shorter testing periods due to lack of variability that could occur as a result of several factors raised by Petitioner, including pollutant concentration in gas stream, temperature, and degree of mixing.¹³⁷

Second, in violation of Title V requirements, the District failed to respond and explain whether more frequent source testing would either be infeasible, or further ensure compliance with CO and PM limits.¹³⁸ Instead, the District’s response focused exclusively on CEMS and ignored entirely comments raising the possibility of more frequent testing to ensure compliance.¹³⁹ Nor did the District explain why parametric monitoring would not be possible.

Third, the District dismissed concerns about the use of source tests every three years to confirm compliance with CO and PM emission limits that are averaged over a very short

¹³² Proposed Permit at 362.

¹³³ DAAC Public Comments, *supra* note 4 at 24–25.

¹³⁴ *Id.*

¹³⁵ *Id.*

¹³⁶ See 40 C.F.R. § 70.7(h)(6) (“The permitting authority must respond in writing to all significant comments raised during the public participation process, including any such written comments submitted during the public comment period . . .”).

¹³⁷ RTC, *supra* note 3 at 11.

¹³⁸ 40 C.F.R. § 70.7(h)(6); RTC, *supra* note 3 at 11–13.

¹³⁹ RTC, *supra* note 3 at 11–13.

timeframe of 15 minutes.¹⁴⁰ The District asserted that CO and PM limits have been “consistently met” by the Refinery under the current monitoring requirements and summarizes CO and PM source tests taken in 2016, 2019, and 2022 to support its claim.¹⁴¹ However, not only did the District fail to provide the individual source test details that could show variability across test runs, but reference to previous test results alone does not address emission variability issues—as detailed by Petitioner, periodic tests cannot accurately capture variability of emissions during the several years in between tests. Further, the District fails to note where in the permit other measures, such as parametric monitoring or inspection and maintenance requirements, exist that could help assure compliance with short-term emission limits in between tests.

Fourth, the District notes that PM emissions limits under Rule 409 are “determined by source test once every five years *and* engineering calculations with the use of appropriate emission factors and exhaust characteristics, respectively.”¹⁴² Presumably the District is arguing that in establishing monitoring and testing requirements, it relied on engineering calculations, emission factors, and exhaust characteristics, which are not provided in the permit record for public review. However, if the District is suggesting that, in between tests, the Refinery uses engineering calculations with emission factors, that requirement does not exist in the proposed permit. The District fails to specify how these calculations are performed, and the particular emission factors relied on to determine “exhaust characteristics for PM” at the Refinery.¹⁴³

Fifth, the District notes its reliance on the Periodic Monitoring Guidelines for Title V Facilities (“Monitoring Guidelines”) developed by the agency in 1997 to establish these testing requirements and other gap filling where underlying rules, such as Rules 407 and 409 at issue here, do not specify monitoring and testing requirements.¹⁴⁴ The District’s reliance on the Monitoring Guidelines, however, does not waive its obligations under 40 C.F.R. § 70.6(c)(1), as well as 42 U.S.C. §§ 7661c(a) and 7661c(c), to implement adequate monitoring requirements to ensure compliance with applicable limits.

Finally, in addressing CEMS, the District dismissed CO CEMS as “not practical nor required by Rule 407 to demonstrate compliance” with CO emission limits.¹⁴⁵ The fact that Rule 407 does not require monitoring does not relieve the District from complying with its Title V duty to include adequate testing and monitoring requirements to ensure compliance with applicable requirements. Further, the District also relies on past source test results to argue that the “large margin of compliance where the limit is 2,000 ppmv” under Rule 407 makes CEMS unnecessary.¹⁴⁶ To reiterate, these once-every-three-year test results do not address the issue of

¹⁴⁰ *Id.* at 11–12.

¹⁴¹ *Id.* at 12.

¹⁴² *Id.*

¹⁴³ *Id.*

¹⁴⁴ *Id.* at 11.

¹⁴⁵ *Id.* at 12–13. The District also dismisses PM CEMS because none “has been certified by the South Coast AQMD.” *Id.* As noted by Petitioner, the District concedes that PM CEMS is commercially available and therefore some certification protocol must exist. *See id.* at 7. Additionally, the District has failed to explain why it is unable to establish a certification protocol.

¹⁴⁶ *Id.* at 13.

variability. The District’s response fails to consider the full range of operational factors and non-routine operational issues that could result in variability and excess releases of CO and PM above applicable limits.¹⁴⁷

Indeed, Petitioner’s concerns about the inadequacy of monitoring requirements for thermal oxidizer 29F-4 are echoed by comments submitted by EPA Region 9 during the 45-day review period after the District’s submission of response to comments and proposed permit on March 29, 2024.¹⁴⁸ Specifically, Region 9 noted that “the commenter assert[s] the proposed permit contains inadequate monitoring against emission limits averaged over a relatively short time-period (e.g., 15 minutes, 60 minutes, 3-hours)” and that these are “valid points . . . that should be addressed in a revised statement of basis and, if necessary, revised permit conditions.”¹⁴⁹ For this reason, Region 9 recommended that the District consider five factors to evaluate appropriate monitoring for this equipment, specifically: (a) “Variability of emissions from the unit in question;” (b) “Likelihood of a violation of the requirements;” (c) “Whether add-on controls are being used for the unit to meet the emission limit; (d) “The type of monitoring, process, maintenance, or control equipment data already available for the emission unit;” and (e) “The type and frequency of the monitoring requirements for similar emission units at other facilities.”¹⁵⁰ Region 9 correctly concluded that the District’s reliance on the Monitoring Guidelines alone is insufficient to address gap filling requirements under 40 C.F.R. 70.6(a)(3)(i)(B).¹⁵¹

In response to comments from EPA Region 9, the District again failed to provide technical analysis and data considered in determining appropriate monitoring for this equipment and did not fully and adequately consider the five factors enumerated in Region 9’s comments. For instance, the District has failed to provide both information about the type and frequency of monitoring requirements for thermal oxidizers at other facilities and data regarding variability (or lack thereof) in the countless hours between the once-every-three-year tests, and has neglected to provide even the performance test reports it referenced, which could show variability across test runs. Rather, the District once again relies on the same source test results to argue that CO and PM emissions from this equipment are “well below” and can “easily” comply with applicable emission limits for these pollutants.¹⁵² But the District once more ignores variability issues raised by Petitioner and any of the five factors in Region 9’s comments that could result in excess emissions from this equipment.¹⁵³ The District failed to provide source test details that could show variability across test runs, but as noted, reference to previous test results alone does not

¹⁴⁷ See, e.g., **Ex. B.3**, Torrance Refinery Summary of NOV Deviation Reports at rows 3, 39, 67, and 70 (self-reported deviations by refinery concerning thermal oxidizer 29F-4 (C952)) (**Ex. 17** to DAAC Public Comments).

¹⁴⁸ Region 9 Comments, *supra* note 9 at 2.

¹⁴⁹ *Id.*

¹⁵⁰ *Id.*

¹⁵¹ *Id.*

¹⁵² District Response to Region 9, *supra* note 13 at 6.

¹⁵³ *Id.*; DAAC Public Comments, *supra* note 4 at 24–25; Region 9 Comments, *supra* note 9 at 2.

address emission variability issues—as detailed by Petitioner, periodic tests cannot accurately capture variability of emissions in between tests.

Moreover, the District dismissed the need to evaluate all of the five factors enumerated by EPA, noting generally that its “responses to comments were thorough and substantially related to many of these five factors”—which is not true—and that “those same technical and engineering considerations . . . [were] in mind when staff developed and took stakeholder input on the recommendations from its rule-specific reviews” and periodic monitoring guidelines.¹⁵⁴ The public is left to speculate as to the technical and engineering considerations related to the Refinery that informed the testing requirements for this equipment, since the District has not provided this previous evaluation and rationale.

To ensure compliance with the thermal oxidizer 29F-4’s CO and PM limits, EPA should mandate that the Title V permit require CEMS or more frequent, robust monitoring and testing requirements. Strong monitoring and testing requirements are especially important for thermal oxidizer 29F-4 because, as discussed above, environmental justice concerns here mandate increased, focused attention to ensure that all Title V requirements—including monitoring, testing, recordkeeping, and reporting requirements—have been complied with. Strong monitoring and testing requirements are also important because the information that the Refinery submitted in response to EPA’s ICR for the 2014-15 petroleum refinery sector risk and technology review indicated that thermal oxidizer 29F-4 emits significant amounts of CO (249.75 tons/year) and PM10 (8.93 tons/year) as of the time of the ICR.¹⁵⁵

D. The Proposed Permit’s Monitoring Requirements Cannot Ensure Compliance with 15-Minute Average CO and PM Emission Limits for Flare 55F-1.

As Petitioner’s comments explained, the proposed Title V permit does not include adequate monitoring, testing, reporting or recordkeeping requirements to ensure compliance with CO and PM limits for flare 55F-1 (C1558).¹⁵⁶ Consequently, the proposed permit violates 40 C.F.R. § 70.6(c)(1), as well as the requirements from 42 U.S.C. §§ 7661c(a) and 7661c(c).

Flare 55F-1 is a “clean service” flare in the eastern tank farm area of the Refinery serving tanks 400x30 (straight run/light hydrocrackate), 400x31 (straight run/light hydrocrackate), and 510x4 (butane).¹⁵⁷ The proposed permit limits CO emissions to 2,000 ppm and PM emissions to 0.1 grains/scf averaged over 15 consecutive minutes under Rules 407 and 409.¹⁵⁸ To calculate CO and PM emissions from the combustion of vent gases, the Refinery is allowed to use emissions factors from natural gas and butane that are typically for closed combustion systems,

¹⁵⁴ District Response to Region 9, *supra* note 13 at 5.

¹⁵⁵ ICR Data, *supra* note 87 at rows 46246, 46249.

¹⁵⁶ DAAC Public Comments, *supra* note 4 at 25–26.

¹⁵⁷ Proposed Permit, *supra* note 63 at 202; Draft Permit Excerpts at 19 (Rule 1118 Monitoring Plan, dated May 2020).

¹⁵⁸ Proposed Permit at 202.

such as boilers and heaters, and not for open-flame flares like 55F-1.¹⁵⁹ As detailed by Petitioner, the District failed to provide technical justification and data explaining how these emissions factors are applicable to and appropriate for this open-flame flare to confirm compliance with these CO and PM emission limits.¹⁶⁰

The District's response to comments is inadequate to address any of the above-discussed problems with the proposed permit's monitoring and testing requirements for flare 55F-1's CO and PM limits averaged over 15 consecutive minutes.

First, in violation of Title V requirements, the District failed to address substantive comments concerning the lack of technical analysis or data characterizing the amount of CO and PM emissions expected from flare 55F-1 and the inadequacy of closed combustion system emission factors to ensure compliance with CO and PM emissions limits.¹⁶¹ In failing to respond, the District effectively concedes these points. Instead, in response, the District states simply that “concern in the comment on the applicability of these factors to an open-flame system versus a closed combustion system is *duly noted*.”¹⁶² Moreover, the District dismissed the need to address technical issues, noting generally that the “original permit for this flare was issued on June 29, 1965, and revised multiple times” and that the “engineering analysis conducted at the time of permitting for each source contains detailed information on regulatory analysis, and such analysis is not repeated in the SOB for the Title V permit renewal.”¹⁶³ To the contrary, the Clean Air Act requires that the statement of basis provide a detailed explanation of the rationale behind the monitoring and other requirements adopted by the District to ensure compliance with applicable emission limits.¹⁶⁴ This mandate is especially important when a commenter points out problems with the Title V permit's monitoring and testing requirements. Without these details in the statement of basis, it is not possible for the public to evaluate the adequacy of the District's decision regarding monitoring requirements.

Second, the District notes that flare 55F-1 is used to “avoid over-pressurization to prevent tank integrity failure” and that “CO emissions from flaring due to process upsets (such as over-pressurization) are exempt from Rule 407 pursuant to subparagraph (b)(3) of the rule.”¹⁶⁵ In effect, the District appears to argue that flare 55F-1 is fully exempt from meeting Rule 407 emission limits. The District's response is contradicted not only by the permit—which makes clear Rule 407 limits apply to Flare 55F-1 and does not exempt the equipment from complying with applicable CO limits—but also by the Refinery's Rule 1118 Flare Monitoring Plan, which confirms that flare 55F-1 “provides *normal* and emergency relief for the three tanks” and serves

¹⁵⁹ Draft Permit Excerpts, *supra* note 112 at 9 (Appx. C of Rule 1118 Monitoring Plan, revised June 2006).

¹⁶⁰ DAAC Public Comments, *supra* note 4 at 25–26.

¹⁶¹ RTC at 13–14, *supra* note 3; 40 C.F.R. § 70.7(h)(6).

¹⁶² RTC at 13–14 (emphasis added).

¹⁶³ *Id.* at 13.

¹⁶⁴ 40 C.F.R. § 70.7(a)(5); *In re Onyx Environmental Services*, Order on Petition No. V-2005-1 at 13–14 (EPA Feb. 1, 2006), https://www.epa.gov/sites/default/files/2015-08/documents/onyx_decision2004.pdf [<https://perma.cc/6LPW-2NWU>].

¹⁶⁵ RTC, *supra* note 3 at 13–14.

“as an air pollution control device and emergency pressure control device” at the Refinery.¹⁶⁶ Moreover, even assuming *arguendo* that this CO exemption applies, Flare 55F-1 is not exempt from complying with PM limits.

Third, the District asserts that Rule 1118 “requires the use of specific emission factors . . . to calculate flare emissions based on the type of vent gas(es) a flare is servicing.”¹⁶⁷ The District does not refute or address Petitioner’s technical comments regarding the inappropriate use of closed combustion system emission factors here. The District’s claim that it lacks authority to ensure compliance with CO and PM emission limits is contradicted by both basic Clean Air Act Title V permitting requirements and Rule 1118.

Rule 1118 is meant to “monitor and record data on Refinery and related flaring operations, and to control and minimize flaring and Flare-related emissions.”¹⁶⁸ On its face, Rule 1118 does not establish monitoring requirements to ensure compliance with Rules 407 and 409, which set the applicable CO and PM emissions limits for flare 55F-1. Additionally, even assuming *arguendo* that Rule 1118 is adequate to ensure compliance with Rules 407 and 409, guidance provided under Attachment B of Rule 1118 confirms the use of these emissions factors is not mandatory.¹⁶⁹ In particular, the rule allows the use of “[f]acility-specific data such as monitoring and/or gas composition data, provided it has been approved as equivalent in writing by the Executive Officer” in lieu of emissions factors for the preparation of quarterly reports and performance targets.¹⁷⁰

Additionally, the monitoring provisions of Rule 1118 are not meant to replace the District’s obligations under the Clean Air Act Title V permitting mandates, which require that the District include testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the applicable requirements.¹⁷¹ Even when a regulation provides monitoring and testing requirements, the District is required to ensure the requirements are sufficient to ensure compliance with applicable emission limits—nothing in the permit record and statement of basis demonstrates the District has conducted this analysis and made such a determination regarding Rule 1118.¹⁷² Moreover, because Rules 407 and 409 lack specific monitoring requirements for CO and PM emission limits, the District is required to fill in this gap and add “periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the permit.”¹⁷³

¹⁶⁶ Draft Permit Excerpts, *supra* note 112 at 2, 6 (Appx. C of Rule 1118 Monitoring Plan, revised June 2006).

¹⁶⁷ RTC, *supra* note 3 at 13.

¹⁶⁸ Rule 1118(a).

¹⁶⁹ Rule 1118, Attachment B (Guidelines for Calculating Flare Emissions).

¹⁷⁰ *Id.*

¹⁷¹ 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1).

¹⁷² *Sierra Club v. EPA*, 536 F.3d at 675–77.

¹⁷³ 40 C.F.R. § 70.6(a)(3)(i)(B); *see also* Cal. Health & Safety Code § 42301.10 (“[A]ir pollution control officer may include, in any permit issued to a Title V source, emission limits, standards, and other requirements that ensure compliance with all federal Clean Air Act ‘applicable requirements’ . . .”).

Indeed, Petitioner’s concerns about the inadequacy of monitoring requirements for flare 55F-1 are echoed by comments submitted by EPA Region 9 during the 45-day review period after the District’s submission of response to comments and proposed permit on March 29, 2024.¹⁷⁴ Specifically, Region 9 noted that “the commenter assert[s] the proposed permit contains inadequate monitoring against emission limits averaged over a relatively short time-period (e.g., 15 minutes, 60 minutes, 3-hours)” and that these are “valid points . . . that should be addressed in a revised statement of basis and, if necessary, revised permit conditions.”¹⁷⁵ For this reason, Region 9 recommended that the District consider five factors to evaluate appropriate monitoring for this equipment, specifically: (a) “Variability of emissions from the unit in question;” (b) “Likelihood of a violation of the requirements;” (c) “Whether add-on controls are being used for the unit to meet the emission limit; (d) “The type of monitoring, process, maintenance, or control equipment data already available for the emission unit;” and (e) “The type and frequency of the monitoring requirements for similar emission units at other facilities.”¹⁷⁶ Region 9 correctly concluded that the District’s reliance on the Monitoring Guidelines alone is insufficient to address gap filling requirements under 40 C.F.R. 70.6(a)(3)(i)(B).¹⁷⁷

In response to comments from EPA Region 9, once again, the District failed to provide technical analysis and data considered in determining appropriate monitoring for this equipment and to consider the five factors enumerated in Region 9’s comments. The District once more ignored Petitioner’s raised concerns about the use of closed combustion emissions factors to estimate emissions from open flame flares and failed to provide data regarding variability (or lack thereof) for flare 55F-1 that could result in higher emissions than anticipated.¹⁷⁸ Moreover, the District dismissed the need to evaluate all of the five factors enumerated by Region 9, noting generally that its “responses to comments were thorough and substantially related to many of these five factors” —which is not true—and that “those same technical and engineering considerations . . . [were] in mind when staff developed and took stakeholder input on the recommendations from its rule-specific reviews” and periodic monitoring guidelines.¹⁷⁹ The record here demonstrates otherwise. The District fails to provide technical analysis indicating that its approach here would ensure compliance with applicable CO and PM emissions limits.

To ensure compliance with flare 55F-1’s CO and PM limits, EPA should mandate that the Title V permit require robust monitoring and testing requirements. Strong monitoring and testing requirements are especially important for flare 55F-1 because, as discussed above, environmental justice concerns here mandate increased, focused attention to ensure that all Title V requirements—including monitoring, testing, recordkeeping, and reporting requirements—have been complied with.

¹⁷⁴ Region 9 Comments, *supra* note 9 at 2.

¹⁷⁵ *Id.*

¹⁷⁶ *Id.*

¹⁷⁷ *Id.*

¹⁷⁸ DAAC Public Comments, *supra* note 4 at 25–26.

¹⁷⁹ District Response to Region 9, *supra* note 13 at 5.

E. The Proposed Permit's Monitoring Requirements Cannot Ensure Compliance with Three-Hour Average H₂S Limits for Flares 55F-1, 65F-3, 65F-4, and 65F-8.

As Petitioner's comments explained, the proposed Title V permit does not include adequate monitoring, testing, reporting or recordkeeping requirements to ensure compliance with hydrogen sulfide ("H₂S") limits for flares 55F-1 (C1558), 65F-3 (C891), 65F-4 (C892), and 65F-8 (C894).¹⁸⁰ Consequently, the proposed permit violates 40 C.F.R. § 70.6(c)(1), as well as the requirements from 42 U.S.C. §§ 7661c(a) and 7661c(c).

The proposed permit limits the use and combustion of vent gases with H₂S greater than 160 ppmv averaged over three hours under condition B61.5.¹⁸¹ This limit applies to flares 55F-1, 65F-3, 65F-4, and 65F-8.¹⁸² Under condition D90.15, the Refinery is required to "periodically monitor the H₂S concentration" at the inlet for flare 55F-1, but the permit fails to specify how often monitoring should take place for either flare 55F-1 or other flares subject to this limit, or whether the other flares even need to monitor for H₂S at all.¹⁸³ Without clear monitoring requirements, it is not possible to ensure flares 55F-1, 65F-3, 65F-4, and 65F-8 are in compliance with the short-term H₂S limit.

The District's response to comments is inadequate to address the above-discussed problem with the proposed permit's monitoring and testing requirements for flares 55F-1, 65F-3, 65F-4, and 65F-8's H₂S limit of 160 ppmv averaged over three hours.

First, in response to Petitioner's comments, the District notes that EPA approved an Alternative Monitoring Plan ("AMP") related to flare 55F-1.¹⁸⁴ As part of the AMP request, the Refinery collected samples from storage tanks serviced by flare 55F-1 to measure H₂S concentrations between August 29, 2005, and September 12, 2005.¹⁸⁵ The samples showed H₂S concentrations below 0.5 ppmv and one sample with a concentration of 1.5 ppmv, below the applicable limit of 160 ppmv.¹⁸⁶ As a result, EPA approved the AMP to exempt the Refinery from having to "install, calibrate, maintain, and operate a continuous monitoring system ("CMS") to monitor and record the concentration by volume of sulfur dioxide emitted into the atmosphere."¹⁸⁷ The District reiterates this finding in its response to comments, noting that because flare 55F-1 is unlikely to combust sulfur compounds, "inherently low sulfur streams are not subject to continuous monitoring requirements with an approved EPA AMP."¹⁸⁸ However, the AMP does not exempt flare 55F-1 entirely from monitoring H₂S concentrations for purposes of complying with the SIP H₂S limit (nor could it), meaning that the District is required to prescribe

¹⁸⁰ DAAC Public Comments, *supra* note 4 at 25–26.

¹⁸¹ Proposed Permit, *supra* note 63 at 314–315.

¹⁸² *Id.*; see also Proposed Permit at 202 (Flare 55F-1), 198 (Flare 65F-3), and 199 (Flares 65F-4 and 65F-8).

¹⁸³ Proposed Permit at 380 (emphasis added).

¹⁸⁴ RTC, *supra* note 3 at 14, 63.

¹⁸⁵ *Id.* at 62.

¹⁸⁶ *Id.*

¹⁸⁷ *Id.* at 61, 63.

¹⁸⁸ RTC, *supra* note 3 at 14.

adequate periodic monitoring to confirm H₂S remain below the applicable limit. The approved AMP for flare 55F-1 does not elaborate on how often the Refinery should “periodically monitor” H₂S under the District’s condition D90.15 even if sulfur contents are expected to be low.

Second, in violation of Title V requirements, the District’s response to comments fails to address the same inadequate condition D90.15 monitoring requirement for flares 65F-3, 65F-4, and 65F-8.¹⁸⁹ In failing to respond, the District effectively concedes this monitoring condition is inadequate. There is no explanation as to whether these flares also have AMPs in place to exempt them from CEM requirements or process low sulfur gas streams—notably, the District’s Attachment A listing currently active AMPs does not list these flares.¹⁹⁰ Instead, the District notes generally that Rule 1118(g) specifies monitoring requirements for flares, but then neglects to specify whether these monitoring requirements include H₂S monitoring for gas streams,¹⁹¹ since Rule 1118(g) monitors gas flow, heating value, and sulfur dioxide (“SO₂”) rather than H₂S emissions. Moreover, these Rule 1118(g) monitoring requirements are not reflected in the proposed permit nor does the permit tag flares with this monitoring requirement. Without this information, the District has not adequately explained how the proposed permit’s monitoring requirements will ensure compliance with H₂S limits for flares 55F-1, 65F-3, 65F-4, and 65F-8. And, importantly, the District’s duty to include monitoring sufficient to ensure compliance with applicable requirements in a Title V permit exists regardless what monitoring the SIP may require, if that SIP monitoring cannot ensure compliance.

Finally, the District notes that the H₂S limit of 160 ppmv averaged over three hours does not apply to “any vent gas resulting from an emergency, shutdown, startup, or process upset.”¹⁹² However, there are presumably other instances where the H₂S limit would apply to flare operations outside of these exempt periods. As previously noted, for example, flare 55F-1 “provides *normal* and emergency relief for the three tanks” and serves “as an air pollution control device and emergency pressure control device” at the Refinery.¹⁹³ Flares 65F-3 and 65F-4 are also designated as general service flares.¹⁹⁴ Further, if the District is suggesting that these flares are entirely exempt, the District fails to explain why the permit would tag these flares with this limit rather than note they are not required to comply with this limit.

To ensure compliance with H₂S limits for flares 55F-1, 65F-3, 65F-4, and 65F-8, EPA should mandate that the Title V permit require CEMS or more frequent, robust monitoring and testing requirements. Strong monitoring and testing requirements are especially important for these flares because, as discussed above, environmental justice concerns here mandate increased,

¹⁸⁹ See 40 C.F.R. § 70.7(h)(6).

¹⁹⁰ RTC at 60.

¹⁹¹ *Id.* at 14.

¹⁹² *Id.* at 14. As detailed by Petitioner, the Clean Air Act requires that emission limits and standards apply continuously, meaning that blanket exemptions for SSM periods are unlawful. See DAAC Public Comments, *supra* note 4 at 44–54.

¹⁹³ Draft Permit Excerpts, *supra* note 112 at 2, 6 (Appx. C of Rule 1118 Monitoring Plan, revised June 2006).

¹⁹⁴ *Id.* at 608.

focused attention to ensure that all Title V requirements—including monitoring, testing, recordkeeping, and reporting requirements—have been complied with.

F. The Proposed Permit’s Monitoring Requirements Cannot Ensure Compliance with 15-Minute Average and Hourly CO, PM, and ROG Emission Limits for Heater 24F-1.

As Petitioner’s comments explained, the proposed Title V permit does not include adequate monitoring, testing, reporting or recordkeeping requirements to ensure compliance with CO, PM, and reactive organic gases (“ROG”) emissions for heater 24F-1 (D925).¹⁹⁵ Consequently, the proposed permit violates 40 C.F.R. § 70.6(c)(1), as well as the requirements from 42 U.S.C. §§ 7661c(a) and 7661c(c).

The permit contains several limits for CO, PM, and ROG emissions for heater 24F-1, including: CO emission limits of 88.54 lbs/hr (under Rule 1303(b)(2)), and 2,000 ppmv (with a 15-minute averaging period under Rule 407); PM limits of 0.1 grains/scf (with a 15-minute averaging period under Rule 409) and limits ranging from 0.196 to 0.010 grains/scf depending on the volume discharged, as determined by a table in Rule 404, and averaged over a cycle of operation or one-hour period, whichever is less under Rule 404(d); PM₁₀ limits of 24.94 lbs/hour; and ROG limits of 62.35 lbs/hour under New Source Review (“NSR”) limits.¹⁹⁶ Under condition D28.23, the Refinery is required to conduct annual source tests to determine the emission rates in pounds *per hour* for CO, PM, and ROG to ensure compliance with applicable emission limits.¹⁹⁷

As explained by Petitioner’s comments, the use of an annual source test under condition D28.23 is inadequate to ensure compliance with emission limits with short averaging periods of 15 minutes and one hour.¹⁹⁸ The District failed to provide technical analysis and data in the statement of basis and permit record showing that there is a lack of emissions variability in between tests sufficient to justify only an annual stack test for these short-term emission limits.¹⁹⁹ The District also failed to consider additional monitoring in between annual source tests to ensure compliance with these emission limits.²⁰⁰ Moreover, the permit failed to provide any monitoring or testing requirements for the ppmv and grains/scf emission limits, given that condition D28.23 only requires determining pounds per hour emission rates for CO, PM, and ROG.²⁰¹

The District’s response to comments is inadequate to address the above-discussed problems with the proposed permit’s monitoring and testing requirements for heater 24F-1’s CO, PM, and ROG limits.

¹⁹⁵ DAAC Public Comments, *supra* note 4 at 26–28.

¹⁹⁶ Proposed Permit, *supra* note 63 at 71.

¹⁹⁷ *Id.* at 361 (emphasis added).

¹⁹⁸ DAAC Public Comments, *supra* note 4 at 26–27.

¹⁹⁹ *Id.*

²⁰⁰ *Id.*

²⁰¹ *Id.*

First, in violation of Title V requirements, the District ignored comments regarding the lack of specific monitoring requirements for the ppmv and grains/scf emissions limits.²⁰² In failing to respond, the District effectively concedes this point.

Second, the District failed to revise its permit record or statement of basis to provide technical analysis and other data demonstrating the variability of emissions (or lack thereof) that could occur due to various factors.²⁰³ Instead, the District dismissed concerns about the use of annual source tests under condition D28.23, noting generally that “based on [the agency’s] best engineering judgment and evaluation, [] annual performance testing is sufficient to demonstrate compliance.”²⁰⁴ The public is left to speculate as to the District’s evaluation and engineering, since the District did not provide it in the permit record. Further, the District fails to note where in the permit other measures, such as parametric monitoring or inspection and maintenance requirements, exist that could help assure compliance with short-term emission limits in between tests.

The District dismissed the need to provide technical analysis, arguing instead that the agency “cannot reasonably be expected to reconstruct and belabor the information from all permitting decisions that were made at the time of permitting in the Title V renewal SOB for all the 1,100 plus devices listed in the Draft Title V permit.”²⁰⁵ Contrary to the District’s assertion, however, Petitioner is not requesting that the District provide additional information to support its permitting decision for *all* 1,100 plus devices. Rather, Petitioner identified several key equipment that are subject to source tests annually or every few years to determine compliance with emissions that are averaged over short periods of time and that could vary over longer periods. At a minimum, the District should have revised the statement of basis and supplemented the permit record related to the devices at issue here to provide the public with sufficient information to evaluate the adequacy of the monitoring requirements to ensure compliance. Given the environmental justice concerns and nature of the Refinery’s operations, and the significant health and safety risks to surrounding communities, the District’s obligation to ensure and explain how the Title V permit’s monitoring and testing requirements adequately promote compliance is especially important here.

Finally, the District notes its reliance on the Monitoring Guidelines to establish monitoring and testing conditions for heater 24F-1 due to the absence of such requirements under Rules 407, 409, and 1303.²⁰⁶ The District’s reliance on the Monitoring Guidelines, however, does not waive its obligations under 40 C.F.R. § 70.6(c)(1), as well as 42 U.S.C. §§ 7661c(a) and 7661c(c), to implement adequate monitoring requirements to ensure compliance with applicable limits.

²⁰² 40 C.F.R. § 70.7(h)(6); *see also* District Response to Region 9, *supra* note 13 at 11–12, tbl.2 (in response to Region 9 comments, the District subsequently summarized CO source tests and notes “None” or “N/A” to indicate no prescribed monitoring and testing requirements under the permit).

²⁰³ RTC, *supra* note 3 at 14–16.

²⁰⁴ *Id.* at 15.

²⁰⁵ *Id.*

²⁰⁶ *Id.*

Indeed, Petitioner’s concerns about the inadequacy of monitoring requirements for thermal heater 24F-1 are bolstered by comments submitted by EPA Region 9 during the 45-day review period after the District’s submission of response to comments and proposed permit on March 29, 2024.²⁰⁷ Specifically, Region 9 noted that “the commenter assert[s] the proposed permit contains inadequate monitoring against emission limits averaged over a relatively short time-period (e.g., 15 minutes, 60 minutes, 3-hours)” and these are “valid points . . . that should be addressed in a revised statement of basis and, if necessary, revised permit conditions.”²⁰⁸ For this reason, Region 9 recommended that the District consider five factors to evaluate appropriate monitoring for this equipment, specifically: (a) “Variability of emissions from the unit in question;” (b) “Likelihood of a violation of the requirements;” (c) “Whether add-on controls are being used for the unit to meet the emission limit;” (d) “The type of monitoring, process, maintenance, or control equipment data already available for the emission unit;” and (e) “The type and frequency of the monitoring requirements for similar emission units at other facilities.”²⁰⁹ Region 9 correctly concluded that the District’s reliance on the Monitoring Guidelines alone is insufficient to address gap filling requirements under 40 CFR 70.6(a)(3)(i)(B).²¹⁰

In response to comments from EPA Region 9, once again, the District failed to provide technical analysis and data considered in determining appropriate monitoring for this equipment and to fully and adequately consider the five factors enumerated in Region 9’s comments. The District once more ignores variability issues raised by Petitioner and any of the five factors in Region 9’s comments that could result in excess emissions from this equipment. For instance, the District has failed to provide information about the type and frequency of monitoring requirements for similar heaters at other facilities and failed to provide data regarding variability (or lack thereof) in the countless hours in between the annual tests. Rather, the District provides source testing to argue that CO and PM emissions from this equipment are “well below” and can “easily” comply with applicable emission limits for these pollutants.²¹¹ Not only did the District fail to provide ROG test results, but these CO and PM source test numbers do not speak to the variability of emissions in between tests—nor did the District provide the actual test reports, which could possibly show variability in between test runs. Further, periodic tests cannot accurately capture variability of emissions during the 364-plus days in between tests.

Moreover, the District dismissed the need to evaluate all of the five factors enumerated by EPA, noting generally that its “responses to comments were thorough and substantially related to many of these five factors” —which is not true—and “those same technical and engineering considerations . . . [were] in mind when staff developed and took stakeholder input on the recommendations from its rule-specific reviews” and periodic monitoring guidelines.²¹² The public is left to speculate as to the technical and engineering considerations related to the

²⁰⁷ Region 9 Comments, *supra* note 9 at 2.

²⁰⁸ *Id.*

²⁰⁹ *Id.*

²¹⁰ *Id.*

²¹¹ District Response to Region 9, *supra* note 13 at 6.

²¹² *Id.* at 5.

Refinery that informed the testing requirements for this equipment, since the District has not provided this previous evaluation and rationale.

To ensure compliance with the heater 24F-1's CO, PM, and ROG limits, EPA should mandate that the Title V permit require CEMS or more frequent, robust monitoring and testing requirements. Strong monitoring and testing requirements are especially important for thermal oxidizer 29F-1 because, as discussed above, environmental justice concerns here mandate increased, focused attention to ensure that all Title V requirements—including monitoring, testing, recordkeeping, and reporting requirements—have been complied with.

G. The Proposed Permit's Monitoring Requirements Cannot Ensure Compliance with 15-Minute Average CO and PM Emission Limits for Heater 4F-1.

As Petitioner's comments explained, the proposed Title V permit does not include adequate monitoring, testing, reporting or recordkeeping requirements to ensure compliance with CO and PM emission limits for heater 4F-1 (D367).²¹³ Consequently, the proposed permit violates 40 C.F.R. § 70.6(c)(1), as well as the requirements from 42 U.S.C. §§ 7661c(a) and 7661c(c).

The proposed permit limits CO emissions to 2,000 ppmv (under Rule 407) and PM emissions to 0.1 grains/scf (under Rule 409) both averaged over a 15-minute period.²¹⁴ The Refinery is required to conduct source testing for CO every three years or at least every five years under condition D28.8 despite likely variability of CO emissions.²¹⁵ Additionally, the District failed to establish how often the Refinery must conduct PM monitoring to ensure compliance with the applicable limit.²¹⁶

The District's response to comments is inadequate to address the above-discussed problems with the proposed permit's monitoring and testing requirements for heater 4F-1's CO and PM limits.

First, in violation of Title V regulations, the District's response does not address Petitioner's raised concerns regarding the potential variability of CO and PM emissions.²¹⁷ In failing to respond, the District effectively concedes this point. Title V regulations require that the District respond to significant comments raised by the public.²¹⁸ Emissions could be higher than the CO and PM limits in the many hours between tests once every five years, but without more frequent testing and monitoring, there would be no way to know whether the heater is complying with these short-term limits.

Second, the District noted that condition D28.8 would be replaced with new permit condition D29.7 that establishes source testing requirements for CO and PM at the SCR 4J-34

²¹³ DAAC Public Comments, *supra* note 4 at 28; *see also* Proposed Permit at 70.

²¹⁴ Proposed Permit, *supra* note 63 at 70.

²¹⁵ *Id.* at 359–360 (condition D28.8); DAAC Public Comments, *supra* note 4 at 28.

²¹⁶ DAAC Public Comments, *supra* note 4 at 28.

²¹⁷ 40 C.F.R. § 70.7(h)(6).

²¹⁸ *Id.*

(C2628) for this equipment—the District argues condition D29.7 extends to heater 4F-1 because it is connected to this SCR.²¹⁹ Similar to condition D28.8, however, newly proposed condition D29.7 would continue to require source testing every five years, which would allow violations to go undetected for years in between tests. Moreover, Petitioner could not have commented on the adequacy of D29.7 because that provision did not apply during the comment period.²²⁰

Third, even assuming *arguendo* that condition D28.8 is adequate to ensure compliance with CO and PM limits, the District does not provide a timeline for when condition D28.8 would be superseded in the permit submitted for EPA review, which does not list condition D29.7 as applying directly to heater 4F-1 but rather applies to SCR 4J-34 under the permit.²²¹ These omissions and the District’s failure to amend the statement of basis with these details creates confusion regarding applicable requirements.²²² Further, the District fails to note where in the permit other measures, such as parametric monitoring or inspection and maintenance requirements, exist that could help assure compliance with short-term emission limits in between tests.

Finally, the District reiterated its reliance on the Monitoring Guidelines as a reference for requiring source testing every few years.²²³ The District’s reliance on the Monitoring Guidelines, however, does not waive its obligations under 40 C.F.R. § 70.6(c)(1), as well as 42 U.S.C. §§ 7661c(a) and 7661c(c), to implement adequate monitoring requirements to ensure compliance with applicable limits.

Indeed, Petitioner’s concerns about the inadequacy of monitoring requirements for heater 4F-1 are bolstered by comments submitted by EPA Region 9 during the 45-day review period after the District’s submission of response to comments and proposed permit on March 29, 2024.²²⁴ Specifically, Region 9 noted that “the commenter assert[s] the proposed permit contains inadequate monitoring against emission limits averaged over a relatively short time-period (e.g., 15 minutes, 60 minutes, 3-hours)” and that these are “valid points . . . that should be addressed in a revised statement of basis and, if necessary, revised permit conditions.”²²⁵ For this reason, Region 9 recommended that the District consider five factors to evaluate appropriate monitoring for this equipment, specifically: (a) “Variability of emissions from the unit in question;” (b) “Likelihood of a violation of the requirements;” (c) “Whether add-on controls are being used for the unit to meet the emission limit;” (d) “The type of monitoring, process, maintenance, or control equipment data already available for the emission unit;” and (e) “The type and frequency of the monitoring requirements for similar emission units at other facilities.”²²⁶ Region 9

²¹⁹ RTC, *supra* note 3 at 17–18; *see also* Proposed Permit, *supra* note 63 at 519–21.

²²⁰ *See* 40 C.F.R. § 70.12(a)(2)(v).

²²¹ Proposed Permit at 475, 519–21.

²²² 57 Fed. Reg. 32,250, *supra* note 21 at 32,251 (clarifying that the Title V permit program meant 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”).

²²³ RTC, *supra* note 3 at 17–18.

²²⁴ *See* Region 9 Comments, *supra* note 9.

²²⁵ *Id.* at 2.

²²⁶ *Id.*

correctly concluded that the District’s reliance on the Monitoring Guidelines alone is insufficient to address gap filling requirements under 40 CFR 70.6(a)(3)(i)(B).²²⁷

In response to comments from EPA Region 9, once again, the District failed to provide technical analysis and data considered in determining appropriate monitoring for heater 4F-1 and to fully and adequately consider the five factors enumerated in Region 9’s comments.²²⁸ The District once more ignores variability issues raised by Petitioner and any of the five factors in Region 9’s comments that could result in excess emissions from this equipment. For instance, the District has failed to provide information about the type and frequency of monitoring requirements for similar heaters at other facilities and failed to provide data regarding variability (or lack thereof) in the countless hours in between the annual tests. Rather, the District provides source testing to argue that CO and PM emissions from this equipment are “well below” and can “easily” comply with applicable emission limits for these pollutants.²²⁹ In so doing, the District failed to provide source test details that could show variability across test runs, but reference to previous tests alone does not address emission variability issues—as detailed by Petitioner, periodic tests cannot accurately capture variability of emissions during the years in between tests.

Moreover, the District dismissed the need to evaluate all of the five factors enumerated by EPA, noting generally that its “responses to comments were thorough and substantially related to many of these five factors” —which is not true—and “those same technical and engineering considerations . . . [were] in mind when staff developed and took stakeholder input on the recommendations from its rule-specific reviews” and periodic monitoring guidelines.²³⁰ The public is left to speculate as to the technical and engineering considerations related to the Refinery that informed the testing requirements for this equipment, since the District has not provided this previous evaluation and rationale.

To ensure compliance with the thermal oxidizer heater 4F-1’s CO and PM limits, EPA should mandate that the Title V permit require CEMS or more frequent, robust monitoring and testing requirements. Strong monitoring and testing requirements are especially important for heater 4F-1 because, as discussed above, environmental justice concerns here mandate increased, focused attention to ensure that all Title V requirements—including monitoring, testing, recordkeeping, and reporting requirements—have been complied with. Strong monitoring and testing requirements are also important because the information that the Refinery submitted in response to EPA’s ICR for the 2014-15 petroleum refinery sector risk and technology review indicated that heater 4F-1 is a significant source of criteria pollutants and released 29.59 tons/year of CO and 8.37 tons/year of PM₁₀.²³¹

²²⁷ *Id.*

²²⁸ See District Response to Region 9, *supra* note 13.

²²⁹ *Id.* at 6.

²³⁰ *Id.*

²³¹ ICR Data, *supra* note 87 at rows 45119–45157.

H. The Proposed Permit’s Monitoring Requirements Cannot Ensure Compliance with Emissions Limits Applicable to Several Other Heaters and Boilers at the Refinery.

As noted in Petitioner’s comments, in addition to heaters 24F-1 and 4F-1, several other heaters and boilers contain inadequate monitoring and testing requirements to ensure compliance with applicable limits.²³² Consequently, the proposed permit violates 40 C.F.R. § 70.6(c)(1), as well as the requirements from 42 U.S.C. §§ 7661c(a) and 7661c(c).

Petitioner provided the District with a table summarizing various heaters and boilers with inadequate—and in some cases completely absent—monitoring and testing requirements despite being a significant source of criteria air pollutants and hazardous air pollutants based on ICR data.²³³ Under the proposed permit conditions, the Refinery is required to conduct emissions monitoring and testing of these devices generally every 3 to 5 years. These monitoring and testing requirements are inadequate to confirm compliance with short term limits that could vary and would leave violations undetected for years in between tests. The District failed to provide data or technical explanation in the permit record or statement of basis justifying these prolonged monitoring timeframes to confirm compliance and ignored the potential variability of emissions.

Table 1: Additional Boilers and Heaters with Deficient Monitoring/Testing.

Unit	Limit(s) (and ICR Data)	Monitoring/Testing (and Permit Condition)
Boiler 2F-4 (D803) ²³⁴	PM: 11 lbs/hr (Rule 476), 0.01 gr/scf (15-min avg- Rule 476 ²³⁵), 0.1 gr/scf (15-min avg- Rule 409) (ICR: 4.31 tons/year PM ₁₀)	None listed
	CO: 2000 ppmv (15-min avg- Rule 407) (ICR: 51.82 tons/year CO)	Stack test every five years or annual test using portable analyzer (D328.1) ²³⁶
	ROG: 1.77 lbs/hr	

²³² DAAC Public Comments, *supra* note 4 at 29–33.

²³³ *Id.* See also ICR Data, *supra* note 87.

²³⁴ Proposed Permit, *supra* note 63 at 182.

²³⁵ The averaging period could arguably be longer, as Rule 476(a)(2)(B) provides that the limit is “averaged over a minimum of 15 consecutive minutes.” This language creates ambiguity as to the applicable averaging requirement to determine compliance.

²³⁶ Proposed Permit, *supra* note 63 at 395.

Boiler 30F-1 (D1236) ²³⁷	(ICR: 2.92 tons/year VOCs)	Stack test every three years (D29.2) ²³⁸
	PM ₁₀ : 5.3 lbs/hr, 11 lbs/hr (Rule 476). PM: 0.01 gr/scf (15-min avg- Rule 476), 0.1 gr/scf (15-min avg- Rule 409), limit per Rule 404 table (1-hr avg) (ICR: 4.40 tons/year PM ₁₀)	Stack test every three years (D29.2)
	CO: 10.1 lbs/hr, 2000 ppmv (15-min avg- Rule 407) (ICR: 15.04 tons/year CO)	Stack test every five years or annual test using portable analyzer (D328.1) ²³⁹
Boiler 30F-2 (D1239) ²⁴⁰	ROG: 1.77 lbs/hr (ICR: 5.55 tons/year VOCs)	Stack test every three years (D29.2) ²⁴¹
	PM ₁₀ : 5.3 lbs/hr, 11 lbs/hr PM ₁₀ (Rule 476). PM: 0.01 gr/scf (15-min avg- Rule 476), 0.1 gr/scf (15-min avg- Rule 409), limit per Rule 404 table (1-hr avg) (ICR: 4.07 tons/year PM ₁₀)	Stack test every three years (D29.2)
	CO: 10.1 lbs/hr, 2000 ppmv (15-min avg- Rule 407)	Stack test every five years or annual test

²³⁷ *Id.* at 183.

²³⁸ *Id.* at 363. Notably, condition D29.2 also states that the Refinery must use the “District-approved averaging time” for ROG emissions but fails to specify the averaging time in the proposed permit to confirm compliance with the applicable ROG limit.

²³⁹ *Id.* at 395.

²⁴⁰ *Id.* at 185.

²⁴¹ *Id.* at 363.

	(ICR: 18.86 tons/year CO)	using portable analyzer (D328.1) ²⁴²
Heater 19F-1 (D924) ²⁴³	PM: 0.1 gr/scf (15-min avg- Rule 409), limit per Rule 404 table (1-hr avg) (ICR: 4.12 tons/year PM ₁₀)	None listed
	CO: 2000 ppmv (15-min avg- Rule 407) (ICR: 86.64 tons/year CO)	Stack test every five years or annual test using portable analyzer (D328.1)
Boiler 2F-3 (C164) ²⁴⁴	PM: 11 lbs/hr PM ₁₀ (Rule 476), 0.01 gr/scf (15-min avg- Rule 476), 0.1 gr/scf (15-min avg- Rule 409).	None listed
Heater 3F-3 (D930) ²⁴⁵	CO: 2000 ppmv (15-min avg- Rule 407) (ICR: 8 tons/year CO)	Stack test every five years or annual test using portable analyzer (D328.1)
	PM: 0.1 gr/scf (15-min avg- Rule 409) (ICR: 2.6 tons/year PM)	None listed
Boiler 75F-1 (D805) ²⁴⁶	PM: 11 lbs/hr PM ₁₀ (Rule 476), 0.01 gr/scf (15-min avg- Rule 476), 0.1 gr/scf (15-min avg- Rule 409).	None listed

²⁴² *Id.* at 395.

²⁴³ *Id.* at 63.

²⁴⁴ *Id.* at 39.

²⁴⁵ *Id.* at 78.

²⁴⁶ *Id.* at 182.

	(ICR: 5 tons/year PM)	
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The District’s response to comments is inadequate to address the above-discussed problems with the proposed permit’s monitoring and testing requirements for various heaters and boilers.

First, in violation of Title V requirements, the District completely ignored the lack of monitoring and testing conditions for boiler 2F-4 (D803), heater 19F-1 (D924), boiler 2F-3 (C164), heater 3F-3 (D930), and boiler 75F-1 (D805) listed on the table.²⁴⁷ In failing to respond, the District effectively concedes these points.

Second, to justify prolonged three to five year source tests for various boilers and heaters, the District incorporated by reference earlier discussion regarding the agency’s reliance on its Monitoring Guidelines to ensure compliance with Rules 407 and 409, which set limits for CO and PM pollutants.²⁴⁸ The Monitoring Guidelines, however, do not relieve the District of its duty under Title V to ensure that this permit includes monitoring sufficient to ensure compliance with applicable limits. Further, the District fails to note where in the permit other measures, such as parametric monitoring or inspection and maintenance requirements, exist that could help assure compliance with short-term emission limits in between tests.

Moreover, the District failed to provide data or additional analysis in the statement of basis explaining the adequacy of these testing and monitoring requirements. Instead, the agency argued that “staff cannot reasonably be expected to reconstruct and belabor the information from all permitting decisions that were made at the time of permitting in the Title V renewal SOB for all the 1,100 plus devices listed in the Draft Title V permit.”²⁴⁹ As previously noted, contrary to the District’s assertion, however, Petitioner is not requesting that the District provide additional information to support its monitoring decisions for all devices operating at the Refinery. Rather, Petitioner flagged several devices that are subject to source tests annually or every few years to determine compliance with emissions that are averaged over short periods of time and that could vary. At a minimum, the District should have revised the statement of basis and supplemented the permit record concerning the devices at issue here to provide the public with sufficient information to evaluate the adequacy of monitoring requirements to ensure compliance with applicable limits. This transparency is particularly important here given the environmental justice concerns and the inherently dangerous nature of the Refinery’s operations and public health impacts.

Indeed, Petitioner’s concerns about the inadequacy of monitoring requirements for the listed heaters and boilers are echoed by comments submitted by EPA Region 9 during the 45-day review period after the District’s submission of response to comments and proposed permit on

²⁴⁷ 40 C.F.R. § 70.7(h)(6); RTC, *supra* note 3 at 18–19, 55–58.

²⁴⁸ RTC, *supra* note 3 at 18–19.

²⁴⁹ *Id.* at 19.

March 29, 2024.²⁵⁰ Specifically, Region 9 noted that “the commenter assert[s] the proposed permit contains inadequate monitoring against emission limits averaged over a relatively short time-period (e.g., 15 minutes, 60 minutes, 3-hours)” and these are “valid points . . . that should be addressed in a revised statement of basis and, if necessary, revised permit conditions.”²⁵¹ Additionally, Region 9 recommended that the District consider five factors to evaluate appropriate monitoring for this equipment, specifically: (a) “Variability of emissions from the unit in question;” (b) “Likelihood of a violation of the requirements;” (c) “Whether add-on controls are being used for the unit to meet the emission limit; (d) “The type of monitoring, process, maintenance, or control equipment data already available for the emission unit;” and (e) “The type and frequency of the monitoring requirements for similar emission units at other facilities.”²⁵² Region 9 correctly concluded that the District’s reliance on the Monitoring Guidelines alone is insufficient to address gap filling requirements under 40 CFR 70.6(a)(3)(i)(B).²⁵³

In response to comments from EPA Region 9, once again, the District failed to provide technical analysis and data considered in determining appropriate monitoring for this equipment and to fully and adequately consider the five factors enumerated in Region 9’s comments. For instance, the District has failed to provide information about the type and frequency of monitoring requirements for similar heaters and boilers at other facilities and failed to provide data regarding variability (or lack thereof) in the countless hours in between source tests—and failed to provide even performance test reports, which could show variability across test runs. Rather, the District relies on source tests to argue that CO and PM emission from this equipment are “well below” and can “easily” comply with applicable emission limits for these pollutants.²⁵⁴ However, not only did the District fail to provide the individual source test details that could show variability across test runs, but reference to previous tests alone does not address emission variability issues—as detailed by Petitioner, periodic tests cannot accurately capture variability of emissions during the several years in between tests. Further, the District fails to note where in the permit other measures, such as parametric monitoring or inspection and maintenance requirements, exist that could help assure compliance with short-term emission limits in between tests.

Moreover, the District dismissed the need to evaluate all of the five factors enumerated by Region 9, noting generally that its “responses to comments were thorough and substantially related to many of these five factors” —which is not true—and “those same technical and

²⁵⁰ Region 9 Comments, *supra* note 9 at 1–2.

²⁵¹ *Id.*

²⁵² *Id.* at 2. Region 9 also referenced and attached to its comments the Order on Petition No. III-2023-15, *In the Matter of United States Steel Corporation*, applying these five factors to monitoring and testing requirements that ranged from two to five years and concluding that the permitting authority failed to provide “sufficient rationale to justify why the Permit’s testing, monitoring, and recordkeeping requirements are sufficient to assure compliance with the Permit’s hourly and rolling 12-month emission limits.” *In re United States Steel Corporation, Edgar Thomson Plant*, *supra* note 25 at 13–14.

²⁵³ *Id.* at 2.

²⁵⁴ District Response to Region 9, *supra* note 13 at 6.

engineering considerations . . . [were] in mind when staff developed and took stakeholder input on the recommendations from its rule-specific reviews” and periodic monitoring guidelines.²⁵⁵ The public is left to speculate as to the technical and engineering considerations specific to the Refinery that informed the testing requirements for this equipment, since the District has not provided this previous evaluation and rationale. Further, emissions “well below” permit limits says nothing about the emissions in the many hours in between tests every few years, and as noted, the District has not produced the actual test reports it cites, which could possibly show variability of emissions across test runs.

Notably, in its response to Region 9, the District once more failed to address the lack of testing and monitoring conditions for boiler 2F-4, heater 19F-1, boiler 2F-3, heater 3F-3, and boiler 75F-1.²⁵⁶ In tables provided by the District summarizing source tests, the agency marks monitoring and testing requirements as “N/A” for various pollutants applicable to this equipment—in effect, the District concedes the permit does not contain monitoring and testing requirements for this equipment to track PM emissions to ensure compliance with applicable limits listed on Table 1 of Petitioner’s comments.²⁵⁷ The District does not provide further information or explanation as to the reason for not designating monitoring and testing requirements for this equipment or how the Refinery would determine compliance with the applicable limits.

To ensure compliance with CO and PM limits for these heaters and boilers, EPA should mandate that the Title V permit require CEMS or more frequent, robust monitoring and testing requirements. Strong monitoring and testing requirements are especially important here because, as discussed above, environmental justice concerns here mandate increased, focused attention to ensure that all Title V requirements—including monitoring, testing, recordkeeping, and reporting requirements—have been complied with.

III. IN VIOLATION OF 40 C.F.R. § 70.7(A)(5), THE DISTRICT FAILED TO PROVIDE A REASONED EXPLANATION FOR WHY THE PROPOSED PERMIT ENSURES COMPLIANCE WITH THE LIMITS AT ISSUE HERE FOR THE FCCU, FLARES, HEATERS, AND BOILERS.

As Petitioner’s comments explained, in addition to the failure of the proposed Title V permit to ensure compliance with limits for the FCCU, flares, heaters, and boilers, the permit and permit record are also deficient for the independent and separate reason that the District has not adequately explained how the proposed Title V permit provisions can ensure compliance with these limits.²⁵⁸ The District’s failure to provide a reasoned explanation in the permit record for why it believes the permit conditions are sufficient to assure the Refinery’s compliance with these various limits violates 40 C.F.R. § 70.7(a)(5)’s requirement that permitting authorities “provide a statement that sets forth the legal and factual basis for the draft permit conditions.”

²⁵⁵ *Id.* at 5.

²⁵⁶ *Id.* at 1–7.

²⁵⁷ *Id.* at 10–12.

²⁵⁸ *See* DAAC Public Comments, *supra* note 4 at 22, 24, 25, 26, 28, 29, 33.

See also Mettiki Order at 7-8 (“In addition to including permit terms sufficient to satisfy EPA's part 70 monitoring requirements, permitting authorities must include a rationale for the monitoring requirements selected that is clear and documented in the permit record.”) (citing § 70.7(a)(5) and prior Title V orders).

In violation of Title V requirements (as reflected in 40 C.F.R. § 70.7(h)(6)), the District did not respond to Petitioner’s significant comment raising this precise objection regarding the District’s failure to offer a reasoned explanation for why the monitoring and other permit requirements ensure compliance with these limits. Thus, Petitioner cannot “explain how [the District’s] response to the comment is inadequate to address the issue raised in the public comment.”²⁵⁹

IV. THE PROPOSED PERMIT CONTAINS UNLAWFUL STARTUP, SHUTDOWN, AND MALFUNCTION EXEMPTIONS TO NSR LIMITS.

As Petitioner’s comments explained, the proposed Title V permit contains unlawful exemptions to major NSR limits for periods of startup, shutdown and malfunction (“SSM”) for a heater, turbine and two boilers.²⁶⁰ The affected major NSR limits are applicable requirements that the Refinery’s Title V permit must assure compliance with.²⁶¹ Because the proposed Title V permit includes unlawful exemptions to these applicable requirements (the exemptions are unlawful for two different reasons, as discussed below), it fails to ensure compliance with the affected NSR limits, in violation of 40 C.F.R. §§ 70.1(b), 70.6(a)(1), 70.7(a)(1)(iv) and 42 U.S.C. § 7661c(a).

The unlawful exemptions are as follows:

- Device Condition A99.4 provides that a 42 lbs/hr NSR NO_x limit, applicable to Heater 24F-1 (D925) and Turbine 24J-1 (D926), “shall not apply during startup, shutdown or malfunction.”²⁶² Relatedly, Equipment Operation/Construction Requirement E54.1 provides that Heater 24F-1 may bypass its SCR reactor (C395) during startup and shutdown for up to 60 hours per event, not including the refractory dryout period (during which bypassing the SCR is permitted up to 144 consecutive hours).²⁶³ Requirement E54.1 also provides that, during startup

²⁵⁹ *See* 40 C.F.R. § 70.12(a)(2)(vi).

²⁶⁰ DAAC Public Comments at 44–52.

²⁶¹ *See* 40 C.F.R. § 70.2 (defining “applicable requirement” to include “[a]ny term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D, of the Act”).

²⁶² Proposed Permit, *supra* note 63 at 305 (Condition A99.4 defines “startup” and “shutdown” as the “time period during the startup and shutdown of the heater unit when the temperature of the exhaust gas at the inlet to SCR is below 550 degree F”). *See also id.* at 71 (listing the 42 lbs/hr NO_x limit as a “NSR applicability limit” applicable to Heater 24F-1), 198 (listing a 42 lbs/lb natural gas NO_x limit as a “NSR applicability limit” applicable to Turbine 24J-1). The limit listed on PDF page 198 of the permit for the turbine should presumably be a 42 lbs/hr limit, given that Device Condition A99.4 lists the turbine as a device subject to that condition and provides that “[t]he 42 Lbs/hr NO_x emission limit(s) shall not apply during startup, shutdown or malfunction.”

²⁶³ *Id.* at 71, 396–97.

and shutdown, the Refinery is to use 244.05 lbs NO_x per hour—almost six times the normal hourly limit—for reporting purposes for Heater 24F-1.²⁶⁴

- Device Condition A195.1 provides that a 9 ppmv NSR NO_x limit averaged over 15 minutes corrected to 15% excess oxygen, dry basis, also applicable to Heater 24F-1 and Turbine 24J-1, “applies at all times except during startup, shutdown, or malfunction when the temperature of the exhaust gas at the inlet to the SCR is below 550 degrees F.”²⁶⁵
- Device Condition A195.9 provides that a 9 ppmv NSR NO_x limit averaged over 60 minutes corrected to 3% excess oxygen, dry basis, applicable to Boilers 30F-1 and 30F-2 (D1236 and D1239), “applies at all times except during startup, shutdown, or malfunction.”²⁶⁶ Under Requirement E448.7, startups and shutdowns can last up to “30 non-consecutive hours when the SCR system has no control effect for the subject devices.”²⁶⁷

All the limits affected by these exemptions are major NSR limits.²⁶⁸

These exemptions are unlawful and render the proposed permit unable to ensure compliance with the affected NSR limits for two reasons:

First, these exemptions violate the unambiguous statutory mandate that major NSR emission limitations apply continuously, not only during some periods of time. Section 7503(a)(2) of the Clean Air Act requires nonattainment major NSR permits (the affected NO_x limits here are all nonattainment NSR limits) to require compliance with the “lowest achievable emission rate,”²⁶⁹ which is defined as the rate of emissions which reflects the more stringent of (A) the most stringent “emission limitation” in any SIP, unless it is demonstrated that such limits are not achievable or (B) the most stringent “emission limitation” achieved in practice by the

²⁶⁴ *Id.* at 396–97.

²⁶⁵ *Id.* at 305. *See also id.* at 71 (listing the 9 ppmv limit as a “BACT emission limit” applicable to Heater 24F-1). Confusingly, even though Device Condition A195.1 indicates that the 9 ppmv limit is also applicable to Turbine 24J-1, the page of the permit listing the various limits applicable to the turbine (PDF page 198) does not list the 9 ppmv limit. The District’s response to comments states that this heater and turbine share a common stack—and that the turbine vents to the heater, which vents to the SCR. RTC, *supra* note 3 at 15–16, 33.

²⁶⁶ Proposed Permit at 307–08. This condition defines “startup” and “shutdown” as the “time period during the start-up and shutdown of the SCR (Devices C1238, C1241) when the temperature of the exhaust gas at the inlet to SCR is below 550 degrees F and NH₃ is not injected.” *Id.* at 307. *See also id.* at 183, 185 (listing the 9 ppmv limit as a “NSR applicability limit” applicable to the two boilers).

²⁶⁷ *Id.* at 429–30.

²⁶⁸ *See id.* at 71, 183, 185, 198 (indicating that the heater, turbine and boilers are each a “MAJOR SOURCE” for NO_x). *See also* RTC, *supra* note 3 at 15–16 (“The configuration of the flue gas system for heater 24F-1 includes the gas turbine 24J-1, which is also a Major Source for NO_x and SO_x emissions.”).

²⁶⁹ 42 U.S.C. § 7503(a)(2).

class or category of source in question.²⁷⁰ The Act unambiguously requires these emission limitations to apply continuously, defining “emission limitation” as a “requirement . . . which limits the quantity, rate, or concentration of emissions of air pollutants *on a continuous basis*, including any requirement relating to the operation or maintenance of a source to assure *continuous emission reduction*, and any design, equipment, work practice or operational standard promulgated under this chapter.”²⁷¹

Contrary to the Clean Air Act’s requirement that major NSR limits apply continuously, the proposed permit’s exemptions mean that the affected NSR limits only apply some of the time. This is plainly unlawful, as the D.C. Circuit confirmed in *Sierra Club v. EPA*.²⁷² In *Sierra Club*, the court held that the requirement for “continuous” emission limits and standards means that “temporary, periodic, or limited systems of control” do not comply with the Act.²⁷³ Congress gave state permitting authorities no authority “to relax emission standards on a temporal basis,”²⁷⁴ as the District has done here with the affected NSR limits for the heater, turbine and two boilers.

Sierra Club’s holding—and not the D.C. Circuit’s recent holding regarding automatic exemptions in SIPs—applies equally to major NSR limits. In the SIP call case, the majority reasoned:

The relevant provision in *Sierra Club* . . . simply required EPA to “establish[] emission standards,” 42 U.S.C. § 7412(d)(1), without any proviso conditioning that obligation on a predicate determination that it is “necessary or appropriate” for a measure to qualify as an “emission standard.” As a result, every measure established by EPA under that provision needed to qualify as an “emission standard,” including by satisfying the requirement that the measure operate on a “continuous basis.” There are also other provisions that likewise require the use of “emission limitations” without condition. *See, e.g.*, 42 U.S.C. § 7429(a)(1)(A) (requiring EPA to establish performance standards for solid waste incineration units and stating that “[s]uch standards shall include emission limitations” (emphasis added)).

Here, by contrast, a SIP must include “emission limitations” only when “necessary or appropriate to meet the [CAA’s] applicable requirements.” 42 U.S.C. § 7410(a)(2)(A). And EPA has not purported to find that it is “necessary or appropriate” for every (or indeed any) emission restriction subject to an automatic exemption to qualify as an “emission limitation” under the statutory definition.²⁷⁵

²⁷⁰ *Id.* § 7501(3)(A), (B). Likewise, 42 U.S.C. § 7475(a)(1) requires Prevention of Significant Deterioration (“PSD”) permits for facilities in attainment areas to set forth “emission limitations.”

²⁷¹ 42 U.S.C. § 7602(k) (emphasis added).

²⁷² *Sierra Club v. EPA*, 551 F.3d 1019, 1027 (D.C. Cir 2008).

²⁷³ *Id.* (quoting H.R. Rep. No. 95-294, at 92 (1977), as reprinted in 1977 U.S.C.C.A.N. 1077, 1170).

²⁷⁴ *See id.* at 1028.

²⁷⁵ *Env’t Comm. of Fla. Elec. Power Coordinating Grp., Inc. v. EPA*, 94 F.4th 77, 103 (D.C. Cir. 2024).

Here—like § 7412(d)(1)—the Act’s relevant major NSR provisions require the use of “emission limitations” without condition.²⁷⁶ That § 7501(3) partly defines “lowest achievable emission rate” to include the most stringent “emission limitation” in any SIP does not change this. Section 7501(3)’s use of “emission limitation” when referring to SIP provisions makes clear that it is referring to continuously applicable limits from SIPs. Further, the second half of § 7501(3)’s definition (the most stringent “emission limitation” achieved in practice by the class or category of source in question) serves as a backstop and unambiguously refers to continuously applicable limits. Finally, it would make no practical sense that the “lowest achievable emission rate” would allow sources to avoid compliance during certain periods of operation.

Thus, every major NSR limit must, without question, satisfy the requirement that it operate on a “continuous basis.” Further, EPA has “consistently” stated that major NSR limits must apply at all times and that NSR permits cannot contain blanket exemptions to those limits for SSM periods.²⁷⁷ Because the exemptions in the proposed Title V permit here unlawfully cause the affected NSR limits to only apply some of the time, the exemptions render the proposed permit unable to ensure compliance with these limits.

Title V’s statutory language also reinforces that emission limits in Title V permits—including those incorporated from NSR permits—must apply continuously, rather than only during some periods of time. Specifically, 42 U.S.C. § 7661(c)(a) provides that each Title V permit “shall include enforceable emission limitations and standards,” and (as explained above) 42 U.S.C. § 7602(k) defines “emission limitation” and “emission standard” as a “requirement . . . which limits the quantity, rate, or concentration of emissions of air pollutants *on a continuous basis*, including any requirement relating to the operation or maintenance of a source to assure *continuous emission reduction . . .*” (emphasis added). Read together, §§ 7661(c)(a) and 7602(k) make doubly clear that limits in Title V permits must apply on a continuous basis.

Second, the proposed Title V permit’s exemptions contravene the Clean Air Act and EPA’s Title V regulations by removing the ability of the public and EPA to enforce violations of the affected NSR limits during SSM periods. 42 U.S.C. § 7661c(a) commands that emission limitations in Title V permits be “enforceable.” In keeping with this language, EPA has acknowledged, as it must, that “Congress designed title V to . . . assure compliance with[] and improve the enforceability of applicable requirements”²⁷⁸ Similarly, EPA’s Title V regulations provide that, except for those terms specifically marked as state-only, “[a]ll terms and conditions in a part 70 permit . . . are *enforceable* by [EPA] and citizens under the Act.”²⁷⁹

²⁷⁶ 42 U.S.C. §§ 7501(3), 7503(a)(2). *See also id.* § 7475(a)(1).

²⁷⁷ *See In re Southwestern Electric Power Co., H.W. Pirkey Power Plant*, Order on Petition No. VI-2014-01 (“Pirkey Order”) at 8 (Feb. 3, 2016) (citing to previous Title V orders and EPA Environmental Appeals Board decisions).

²⁷⁸ Clarifying Scope of “Applicable Requirements” Under State and Federal Operating Permit Programs, 89 Fed. Reg. 1150, 1174 (Jan. 9, 2024). *See also id.* at 1175 (quoting legislative history stating that the “first benefit of the title v permit program is that . . . it will clarify and make more readily enforceable a source’s pollution control requirements”) (citation omitted).

²⁷⁹ 40 C.F.R. § 70.6(b)(1) (emphasis added).

Similarly, the Clean Air Act’s citizen suit provision mandates that limits from Title V permits and NSR permits be enforceable by citizens in federal court.²⁸⁰ Congress enacted the citizen suit provision, 42 U.S.C. § 7604, “to widen citizen access to the courts, as a supplemental and effective assurance that the Act would be implemented and enforced.”²⁸¹ Congress expressly authorized citizen suits over violations of “an emission standard or limitation under this chapter,” 42 U.S.C. § 7604(a)(1), which Congress defined to include major NSR limits (“any condition or requirement of a permit under part C of subchapter I of this chapter (relating to significant deterioration of air quality) or part D of subchapter I (relating to nonattainment)”) and any limits found in Title V permits (“any other standard, limitation, or schedule established under any permit issued pursuant to subchapter V”).²⁸² Congress separately authorized citizen suits over violations of “any condition of” a major NSR permit.²⁸³ Read together, these provisions mean that citizens have the right to bring suits in federal court over violations of emission limits found in Title V and NSR permits.

SSM exemptions in NSR permits incorporated into Title V permits, such as the exemptions at issue here, violate both the statutory (and regulatory) requirement that Title V permits contain “enforceable” emission limitations and Congress’s instruction that citizens may enforce emissions limits from Title V and NSR permits. These exemptions eliminate the ability of the public and EPA to enforce violations of affected limits during SSM periods. Further, exemptions promote noncompliance during SSM periods with limits that would otherwise apply but for the SSM exemptions.

In its 2015 SSM SIP call, EPA took essentially the same position regarding SSM loopholes’ effect on enforcement. As EPA put it in its main D.C. Circuit brief defending the SIP call: “EPA SIP-called automatic exemption provisions because they undermine the CAA requirement that emission limitations be continuous and enforceable.”²⁸⁴ In the SIP call, EPA explained:

Automatic exemption provisions for excess emissions eliminate the possibility of enforcement for what would otherwise be clear violations of the relied-upon emission limitations and thus eliminate any opportunity to obtain injunctive relief that may be needed to protect the NAAQS or meet other CAA requirements. Likewise, the elimination of any possibility for penalties for what would otherwise be clear violations of the emission limitations, regardless of the conduct of the source, eliminates any opportunity for penalties to encourage appropriate design, operation and maintenance of sources and to encourage efforts by source operators to prevent and to minimize excess emissions in order to protect the NAAQS or to meet other CAA requirements. Removal of this monetary incentive to

²⁸⁰ 42 U.S.C. § 7604(a), (f).

²⁸¹ *NRDC v. Train*, 510 F.2d 692, 700 (D.C. Cir. 1974).

²⁸² 42 U.S.C. § 7604(f)(1), (3)–(4).

²⁸³ *Id.* § 7604(a)(3).

²⁸⁴ **Ex. M**, Resp’t EPA Final Answering Br. at 36, *Walter Coke, Inc. v. EPA*, No. 15-1166 (D.C. Cir. Oct. 28, 2016), ECF No. 1643446 (“EPA SIP Call Br.”).

comply with the SIP reduces a source's incentive to design, operate, and maintain its facility to meet emission limitations at all times.²⁸⁵

This reasoning from the SIP call applies equally in the context of SSM exemptions found in NSR permits.

Although (as mentioned above) the D.C. Circuit recently vacated the SSM SIP call as to automatic exemptions on the grounds that EPA had not determined under Clean Air Act § 110(a)(2)(A) that it is “necessary or appropriate” that SIPs contain continuously-applicable emission limits “to meet the applicable requirements of this chapter,” the portion of the majority opinion discussing the lawfulness of such provisions in SIPs did not reject—or even directly address—EPA’s rationale that these loopholes undermine enforcement and that enforceable limits are needed to protect air quality.²⁸⁶ In fact, the D.C. Circuit upheld EPA’s enforcement-related rationale in a separate part of the opinion discussing the agency’s statutory authority to issue the SIP call under Clean Air Act § 110(k)(5):

In short, the text of section 7410(k)(5) instructs that EPA shall issue a SIP Call whenever it concludes that a SIP is materially deficient to comply with any requirement of the Act. In the Final Action, EPA did exactly that, *explaining why in its view the SIPs were deficient to comply with the Act’s requirements for emission limitations, its remedial and enforcement provisions, and its procedural requirements for revising a SIP. See, e.g., id. at 33,874/2-75/2, 33,957/2-74/2.* EPA further explained why those asserted deficiencies were “substantial.” *See, e.g., id. at 33,926/3, 33,927/1-29/3.*²⁸⁷

In sum, SSM exemptions in NSR permits, such as the ones in the proposed Title V permit here, violate the unambiguous statutory requirements that limits in Title V permits be enforceable (and the similar regulatory requirement) and that citizens must be able to enforce Title V and NSR limits. Similarly, contrary to Title V’s purpose of promoting compliance and strengthening enforcement, these SSM exemptions promote noncompliance and weaken enforcement.

Because these exemptions are unlawful and render the proposed Title V permit unable to ensure compliance with the affected NSR limits for the two reasons discussed above, the exemptions must be removed.

²⁸⁵ Restatement and Update of EPA’s SSM Policy Applicable to SIPs, 80 Fed. Reg. 33,840, 33,927 (June 12, 2015).

²⁸⁶ *See Env’t Comm. of Fla. Elec. Power Coordinating Grp.*, 94 F.4th at 98–111.

²⁸⁷ *Id.* at 91 (emphasis added).

A. The Fact that the Exemptions May Have Been Incorporated from NSR Permits Provides No Reason to Refuse to Address these Loopholes.

As Petitioner’s comments explained, EPA cannot lawfully rely on the policy from its “Big River Steel Order”²⁸⁸ and “Valero Houston Order”²⁸⁹ to refuse to address the SSM exemptions discussed above.²⁹⁰ In the latter of these orders, EPA—relying on the policy from the Big River Steel Order—refused to address SSM limits that unlawfully inflated otherwise applicable NSR limits solely because those SSM limits were originally established in a NSR permit.²⁹¹ EPA claimed, “where the EPA has approved a state’s Title I permitting program (whether PSD, NNSR, or minor NSR), duly issued preconstruction permits will establish the NSR-related ‘applicable requirements’ for the purposes of Title V, and the terms and conditions of such permits should be incorporated into the Title V permit without further review by EPA.”²⁹²

If the exemptions in the proposed permit here were established through the Title V permit process rather than through underlying NSR permits (which is unclear from the permit and permit record),²⁹³ the policy from the Big River Steel and Valero Houston Orders—that “*duly issued preconstruction permits* will establish the NSR-related ‘applicable requirements’ for the purposes of title V”—would not apply.²⁹⁴

Even if the District established the exemptions through underlying NSR permits, the policy from the Big River Steel and Valero Houston Orders would still be irrelevant here. The Big River Steel Order turned on EPA’s interpretation of the term “applicable requirement,”

²⁸⁸ *In re Big River Steel, LLC*, Order on Petition No. VI-2013-10 (“Big River Steel Order”) (EPA Oct. 31, 2017), https://www.epa.gov/sites/default/files/2017-10/documents/big_river_steel_response2013.pdf [<https://perma.cc/QT9Y-VJ5U>].

²⁸⁹ Valero Houston Order, *supra* note 55.

²⁹⁰ DAAC Public Comments, *supra* note 4 at 48–52.

²⁹¹ Valero Houston Order, *supra* note 55 at 64–67. At issue in the Valero Houston permit were provisions that unlawfully inflated NSR limits during periods of startup, shutdown, and maintenance (rather than malfunction).

²⁹² *Id.* at 65 (citing Big River Steel Order).

²⁹³ Although the District did not directly respond to Petitioner’s comment that the draft Title V permit was unclear as to whether the exemptions were established through that permit or underlying NSR permits (*see* DAAC Public Comments, *supra* note 4 at 48), the District’s response to comments suggests that the exemptions were established through the NSR permits. *See* RTC, *supra* note 3 at 35 (“[W]e would disagree that Title V permitting process gives appropriate occasion to disregard the finality of NSR permitting decisions . . .”).

²⁹⁴ *See, e.g., In re Salt River Project Agricultural Improvement & Power District, Agua Fria Generating Station*, Order on Petition No. IX-2022-4 at 11 n.18 (EPA July 28, 2022), https://www.epa.gov/system/files/documents/2022-08/SRP%20Agua%20Fria%20Order_7-28-22.pdf [<https://perma.cc/8JCW-VAAY>] (determining whether Title V permit contained all NSR-related applicable requirements where no NSR permit had been issued by permitting authority and “[e]mission limits designed to restrict [potential to emit] to levels below which major and minor NSR permitting requirements apply were established exclusively through a Title V permit action”).

which is found in EPA’s Title V regulations and the Clean Air Act’s Title V.²⁹⁵ EPA’s interpretation and reasoning focused on two sections from 40 C.F.R. § 70.2’s definition of “applicable requirement”—the first section (“Any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA”) and the second section (“Any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D, of the Act”). EPA reasoned:

[P]rior to the *PacifiCorp-Hunter Order*,²⁹⁶ the EPA had construed section (1) of the definition of “applicable requirement” to include both the requirement to obtain a preconstruction permit and a requirement that such a permit comply with the applicable preconstruction permitting requirements in the plan. Specifically, the EPA has read the phrase “[a]ny standard or other requirement provided for in the applicable implementation plan” to include the requirement to obtain a preconstruction permit “that in turn complies with the applicable PSD requirements under the Act.” But when a source has obtained a preconstruction permit, for purposes of writing a title V permit, this presents an ambiguity in the definition of “applicable requirement” because section (2) includes the terms and conditions of that permit. The EPA has previously interpreted its regulations to apply both sections (1) and section (2) to title I preconstruction permitting requirements after a preconstruction permit has been obtained. But this reading can lead to a requirement that a title V permitting authority or the EPA consider or reconsider, in issuing a title V permit or permit renewal or in responding to a petition, whether a validly issued preconstruction permit complies with all of the requirements of the applicable implementation plan. While such an expansive reading of section (1) may have been applied by the EPA in past title V petition responses, this leads to an incongruous result that is inefficient and can upset settled expectations . . . in circumstances where a source has obtained a legally enforceable preconstruction permit in accordance with the requirements of title I.²⁹⁷

Likewise, although EPA did not articulate the rationale behind its interpretation in the Valero Houston Order, that order also necessarily relied on the agency’s reasoning regarding the interplay between the first and second sections of § 70.2’s definition of “applicable

²⁹⁵ See *Big River Steel Order*, *supra* note 288 at 10 (“The EPA is now interpreting the part 70 regulations to mean that the issuance of a PSD permit defines the preconstruction requirements under section (1) of the definition of ‘applicable requirement’ for the approved construction activities for the purposes of permitting under title V of the Act.”).

²⁹⁶ EPA first announced the general policy later applied in the *Big River Steel Order* through a Title V order covering the Hunter power plant in Utah. See *In re PacifiCorp Energy Hunter Power Plant, Order on Petition No. VIII-2016-4* (“Hunter Order”) (Oct. 16, 2017), https://www.epa.gov/sites/default/files/2021-03/documents/hunter_order_10-16-2017.pdf [<https://perma.cc/5WK5-PK25>]. As discussed in more detail below, the U.S. Court of Appeals for the Tenth Circuit later vacated the Hunter Order. *Sierra Club v. EPA*, 964 F.3d 882 (10th Cir. 2020).

²⁹⁷ *Big River Steel Order*, *supra* note 288 at 10 (citation omitted).

requirement”: in arguing that the Title V permit there incorporated limits—from a previously issued NSR permit—for periods of maintenance, startup, and shutdown that unlawfully inflated otherwise applicable major NSR limits, the petitioners asserted that the permitting authority had failed to comply with major NSR permitting requirements from the SIP—including ensuring that the startup and shutdown limits reflected BACT, analyzing air quality impacts, ensuring that the public participation requirements for establishing major NSR limits were complied with, and offsetting any emissions increases resulting from relaxing major NSR limits.²⁹⁸

EPA’s regulatory interpretation and rationale behind the Big River Steel and Valero Houston Orders is irrelevant to the question of whether EPA must address the exemptions here. In this petition, Petitioner is not asserting that the District failed to comply with major NSR permitting requirements from the SIP. Instead, Petitioner argues that these exemptions violate: (1) the statutory requirement that NSR emission limits apply continuously; and (2) the statute and EPA’s regulations by removing the ability to enforce violations of the affected NSR limits during the exempted periods. Thus, the first section of § 70.2’s definition of “applicable requirement” is irrelevant, and there can be no alleged ambiguity concerning the application of the first and second sections of that definition.

Additionally, refusing to address the SSM exemptions in the context of this proposed Title V permit would violate the Clean Air Act and EPA’s Title V regulations for four different reasons:

First, because (as discussed above) SSM exemptions from NSR permits incorporated into Title V permits violate the unambiguous statutory requirements that limits in Title V permits be enforceable (and the similar regulatory requirement) and that citizens must be able to enforce Title V and NSR limits, Title V permitting must be available to remedy these loopholes. Similarly, Title V permitting must be available to remedy SSM exemptions from NSR permits because (as also discussed above) exemptions promote noncompliance and weaken enforcement, contrary to Title V’s purpose of promoting compliance and strengthening enforcement.

Second, the statutory mandate (discussed above) that major NSR emission limitations apply continuously, not only during some periods of time, is an “applicable requirement of this chapter”—the Clean Air Act—that Title V permits unambiguously must ensure compliance with. 42 U.S.C. § 7661c(a) plainly provides: “Each permit issued under this subchapter shall include enforceable emission limitations and standards . . . and such other conditions as are necessary to assure compliance with applicable requirements of this chapter, including the requirements of the applicable implementation plan.” In addition to the statutory requirement that NSR limits apply continuously, the statutory mandate from § 7604 that citizens be able to enforce limits from NSR and Title V permits is also a requirement of “this chapter” that Title V permits must assure compliance with. In addition, 42 U.S.C. § 7661a(f) declares that a state’s Title V program cannot be approved by EPA, even partially, unless it “applies, and ensures compliance with . . . [a]ll requirements of [Title I] . . . applicable to sources required to have a permit under [Title V].”

²⁹⁸ *In re Valero Refining-Texas*, Petition No. VI-2021-8 for Objection to Permit at 98–105 (June 29, 2021), https://www.epa.gov/system/files/documents/2021-07/valero-houston-petition_6-29-21.pdf [<https://perma.cc/ZB6W-LV5U>].

NSR requirements are requirements of Title I: the statutory provisions that require major NSR permit limits are found in Title I.

Third, the Act makes clear that EPA must remedy unlawful SSM exemptions through the Title V objection process. 42 U.S.C. § 7661d(b)(1) provides: “If any [Title V] permit contains provisions that are determined by the Administrator as *not in compliance with the applicable requirements of this chapter* . . . , the Administrator shall . . . object to its issuance.”²⁹⁹ Similarly, § 7661d(b)(2) provides that, in responding to a Title V petition, EPA “shall issue an objection . . . if the petitioner demonstrates . . . that the permit is *not in compliance with the requirements of this chapter*”³⁰⁰ Unlawful SSM exemptions from NSR permits are “not in compliance with” the Act’s requirements because they violate Congress’s instruction (from 42 U.S.C. § 7604) that citizens may enforce Title V and NSR limits and the Act’s requirement that Title V permits contain “enforceable” emission limitations. In addition, exemptions to major NSR limits are “not in compliance with” the Act’s requirements because they violate the Act’s requirement that these limits apply continuously. Thus, the statute is clear that EPA must object to unlawful SSM exemptions.

Fourth, EPA’s Title V regulations also make clear that the agency must address the exemptions’ unlawful effect on NSR limits. As noted above, the Big River Steel and Valero Houston Orders were based on the policy that EPA initially announced through its Hunter Order. The U.S. Court of Appeals for the Tenth Circuit vacated the Hunter Order, flatly and correctly rejecting it as contrary to the plain language of EPA’s Title V regulations.³⁰¹ The Tenth Circuit concluded that EPA’s Title V regulations “unmistakably require[] that each Title V permit include all requirements in the state implementation plan, including Utah’s requirement for major NSR.”³⁰²

Here, just as the requirement to obtain a major NSR permit in *Sierra Club*, the NSR limits affected by the SSM exemptions are unambiguously applicable requirements under EPA’s Title V regulations that the proposed Title V must ensure compliance with. These limits are “condition[s] of . . . preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D, of the Act.”³⁰³ And EPA’s Title V regulations unambiguously mandate that Title V permits must ensure compliance with all applicable requirements. For example, 40 C.F.R. § 70.1(b) declares that “[a]ll sources subject to these regulations shall have a permit to operate that assures compliance by the source with *all* applicable requirements.”³⁰⁴ Thus, under its own regulations, EPA cannot lawfully refuse to

²⁹⁹ 42 U.S.C. § 7661d(b)(1) (emphasis added).

³⁰⁰ *Id.* § 7661d(b)(2) (emphasis added).

³⁰¹ *Sierra Club v. EPA*, 964 F.3d, *supra* note 296 at 899.

³⁰² *Id.* at 891.

³⁰³ *See* 40 C.F.R. § 70.2 (second section of “applicable requirement” definition).

³⁰⁴ *Id.* § 70.1(b) (Emphasis added). *See also id.* §§ 70.4(b)(3)(i), (v) (a state must have authority to “[i]ssue permits and assure compliance with each applicable requirement” and “[i]ncorporate into permits all applicable requirements”), 70.6(a)(1) (permit must “assure compliance with all applicable requirements at the time of permit issuance”), 70.7(a)(1)(iv) (a permit can be issued only if it “provide[s] for compliance with all applicable requirements”).

address provisions—such as the exemptions here—that render the proposed permit unable to ensure compliance with these applicable NSR limits.

1. It Would Also Be Arbitrary and Capricious for EPA to Refuse to Address the Unlawful SSM Exemptions Here.

If EPA were to refuse to address the unlawful SSM exemptions to NSR limits here, that would be arbitrary and capricious in at least four different ways.

First, EPA to date has failed to consider an important aspect of the problem in that it has not grappled with the fact that, under the policy it has applied in at least the Valero Houston Order,³⁰⁵ some states could use NSR permitting to circumvent EPA’s prohibition on unlawful SSM loopholes, such as automatic exemptions, director’s discretion provisions, and affirmative defenses to penalties. Some states do not agree with EPA’s position that SSM loopholes are unlawful: 19 different states petitioned for review of the SSM SIP call in the D.C. Circuit, arguing that the rule should be vacated.³⁰⁶ There can be no guarantee that these (and other) states will not use NSR permits to establish SSM loopholes, and, in fact some of them, including Kentucky and Texas, already have, as shown by some of the Title V orders where EPA previously addressed SSM loopholes in NSR permits.³⁰⁷ Under EPA’s more recently applied

³⁰⁵ See also *In the Matter of Delaware City Refining Company, LLC*, Order on Petition No. III-2022-10 at 16 (July 5, 2023) (“To the extent that this SSM provision (established in an underlying NSR permit) affects the NSR-based limits (also established in that NSR permit), EPA will not review those issues.”).

³⁰⁶ Those states are: Alabama, Arizona, Arkansas, Delaware, Florida, Georgia, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, and West Virginia. Although the state of North Carolina did not directly petition for review, the North Carolina Department of Environment and Natural Resources did. Delaware later moved to dismiss its petition, as did Texas after the Trump Administration withdrew that state from the rule.

The D.C. Circuit vacated the SIP call for automatic exemptions, director’s discretion provisions and affirmative defenses to liability. At the same time, though, the D.C. Circuit offered a path for EPA to remedy the problems that the court identified with the SIP call. For example, the court stated:

Our [dissenting] colleague first surmises that automatic exemptions from SSM periods “undercut states’ ability to meet Clean Air Act requirements, such as attaining and maintaining the NAAQS.” If that were so, and if EPA reasonably so concluded, we agree that EPA could call a SIP on that basis.

Env’t Comm. of Fla. Elec. Power Coordinating Grp., 94 F.4th at 101 (citation omitted).

Regardless how EPA chooses to respond to the D.C. Circuit’s opinion on the SIP call, SSM exemptions to NSR limits are plainly unlawful, as discussed above.

³⁰⁷ See, e.g., *Pirkey Order*, *supra* note 277 at 12 (“To the extent the TCEQ elects to revise the 2014 NSR Permit and that permit continues to include alternative BACT limits for startup and shutdown periods, the TCEQ should ensure that its permitting record explains how those limits reflect BACT for the operating conditions to which they apply”—also instructing TCEQ that alternative BACT limits for maintenance periods are impermissible); *In re Cash Creek Generation, LLC*, Order on Petition No. IV-2010-4, at 22 (June 22, 2012), https://www.epa.gov/sites/default/files/2015-08/documents/cashcreek_response2010.pdf [<https://perma.cc/7PG6-BVGN>] (“If KDAQ concludes upon further consideration that flaring emissions during shutdowns and malfunctions are in fact

policy, SSM loopholes have been insulated from review after NSR permits have been issued with notice and comment and after any opportunity for challenging the permits through state avenues. That the public could challenge NSR permits through state administrative procedures or in state courts is of no consolation: it is highly unlikely that any state administrative body or state court reviewing SSM loopholes would agree that these loopholes are unlawful—especially when the state is arguing that they are lawful. Instead, state administrative forums and state courts are likely to defer to states’ positions. Cooperative federalism requires EPA oversight to protect communities—not just turning a blind eye to unlawful SSM loopholes in NSR permits.

Second, as discussed above, EPA has recognized that the purpose of Title V permits is to improve the enforceability of—and assure compliance with—applicable requirements, which plainly include NSR limits. And, as also discussed above, EPA has recognized that SSM loopholes weaken enforcement and promote noncompliance. Yet the agency has irrationally and conflictingly taken the position that NSR permits’ unlawful SSM loopholes cannot be remedied through Title V permitting.

Third, in recent Title V orders, EPA has taken the position that Title V permitting can be used to address problems with the enforceability of synthetic minor NSR limits, reasoning:

*Inquiries concerning whether a title V permit contains enforceable permit terms, supported by monitoring sufficient to assure compliance with an applicable requirement or permit term (such as an emission limit established in a minor NSR permit), are properly reviewed during title V permitting. The statutory obligations to ensure that each title V permit contains “enforceable emission limitations and standards” supported by “monitoring . . . requirements to assure compliance with the permit terms and conditions,” 42 U.S.C. § 7661c(a) and (c), apply independently from and in addition to the underlying regulations and permit actions that give rise to the emission limits and standards that are included in a title V permit.*³⁰⁸

Following this reasoning, EPA has stated that it “will review . . . concerns related to the enforceability of . . . synthetic minor [] emission limits, since these concerns relate to core title V requirements.”³⁰⁹

excluded from the permit’s BACT limits, KDAQ must revise the permit to address that deficiency.”); *In re Louisville Gas and Electric Co.*, Order on March 2, 2006, Petition at 10–11 (EPA Sept. 10, 2008), https://www.epa.gov/sites/default/files/2015-08/documents/lg_e_decision2006.pdf [<https://perma.cc/7GGX-T9ZF>] (“KDAQ’s SOB does not provide a sufficient analysis to justify this exemption as an alternative BACT limit for periods of startup and shutdown.”).

³⁰⁸ *In re Yuhuang Chemical Inc. Methanol Plant*, Order on Petition Nos. VI-2017-5 & VI-2017-13 at 8 (Apr. 2, 2018) (https://www.epa.gov/sites/default/files/2018-04/documents/yuhuang_ii_order_3-19-18.pdf) [<https://perma.cc/Y233-UEN3>] (emphasis added).

³⁰⁹ *In re Intercontinental Terminals Company LLC, Pasadena Terminal*, Order on Petition No. VI-2023-13, at 14 (Feb. 7, 2024) (https://www.epa.gov/system/files/documents/2024-02/itc-pasadena-order_02-07-2024.pdf) [<https://perma.cc/R4E6-B9Q2>].

Here too, concerns regarding the enforceability of major NSR limits affected by SSM loopholes relate to “core title V requirements”—since, as discussed above, the statutory obligation to ensure that each Title V permit contains “enforceable emission limitations and standards” “appl[ies] independently from and in addition to the underlying regulations and permit actions that give rise to the emission limits and standards that are included in a title V permit.” It is irrational and contradictory for EPA to take the position that the enforceability of synthetic minor NSR limits is reviewable in Title V permitting while, at the same time, take the position that unlawful SSM loopholes that diminish or negate the enforceability of major NSR limits cannot be remedied through Title V permitting.³¹⁰

Fourth, it would be irrational and contradictory for EPA to take the position elsewhere—such as in previous Title V orders, numerous NESHAP and NSPS rulemakings and the SSM SIP call—that SSM loopholes are unlawful and must be removed when present, while, at the same time, take the position here that these unlawful loopholes—if contained in an NSR permit—cannot be remedied through Title V permitting.³¹¹

In addition to being unambiguously unlawful under the Clean Air Act, SSM emissions and loopholes can also have devastating real-world impacts. As EPA has recognized, SSM emissions can be very large.³¹² In fact, air pollution during SSM events can far exceed emissions during normal operations.³¹³ SSM emissions can be so large that they threaten attainment of the NAAQS and protection of PSD increments.³¹⁴

SSM events also occur frequently.³¹⁵ Further, SSM events harm the health and wellbeing of the communities near the polluting facilities. These fence-line and downwind communities tend to be low-income and communities of color that already experience disproportionate exposure to air pollution.³¹⁶

³¹⁰ See, e.g., *Transactive Corp. v. United States*, 91 F.3d 232, 237 (D.C. Cir. 1996) (“A long line of precedent has established that an agency action is arbitrary when the agency offered insufficient reasons for treating similar situations differently.”).

³¹¹ *Id.*

³¹² See, e.g., EPA SIP Call Br., *supra* note 284 at 18–19.

³¹³ **Ex. N**, Nikolaos Ziropiannis et al, *Understanding Excess Emissions from Industrial Facilities: Evidence from Texas*, 52 *Env. Sci. Tech* at 2482 (2018), <https://dx.doi.org/10.2139/ssrn.3380742>; *Envtl. Comm. of Fla. Elec. Power Coordinating Grp.*, 94 F.4th at 118 (Pillard, J., dissenting) (“Releases during SSM events often far exceed emissions from normal operations because facilities may operate less efficiently than during steady-state operation and because facilities often bypass controls when they are starting up, shutting down, or malfunctioning.”).

³¹⁴ EPA SIP Call Br., *supra* note 284 at 18-19; 80 Fed. Reg. 33840, 33,927 (“Automatic exemption provisions for excess emissions . . . eliminate any opportunity to obtain injunctive relief that may be needed to protect the NAAQS or meet other CAA requirements.”).

³¹⁵ See, e.g., *Envtl. Comm. of Fla. Elec. Power Coordinating Grp.*, 94 F.4th at 118 (Pillard, J., dissenting) (“Excess emissions from SSM events can be regular occurrences: One Georgia facility, for example, exceeded applicable emission limits on ‘thousands of occasions’ over a four-year period.” (citing *Sierra Club v. Ga. Power Co.*, 443 F.3d 1346, 1347, 1350 (11th Cir. 2006)).

³¹⁶ See *id.* (Pillard, J., dissenting) (“Mounting scientific evidence links concentrated bursts of pollutants to severe harm to public health and welfare. Those harms fall disproportionately on industrial facilities’ neighboring communities, many of which are socially and economically disadvantaged.”).

The worst of these SSM pollution events often occur during and around natural disasters, hitting climate-vulnerable communities already pummeled by the disasters themselves with additional air pollution burdens. For more information on the severe impacts of SSM events on surrounding communities, Petitioner is providing a petition for rulemaking that community groups and environmental organizations filed asking EPA to eliminate SSM exemptions in New Source Performance Standards.³¹⁷ It is especially important that EPA address SSM loopholes in NSR permits through Title V permitting because these loopholes are an environmental justice issue that EPA should remedy whenever given the opportunity and (as here) doing so is lawful.

2. EPA’s Rationale for Refusing to Address NSR Permits’ Problems through Title V Permitting Is Especially Unpersuasive as Applied to SSM Loopholes.

In EPA’s recent proposed rule to “clarify the scope” of applicable requirements under Title V,³¹⁸ EPA proposed that many NSR permit conditions would be insulated from review in Title V permitting. In that proposed rule, EPA reiterated rationale that it had previously put forth in Title V orders such as the Big River Steel and Valero Houston Orders. That reasoning is particularly unpersuasive and irrational in the context of SSM loopholes.

To begin with, EPA has claimed that its interpretation is consistent with the structure of the Clean Air Act because “title I and title III procedures” can be used “for evaluating, challenging, and enforcing title I permitting requirements.”³¹⁹ Regarding Title III, we are aware of no citizen suit or other enforcement action that could be brought to address unlawful SSM loopholes in a NSR permit—and EPA does not explain how such an enforcement suit could possibly be brought. If EPA were to take the position that Title V cannot be used to address NSR permits’ SSM loopholes, that would require environmental justice communities—who face the brunt of SSM emissions’ harmful impacts—to constantly monitor, comment on and successfully challenge through state processes most, if not every, relevant NSR permit development related to SSM provisions. As explained above, it is highly unlikely that Title I permitting procedures could be used to address many NSR permits’ SSM loopholes, since state administrative appeal bodies and state courts are likely to defer to states’ positions that these loopholes are lawful.

EPA has also maintained that its policy is best because of “resource-related” and “practical limitations” in Title V, such as “abbreviated timelines” in the Act.³²⁰ Remediating SSM loopholes through Title V permitting when commenters and petitioners have made the case that they are unlawful, however, is no arduous or complicated task. For example, EPA long ago determined that SSM exemptions are unlawful, and all that would be required of EPA to remedy an exemption in a NSR permit (such as here) would be for EPA to review petitioners’ arguments and, if petitioners have made the required demonstration that the exemption is unlawful, order the state to remove the loophole.

³¹⁷ **Ex. O**, Petition for Rulemaking to Eliminate Startup, Shutdown, and Malfunction Exemptions in Clean Air Act Section 111 Regulations at 3–7 (Sept. 13, 2022).

³¹⁸ 89 Fed. Reg. 1150, *supra* note 278.

³¹⁹ *Id.* at 1174.

³²⁰ *Id.* at 1174, 1177.

Additionally, EPA has claimed that Title V should not be used to reevaluate NSR permits' conditions because, "[w]hen a permitting authority authorizes construction by issuing either a major NSR permit or minor NSR permit, it establishes emission limits and other standards necessary to satisfy the SIP requirements relevant to either major or minor NSR."³²¹ This is not true for SSM loopholes. As EPA has recognized, under the relevant "SIP requirements" of the Act, SSM loopholes to NSR limits are unlawful. Further, SSM loopholes do not comport with SIP requirements because these loopholes make it more difficult to maintain and attain the NAAQS.

Regarding the structure of the Clean Air Act as a whole, EPA has also asserted that, "[t]hrough the review of SIP submissions, the EPA ensures that states have programs in place that provide the authority to issue substantively sound preconstruction permits"³²² This is not true for SSM loopholes in NSR permits. Most, if not all, SSM loopholes in NSR permits are established through individual NSR permits, rather than through SIP NSR provisions.

EPA has also pointed out that states are supposed to provide for notice and comment on NSR permits and an opportunity to challenge NSR decisions through state forums, such as state courts and administrative bodies.³²³ EPA has further pointed out that it can provide comments to states on NSR permits.³²⁴ EPA has not shown that it can or will comment on SSM loopholes in NSR permits in any kind of systematic way, which would be needed to address the many unlawful SSM loopholes that could and do appear in the multitude of NSR permits issued by states. Further, EPA cannot rationally explain how it would remedy a situation where a state simply ignored EPA's comments that a permit's SSM loopholes are unlawful. As explained above, state courts and administrative bodies would be ineffective forums for resolving unlawful SSM loopholes.

In addition, EPA has maintained that, policy-wise, NSR issues are complicated and that Title V is thus a poor fit for resolving these issues.³²⁵ Remediating SSM loopholes, however, is unlikely to be factually or legally complicated, as explained above. Finally, EPA has claimed that its position respects finality and fosters certainty.³²⁶ Permittees and states, however, are well-aware of EPA's position that SSM loopholes, such as exemptions, are unlawful. Thus, sources have no—or at least should not have any—certainty that they can rely on these unlawful exemptions in NSR permits.

B. The District's Response to Comments Does Not Adequately Address the Unlawful SSM Exemptions.

The District offers several arguments—none persuasive—for why these SSM exemptions need not be removed from the Title V permit.

³²¹ *Id.* at 1165–66.

³²² *Id.* at 1178.

³²³ *Id.* at 1179.

³²⁴ *Id.*

³²⁵ *Id.* at 1180–81.

³²⁶ *Id.*

First, the District argues that “[t]here are no exemptions to NSR limits in the proposed permit” because (says the District) the permit contains “alternative emission limitations.”³²⁷ Not true. The permit contains no alternate numeric standards or work practice requirements that apply to reduce emissions during the exempted SSM periods. For example, regarding the SSM exemptions to the 42 lbs/hr and 9 ppmv NO_x limits applicable to Heater 24F-1 and Turbine 24J-1, the District asserts that “two permit limits are imposed – one during the startup of the combustion equipment until it reaches a temperature for SCR to be operational (E54.1), and a second limit for steady state operations when the SCR is fully engaged (A99.4).”³²⁸ Condition E54.1 is not, however, an “alternative emission limitation.” Condition E54.1 provides:

The operator is not required to vent this equipment to the following equipment if all of the requirements listed below are met:

Device ID: C395 [SELECTIVE CATALYTIC REDUCTION REACTOR]

Requirement number 1: During startups and shutdowns. For the purpose of this condition, start-up and shutdown shall be defined as the time period during the startup and shutdown of the heater unit when the temperature of the exhaust gas at the inlet to SCR is below 550 degree F.

Requirement number 2: The operator shall limit startups and shutdowns to no more than 60 hours, not including the refractory dryout period. Refractory dryout shall be permitted up to a total of 144 consecutive hours to allow the curing of refractory materials.

Requirement number 3: During startup and shutdown, the operator shall use 244.05 lbs NO_x per hour for reporting purposes under RECLAIM.

Requirement number 4: The facility shall submit a report to the District annually with a summary of the number of hours for startups and shutdowns.³²⁹

No part of condition E54.1 sets forth alternative numeric limits or work practice standards that apply to reduce—much less continuously reduce—emissions during SSM periods. An emission limitation is a “requirement . . . which *limits the quantity, rate, or concentration of emissions* of air pollutants *on a continuous basis*, including any requirement relating to the operation or maintenance of a source to assure *continuous emission reduction*, and any design, equipment, work practice or operational standard promulgated under this chapter.”³³⁰ Condition E54.1 flunks this test.

In particular, the requirement to “use 244.05 lbs NO_x per hour for reporting purposes under RECLAIM” is not an alternative limit that mandates continuous reduction of NO_x; it

³²⁷ RTC, *supra* note 3 at 30–34.

³²⁸ *Id.* at 32. *See also id.* at 33 (stating, with respect to the 9 ppmv limit, that “startup and shutdowns are covered under other conditions such as E54.1 . . .”).

³²⁹ Proposed Permit, *supra* note 63 at 396–97.

³³⁰ 42 U.S.C. § 7602(k) (emphasis added).

requires the Refinery to always report this amount of hourly NO_x emissions during startups and shutdowns. Indeed, the District admits that this is only a reporting requirement.³³¹ Startup and shutdown emissions from the heater could possibly be higher than 244.05 lbs/hour, and this would not result in a violation.³³² Nor does 244.05 lbs/hour appear to reflect LAER,³³³ as an alternative limit for startup and shutdown would need to do.

Further, the requirement to “use 244.05 lbs NO_x per hour for reporting purposes under RECLAIM” does not apply during malfunctions—nor could it lawfully, since EPA has (correctly) stated that alternative NSR limits are not justifiable for periods of malfunctions.³³⁴ In addition, condition E54.1 is only applicable to Heater 24F-1 (unit D925)—and not Turbine 24J-1 (unit D926), which also has SSM exemptions to its 42 lbs/hr and 9 ppmv NO_x limits.³³⁵

Regarding the SSM exemption to the 9 ppmv NO_x limit for Boilers 30F-1 and 30F-2, the District claims: “Condition E448.[7]³³⁶ stated that ‘A startup or shutdown period shall not exceed 30 non-consecutive hours when the SCR system has no control effect for the subject devices’ and this condition limits the emissions during startup when achieving lower NO_x is technologically not feasible.”³³⁷ This condition, however, does not limit emissions at all—much less continuously limit emissions—during the 30 allowed hours of startup and shutdown: the condition contains no alternative numerical limit or work practice standards that apply to reduce NO_x emissions during these periods. NO_x emissions from the two boilers could be far above the 9 ppmv limit, and this would not result in a violation. Further, the language that the District quotes from condition E448.7 only applies to startups and shutdowns. The permit contains no time limit on malfunctions, when the 9 ppmv limit also does not apply.

The District identifies no other purported “alternative emission limitations” that supposedly apply during the exempted periods.

Second, the District “disagree[s] that the Title V permitting process gives appropriate occasion to disregard the finality of NSR permitting decisions and substantively change applicable requirements.”³³⁸ For all the reasons discussed above, however, EPA must address the unlawful SSM exemptions through this Title V permit proceeding.

Third, the District argues that “LAER applies at the time of permitting, and the limits in the permit reflect the LAER as applicable when the permit to construct was granted.”³³⁹ As

³³¹ See RTC, *supra* note 3 at 32 (“[A]ctual emissions during start up are much lower than this, but setting the reporting value higher ensures that the NO_x emissions under RECLAIM are not underreported.”).

³³² The District explains: “Without the SCR fully operational, it is not uncommon for the NO_x emissions to be six times higher than steady state operation when SCR is fully engaged.” *Id.*

³³³ See *id.* (“[A]ctual emissions during start up are much lower than this . . .”).

³³⁴ See, e.g., Pirkey Order, *supra* note 277, at 12.

³³⁵ Proposed Permit at 396–97 (“Devices subject to this condition [E54.1]: D925”).

³³⁶ The District mistakenly refers to this as condition “E448.1.” The correct condition is E448.7 located in the Proposed Permit at 429–30.

³³⁷ RTC, *supra* note 3 at 33.

³³⁸ *Id.* at 35. See also *id.* at 30–31.

³³⁹ *Id.* at 33.

discussed above, however, the Clean Air Act unambiguously requires LAER limits to apply continuously and does not allow for exemptions to these limits.³⁴⁰

Fourth, the District argues that the permit’s “[a]llowances during SSM” are lawful under the portion of 42 U.S.C. § 7501(3) defining the “lowest achievable emission rate” as the most stringent emission limitation in any SIP, unless it is demonstrated that such limits are not achievable, because “achieving lower NO_x limits during SSM periods is technologically not feasible and therefore not achievable for a combustion source that uses SCR to control NO_x emissions.”³⁴¹ The District’s argument here is unclear since, in the same paragraph, the District reiterates its argument that “[t]here are no exemptions to NSR limits in the proposed permit” for the Refinery.³⁴² To the extent the District is arguing that the exemptions here are allowed under the language of § 7501(3), the District ignores that (as discussed above) both prongs of § 7501(3)’s definition of “lowest achievable emission rate” use the term “emission limitation,” making clear that nonattainment NSR limits must be continuously applicable. Further, the second prong of § 7501(3)’s definition (the most stringent “emission limitation” achieved in practice by the class or category of source in question) serves as a backstop (whichever prong “is more stringent” applies under § 7501(3)) and also unambiguously requires continuously applicable limits. In addition, as mentioned above, it would make no practical sense that the “lowest achievable emission rate” would allow sources to avoid compliance with emission limits during certain periods of operation. Also, apart from the fact that LAER limits must apply continuously, the exemptions also violate the Clean Air Act and EPA’s Title V regulations by removing the ability of the public and EPA to enforce violations of the affected limits during SSM periods, as discussed above.

Finally, the District cryptically asserts that “later-established SIP requirements applying to the same unit could be more stringent and be enforceable as applicable requirements, as well, and/or provide basis for updates to an underlying NSR permit.”³⁴³ The District points to no such “later-established SIP requirements.” Importantly, any such later-established SIP requirements would not change the fact that the SSM exemptions here are unlawful and must be removed.

³⁴⁰ See 42 U.S.C. §§ 7501(3) (defining “lowest achievable emission rate” as the rate of emissions which reflects the more stringent of (A) the most stringent “emission limitation” in any SIP, unless it is demonstrated that such limits are not achievable or (B) the most stringent “emission limitation” achieved in practice by the class or category of source in question), 7602(k) (defining “emission limitation” as a “requirement . . . which limits the quantity, rate, or concentration of emissions of air pollutants *on a continuous basis*, including any requirement relating to the operation or maintenance of a source to assure *continuous emission reduction*, and any design, equipment, work practice or operational standard promulgated under this chapter”) (emphasis added).

³⁴¹ RTC, *supra* note 3 at 33. In the same paragraph, the District reiterates its argument that “[t]here are no exemptions to NSR limits in the proposed permit, and therefore the permit complies with the Clean Air Act and Title V regulations.” *Id.* at 34.

³⁴² *Id.* at 34.

³⁴³ *Id.* at 35.

V. QUARTERLY INSPECTION RECORDS INDICATE THAT THE REFINERY IS IN VIOLATION OF REINSPECTION REQUIREMENTS UNDER RULES 1173 AND 1176 TO CONTROL FUGITIVE VOC RELEASES.

As detailed in Petitioner’s comments, quarterly inspection records indicate the Refinery is in violation of VOC leak reinspection requirements under SIP-approved Rules 1173 and 1176 and there is no plan in place to ensure the Refinery will come into compliance with these requirements.³⁴⁴ Consequently, the District is in violation of Title V requirements that mandate the preparation of a “compliance schedule” for the Refinery to come into compliance with all applicable requirements prior to issuing the Title V permit.³⁴⁵ This compliance schedule must include a “schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance” at the Refinery.³⁴⁶

Under District Rule 1173, the Refinery is required to implement a leak detection and repair (“LDAR”) monitoring program to inspect process components, such as valves, pumps, and pressure relief devices, for excess fugitive VOC emissions using an analyzer in accordance with EPA Method 21.³⁴⁷ The Refinery is also required to comply with District Rule 1176 to control VOC fugitive emissions from wastewater systems, including process drains, sumps, and sewer lines, using either Method 21 or a grab sample method under Attachment A of the regulation.³⁴⁸ Both Rules 1173 and 1176 contain reinspection requirements after a component is repaired or replaced. Specifically, under Rule 1173, each refinery is required to “[i]nspect all repaired or replaced components within 30 days of the repair or replacement” to ensure the corrective action remedied the VOC leak and resulted in ppm values below the applicable threshold.³⁴⁹ If the leak has not been remedied, additional corrective action would be required to control the leak below applicable limits. Similarly, Rule 1176 requires reinspection of repairs “between 24 hours to 48 hours” at petroleum refineries.³⁵⁰ The Refinery is required to submit quarterly reports documenting all inspections and repairs required under the rules.³⁵¹

As part of its comments, Petitioner submitted several available quarterly inspection and repair records to the District.³⁵² As the excerpt below confirms, the Refinery is failing to conduct (or at a minimum log) these reinspections after performing an initial inspection (Insp. Date column) identifying a leak rate above applicable limits (Leak Rate column) and then conducting a repair within the required timeframe (Type of Repair column) and taking a contemporaneous

³⁴⁴ DAAC Public Comments, *supra* note 4 at 57–59; *see also* 40 C.F.R. § 52.220(c)(197)(i)(A)(1), (c)(378)(i)(A)(1).

³⁴⁵ 40 C.F.R. § 70.5(c)(8)(iii)(C); *see also* 42 U.S.C. § 7661c(a).

³⁴⁶ 40 C.F.R. § 70.5(c)(8)(iii)(C).

³⁴⁷ Rule 1173(a), (c)(4).

³⁴⁸ Rule 1176(b), (c)(26), (h)(1).

³⁴⁹ Rule 1173(f)(1)(F).

³⁵⁰ Rule 1176(f)(3).

³⁵¹ *See, e.g.*, Torrance Refinery Rule 1173 Quarterly Inspection Reports (2016–2019) (Ex. 15 to DAAC Public Comments). These quarterly inspection reports are not available on the District’s website and require the submission of a Public Records Act request.

³⁵² *Id.*

leak rate measurement (Post Leak Rate column) following the corrective action to confirm the leak is below the applicable threshold at that time.

Table 2: Excerpt of Rule 1173 Component Leak Quarterly Report.

Component					Inspect ID	Insp. Date	Leak Rate		Type of Repair	Date	Post Leak Rate	Extended Repair	Reason
Unit	ID#	TYPE	SERVICE	LOCATION			(ppm)	L**			(ppm)	L**	
01	3003.00	CONNECT	GV	G/7 NESD F 1F-2 NSD CELL 1 #10 UN	CY01	7/18/2017	4,913		TIGHTENED UN	7/20/2017	10		
01	3016.00	CONNECT	GV	G/7 NESD F 1F-2 NSD CELL 1 #9 UN	CY01	7/18/2017	4,973		TIGHTENED UN	7/20/2017	22		
01	3029.01	CONNECT	GV	G/7 NESD F 1F-2 NSD CELL 1 #8 UN	CY01	7/18/2017	3,167		TIGHTENED UN	7/20/2017	6		
01	3043.00	CONNECT	GV	G/7 NESD F 1F-2 NSD CELL 1 #7 UN	CY01	7/18/2017	1,556		TIGHTENED UN	7/20/2017	155		

In other words, the Refinery is failing to retest components within the required reinspection timeframes under Rules 1173 (30 days) and 1176 (24 to 48 hours) following the repair to determine compliance with applicable limits and the effectiveness of the corrective action—as a result, components leaking excess VOC emissions would remain unaddressed until a subsequent quarterly inspection. Further, Petitioner noted that the District is required to prepare a “compliance schedule” for the Refinery to come into compliance with all applicable requirements prior to issuing the Title V permit.³⁵³ This compliance schedule must include a “schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance” at the Refinery.³⁵⁴ Indeed, these violations contribute to excess VOC emissions, exacerbating ozone in the region and exposing communities to HAPs. Adequate monitoring, reporting, and repair of fugitive VOC emissions is critical given that leaks are the largest source of VOC emissions and volatile HAPs and “account for more than 55 percent of all refinery [reportable Toxic Release Inventory] emissions” at petroleum refineries.³⁵⁵ The District’s response to comments is inadequate to address the above-discussed deficiencies with the proposed permit and record.

In response to Petitioner’s comments, the District does not dispute—and therefore concedes—that reinspections are required under Rules 1173 and 1176 and that the Refinery’s quarterly reports fail to confirm reinspections. Instead, without reference to quarterly reports or other evidence in the record, the agency dismissed the non-compliance issues raised by Petitioner noting simply that “there are no ongoing violations in response to the matters raised in this comment” and cites to the Notice of Violation (“NOV”) database to argue that no citations have been issued regarding these requirements.³⁵⁶ But that is precisely the problem raised by Petitioner. The District has failed to identify violations and issue NOV’s regarding the Refinery’s non-compliance with reinspections as required under Rules 1173 and 1176. Given the evidence presented, the District cannot dismiss these non-compliance issues by asserting generally that the “South Coast AQMD has a dedicated enforcement team for refineries and regularly conducts

³⁵³ 42 U.S.C. § 7661c(a).

³⁵⁴ 40 C.F.R. § 70.5(c)(8)(iii)(C).

³⁵⁵ EPA, *Leak Detection and Repair: A Best Practices Guide* at 10, 52 (Oct. 2007), <https://www.epa.gov/sites/default/files/2014-02/documents/ldarguide.pdf> [<https://perma.cc/8M9Q-5RN9>].

³⁵⁶ RTC, *supra* note 3 at 47–48.

inspections for compliance with these provisions.”³⁵⁷ Because Petitioner has demonstrated a pattern of non-compliance with reinspection requirements under Rules 1173 and 1176, the District was required to ensure the development of a compliance plan prior to issuing the proposed permit or if the agency disagreed with Petitioner’s claims, the District was required to provide a responsive answer with evidence in the permit record explaining how the Refinery is not in violation of applicable LDAR requirements under these SIP-approved rules.³⁵⁸

VI. THE PROPOSED PERMIT OMITTS EQUIPMENT AT THE REFINERY WITHOUT ADEQUATE EXPLANATION OR SUPPORTING DOCUMENTS IN THE PERMIT RECORD TO UNDERSTAND THE BASIS FOR THE EXCLUSION.

As detailed in Petitioner’s comments, the proposed Title V permit fails to consolidate all existing equipment at the Refinery and in turn any applicable emission limits and operating standards, including related monitoring, testing, recordkeeping, and reporting conditions to ensure compliance.³⁵⁹ Consequently, the proposed permit violates 40 C.F.R. § 70.6(a) that requires a permit to contain all applicable requirements to equipment at the Refinery. Title V permits must “contain[], in a single, comprehensive set of documents, all [Clean Air Act] requirements relevant to the particular polluting source.”³⁶⁰ The District’s failure to identify all equipment at the Refinery undermines this Title V requirement.

Petitioner provided the table below summarizing various equipment that appeared to be omitted from the permit.³⁶¹ The proposed permit failed to reflect all existing equipment leaving the public to speculate as to the reasons for excluding this equipment and undermining the purpose of a Title V permit to serve as “a source-specific bible for Clean Air Act compliance.”³⁶²

Table 3: List of Equipment Omitted in Title V Permit.

Emission Unit ID	Process ID	Notes
U04-H2Plant1	CO2-VENT	Not in equipment list.
U13-KCR	FUG-U13	Not in equipment list.
U27-FGT	FUG-U27	Not in equipment list.
U4-H2Plant1	CO/CO2Analyzer	Not in equipment list.
U51-GasLoad	FUG-U51	Not in equipment list.
U51-GasLoad	ICE-G (West)	Not in equipment list.
U52-LPGLoad	ICE-D (East)	Not in equipment list.
U52-LPGLoad	ICE-D (West)	Not in equipment list.

³⁵⁷ *Id.* at 48.

³⁵⁸ See 40 C.F.R. § 70.8(a)(1)(ii) (District required to provide a “written response to all significant comments raised during the public participation process on the draft permit and recorded under § 70.7(h)(5)”; see also 40 C.F.R. § 70.7(h)(3).

³⁵⁹ DAAC Public Comments, *supra* note 4 at 61–63.

³⁶⁰ *Com. of Va. v. Browner*, 80 F.3d 869, 873 (4th Cir. 1996.)

³⁶¹ DAAC Public Comments, *supra* note 4 at 61–63.

³⁶² *Com. of Va. v. Browner*, 80 F.3d at 873.

U52-LPGLoad	LOAD-LPG	Not in equipment list.
U53-GasDry	FUG-U53	Not in equipment list.
U54-CokeBarn	COKEBARN	Not in equipment list.
U55-WOM	15x420	Not in equipment list; in Appendix of Voluntary Risk Reduction Plan. ³⁶³
U55-WOM	15x421	Not in equipment list; in Appendix of Voluntary Risk Reduction Plan.
U55-WOM	300x18	Not in equipment list; in Appendix of Voluntary Risk Reduction Plan.
U55-WOM	300x19	Not in equipment list; in Appendix of Voluntary Risk Reduction Plan.
U55-WOM	300x25	Not in equipment list; in Appendix of Voluntary Risk Reduction Plan.
U55-WOM	300x26	Not in equipment list; in Appendix of Voluntary Risk Reduction Plan.
U55-WOM	400x13	Not in equipment list; in Appendix of Voluntary Risk Reduction Plan.
U55-WOM	800x104	Not in equipment list; in Appendix B (inventory of tanks).
U55-WOM	800x126	Not in equipment list; in Appendix of Voluntary Risk Reduction Plan.
U55-WOM	800x127	Not in equipment list; in Appendix of Voluntary Risk Reduction Plan.
U55-WOM	800x128	Not in equipment list; in Appendix of Voluntary Risk Reduction Plan.
U55-WOM	83D-1	Not in equipment list.
U55-WOM	FHP1	Not in equipment list; in Appendix of Voluntary Risk Reduction Plan.
U55-WOM	FHP2	Not in equipment list; in Appendix of Voluntary Risk Reduction Plan.
U55-WOM	FUG-U55	Not in equipment list.
U56-EOM	1340x43	Not in equipment list; in Appendix of Voluntary Risk Reduction Plan.
U56-EOM	1340x88	Not in equipment list; in Appendix of Voluntary Risk Reduction Plan.
U56-EOM	56C(5)	Not in equipment list; in Appendix of Voluntary Risk Reduction Plan.
U56-EOM	800x132	Not in equipment list; in Appendix B (inventory of tanks).

³⁶³ See Draft Permit Excerpts, *supra* note 112 at 21–112 (containing the Refinery’s Voluntary Risk Reduction Plan from April 17, 2020 prepared under California’s Air Toxics “Hot Spots” Act (AB 2588) identifying the main processes creating health risks for nearby residents).

U56-EOM	800x133	Not in equipment list; in Appendix B (inventory of tanks).
U56-EOM	800x134	Not in equipment list; in Appendix B (inventory of tanks).
U56-EOM	800x215	Not in equipment list; in Appendix of Voluntary Risk Reduction Plan.
U56-EOM	FHP3	Not in equipment list; in Appendix of Voluntary Risk Reduction Plan.
U72-WWT	ICE-D (API)	Not in equipment list.
U72-WWT	WWT	Not in equipment list.
U-99 CTs	CT-FGT	Not in equipment list.
U-99 CTs	CT-HDT	Not in equipment list.
U-99 CTs	CT-NO	Not in equipment list.
U-99 CTs	CT-PTR	Not in equipment list.
U-99 CTs	CT-SCOKR	Not in equipment list.
U-99 CTs	CT-SO	Not in equipment list.
U-99 CTs	CT-SRU	Not in equipment list.
U99-CatLoad	CATALYSTLOAD	Not in equipment list.
U99-Rental	RENTAL	Not in equipment list.
U99-VesselDegas	VesselDegas	Not in equipment list.

The District’s response to comments is inadequate to address the above-discussed deficiencies with the proposed permit and record.

First, in response to Petitioner’s comments, the District asserted that various equipment are exempt under Rule 219, which excuses “equipment, processes, or operations that emit small amounts of air contaminants” from obtaining written permits.³⁶⁴ In particular, the District notes that the following equipment (identified by Emission Unit ID (and Process ID)) are exempt under Rule 219: U4-H2Plant1 (CO/CO2 Analyzer), U55-WOM (300x18), U55-WOM (300x19), U55-WOM (300x25), U55-WOM (300x26), U55-WOM (400x13), U55-WOM (800x126), U55-WOM (800x127), U55-WOM (800x128), U55-WOM (83D-1), U56-WOM (1340x43), U56-WOM (1340x88), and U56-WOM (800x215).³⁶⁵ The information provided by the District, however, is insufficient.

The District failed to provide the specific basis for exempting each equipment under Rule 219, leaving the public to speculate. Nor does the District direct the public to specific areas of the permit record to verify that the equipment has been properly exempt from permitting requirements, including information regarding the emissions expected from these devices. In fact, the Refinery is required to provide information regarding specific Rule 219 exemptions under District Form 500-B (Title V List of Exempt Equipment), which is submitted as part of its

³⁶⁴ RTC, *supra* note 3 at 50–53.

³⁶⁵ *Id.*

Title V renewal process.³⁶⁶ The Form 500-B submitted by the Refinery does not list the exempt equipment that the District now asserts for the first time in response to comments are subject to Rule 219. In violation of Title V regulations, the District does not explain the reasons for allowing the Refinery to omit this equipment from Form 500-B and processing a deficient application that omitted important information.³⁶⁷

Second, the District does not explain whether this equipment is subject to any conditions even if not required to obtain a written permit, and as noted, Petitioner is unable to confirm additional requirements without more information and documentation in the permit record regarding these exemptions. Any applicable conditions should be reflected in the Title V permit. Indeed, equipment that is exempt from obtaining a written permit under Rule 219 may still be subject to other rules establishing operating conditions, such as SIP-approved District Rule 109 requiring recordkeeping regarding VOC releases from the use of adhesives, coatings, and solvents by stationary sources.³⁶⁸ Rule 109 applies to the Refinery.³⁶⁹ Rule 109 allows “a facility with equipment not requiring a written permit pursuant to Rule 219 . . . to keep monthly records” rather than daily records regarding the use of adhesives, coatings, and solvents “provided the equipment meets the requirements of paragraph (d)(1).”³⁷⁰

Finally, the Districts fails to explain why this exempt equipment is not documented in the proposed permit. Appendix A of the proposed permit contains NOx and SOx emitting equipment exempt under Rule 219.³⁷¹ Appendix A, however, does not reflect the additional equipment identified in Petitioner’s comments and now acknowledged by the District. Similarly, the proposed permit lists Rule 219 exempt equipment under Process 21, including cleaning equipment, laminating equipment, and fire extinguishing equipment.³⁷² The equipment listed in the proposed permit appear to be based on the District’s Form 500-B (Title V List of Exempt Equipment) submitted by the Refinery. The District should be fully transparent about exempt equipment and should document all equipment at the Refinery in the proposed permit. Without complete information, it is not possible for the public to assess the adequacy of the District’s response or to confirm compliance with Title V permitting requirements.

³⁶⁶ **Ex. L**, Title V Permit Renewal Application at 4–5.

³⁶⁷ *See, e.g.*, 40 C.F.R. §§ 70.5(a) (noting that “an application must provide all information required pursuant to paragraph (c) of this section”, (c)(3)(i) (a facility must “describe all emissions of regulated air pollutants emitted from *any* emissions unit”) (emphasis added), (c)(3)(ii) (a facility must identify and describe “all points of emissions described in paragraph (c)(3)(i)”). Further, “for insignificant activities which are exempted because of size or production rate, a list of such insignificant activities must be included in the application.” *Id.* § 70.5(c).

³⁶⁸ 40 C.F.R. § 52.220(c)(320)(i)(B)(1).

³⁶⁹ Proposed Permit, *supra* note 63 at 565.

³⁷⁰ Rule 109(d)(5).

³⁷¹ Proposed Permit at 570.

³⁷² *Id.* at 205–06.

CONCLUSION

For the foregoing reasons, and as explained in Petitioner's comments, the proposed Title V permit fails to comply with the Clean Air Act and regulatory requirements. Consequently, EPA must object to this deficient proposed permit.

Respectfully submitted this 10th day of July 2024, on behalf of Del Amo Action Committee,

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LIST OF EXHIBITS³⁷³

Exhibit	Description
A	South Coast AQMD's Responses to Del Amo Action Committee's Comments (Mar. 29, 2024)
B.1	Public Comments by Del Amo Action Committee ("DAAC") (Nov. 16, 2022)
B.2	Exhibits 1–17 in support of DAAC Public Comments (Nov. 16, 2022)
B.3	Ex. 12 to DAAC Public Comments – Torrance Refinery NOVs and Deviation Reports Spreadsheet (Nov. 16, 2022)
B.4	Ex. 17 to DAAC Public Comments – 2014 Refinery ICR Emissions Update (Nov. 16, 2022)
C	EPA Comments on Proposed Permit Package (May 8, 2024)
D	South Coast AQMD Response to EPA Comments on Proposed Permit Package (May 30, 2024)
E	EPA Email Confirming Start of Petition Period and End of 45-Day Review Period (May 9, 2024)
F	South Coast AQMD, AER/AB2588 Database Results for Torrance Refining Company for Reporting Year 2021
G	Michelle C. Turner et al., <i>Long-Term Ozone Exposure and Mortality in a Large Prospective Study</i> , 193 American Journal of Respiratory Critical Care Medicine (May 2016)

³⁷³ Exhibits are available upon request.

Exhibit	Description
H	Stephen B. Williams et al., <i>Proximity to Oil Refineries and Risk of Cancer: A Population-Based Analysis</i> , 4 JNCI: Cancer Spectrum (2020)
I	Jaclyn Cosgrove and Irfan Khan, <i>Torrance Residents Fear Continued Use of Hydrofluoric Acid at Torrance Refinery Endangers Community</i> , LA Times (Feb. 17, 2024)
J	Proposed Title V Permit for Torrance Refining Company, LLC (Mar. 29, 2024)
K	Excerpts from Draft Title V Permit for Torrance Refining Company, LLC (Aug. 23, 2022)
L	Title V Permit Renewal Application for Torrance Refining Company, LLC (May 2019)
M	Respondent EPA's Final Answering Brief, <i>Walter Coke, Inc. v. EPA</i> , No. 15-1166 (D.C. Cir. Oct. 28, 2016), ECF No. 1643446
N	Nikolaos Ziropiannis et al, <i>Understanding Excess Emissions from Industrial Facilities: Evidence from Texas</i> , 52 Environmental Science & Technology at 2482 (2018)
O	Petition for Rulemaking to Eliminate Startup, Shutdown, and Malfunction Exemptions in Clean Air Act Section 111 Regulations (Sept. 13, 2022)