BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF:	)	
	)	
LDEQ Title V Air Operating Permit No. 1340-00352-V9	)	
	)	Permit No. 1340-00352-V9
For Dyno Nobel Louisiana Ammonia, LLC Ammonia Production Facility	)	
	)	
Issued by the Louisiana Department of Environmental Quality	)	

PETITION TO OBJECT TO THE TITLE V OPERATING PERMIT FOR THE DYNO NOBEL LOUISIANA AMMONIA, LLC AMMONIA PRODUCTION FACILITY

Pursuant to section 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), and 40 C.F.R. § 70.8(d), Harahan/River Ridge Air Quality Group, JOIN for Clean Air, Sierra Club, and Environmental Integrity Project ("Petitioners") petition the Administrator of the U.S. Environmental Protection Agency ("EPA") to object to the above-referenced proposed Title V permit issued by the Louisiana Department of Environmental Quality ("LDEQ") for the Ammonia Production Facility in Waggaman, Jefferson Parish, Louisiana previously owned and operated by Dyno Nobel Louisiana Ammonia, LLC ("Dyno Nobel"). CF Industries East Point, LLC ("CF East Point") took ownership of the Waggaman facility effective December 1, 2023.[1]

The Ammonia Production Facility is located within the Cornerstone Chemical Manufacturing Complex, co-located with: an acrylonitrile plant, a sulfuric acid regeneration plant, a urea/melamine plant, a methyl methacrylate plant, and an associated utilities plant. The adjacent communities are surrounded on all sides by heavy industry and air pollution sources.

A Title V permit must include compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit; LDEQ's permit does not meet this standard.

EPA must object to the proposed permit because it does not include testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the Ammonia Production Facility's Cogeneration Boiler's limits for PM2.5, PM10, and Total Suspended Particulate (TSP).

[1] On December 5, 2023 CF East Point submitted a request to LDEQ to transfer Permit No. 1340-00352-V9 from Dyno Nobel Louisiana Ammonia LLC. *See* https://edms.deq.louisiana.gov/app/doc/view?doc=14089729

BACKGROUND

I. THE PROPOSED PERMIT ON WHICH THIS PETITION IS BASED

This petition asks EPA to object to the proposed Title V Air Operating Permit for the Dyno Nobel Ammonia Production Facility in Waggaman, Louisiana (AI No. 184235, Permit No. 1340-00352-V9). The permit action at issue here is a significant modification.

LDEQ released the draft permit for public comment on January 10, 2023, with a comment deadline of February 14, 2023.[2] LDEQ announced a public hearing on February 10, 2023 and extended the comment deadline until March 22, 2023.[3] Petitioners timely submitted comments on March 2, raising all of the objections discussed below in this petition.[4] Petitioners presented comments orally at the public hearing held on March 21, 2023 and submitted supplemental comments on March 22, 2023.[5]

LDEQ has since responded to Petitioners' significant comments on the draft permit, revised the permit without resolving all the concerns raised in Petitioners' comments, and sent the revised, proposed permit to EPA for its review. This proposed permit restarted the clock for Petitioners to petition EPA on Permit No. 1340-00352-V9, as EPA Region 6 has recognized.[6] Petitioners are timely filing this petition by the January 16, 2024 deadline listed on Region 6's website to petition EPA to object to the proposed permit.

II. PETITIONERS

Harahan/River Ridge Air Quality Group is an organization of 2,900 residents from Harahan and River Ridge, Louisiana concerned with persistent odors, air quality, and industrial expansion in their communities. Group members reside within a three-mile radius of the Cornerstone Chemical Manufacturing Complex, which according to the EPA Toxics Release Inventory is ranked #8 of 3,430 facilities in the chemical industries sector for releases to air, land, and water.

JOIN for Clean Air (Jefferson, Orleans, Irish Channel Neighbors for Clean Air) is a non-profit (501c3) organization dedicated to improving air quality in the greater New Orleans

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[2] LDEQ's public notice is available on LDEQ's Electronic Document Management System ("EDMS"), at: https://edms.deq.louisiana.gov/app/doc/view?doc=13603510

[3] LDEQ's second public notice announcing the public hearing and extending the comment period is available on EDMS, at: https://edms.deq.louisiana.gov/app/doc/view?doc=13664692

[4] *See* Ex. 1, Comments.

[5] *See* Ex. 2, Supplemental Comments.

[6] *See* https://www.epa.gov/caa-permitting/operating-permit-timeline-louisiana listing January 16, 2024 as the deadline to petition EPA on the permit (last visited January 7, 2024).

area, with a focus on issues that cross parish boundaries. Its members primarily consist of residents of Orleans Parish and Jefferson Parish living close to the Mississippi River.

Environmental Integrity Project ("EIP") is a non-profit, non-partisan watchdog organization that advocates for effective enforcement of environmental laws. EIP has three goals: (1) to illustrate through objective facts and figures how the failure to enforce and implement environmental laws increases pollution and harms public health; (2) to hold federal and state agencies, as well as individual corporations, accountable for failing to enforce or comply with environmental laws; and (3) to help communities obtain protections guaranteed by environmental laws.

Sierra Club is one of the oldest and largest national nonprofit environmental organizations in the country, with approximately 3.5 million members and supporters dedicated to exploring, enjoying, and protecting the wild places and resources of the earth; practicing and promoting the responsible use of the earth's ecosystems and resources; educating and enlisting humanity to protect and restore the quality of the natural and human environment; and using all lawful means to carry out these objectives. One of Sierra Club's priority national goals is promoting and improving air quality.

III. GENERAL TITLE V PERMIT REQUIREMENTS

To protect public health and the environment, the Clean Air Act prohibits stationary sources of air pollution from operating without or in violation of a valid Title V permit, which must include conditions sufficient to "assure compliance" with all applicable Clean Air Act requirements. 42 U.S.C. §§ 7661c(a), (c); 40 C.F.R. §§ 70.6(a)(1), (c)(1). "Applicable requirements" include all standards, emissions limits, and requirements of the Clean Air Act. 40 C.F.R. § 70.2. Congress intended for Title V to "substantially strengthen enforcement of the Clean Air Act" by "clarify[ing] and mak[ing] more readily enforceable a source's pollution control requirements." S. Rep. No. 101-228 at 347, 348 (1990), *as reprinted in* A Legislative History of the Clean Air Act Amendments of 1990 (1993), at 8687, 8688. As EPA explained when promulgating its Title V regulations, 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." Operating Permit Program, Final Rule, 57 Fed. Reg. 32,250, 32,251 (July 21, 1992).

Among other things, a Title V permit must include compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit. 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1). The D.C. Circuit has explained that 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." *See Sierra Club v. EPA,* 536 F.3d 673, 677 (D.C. Cir. 2008).

If applicable requirements themselves contain no periodic monitoring, EPA's regulations require permitting authorities to add "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit." 40 C.F.R. § 70.6(a)(3)(i)(B); *see also In the Matter of Mettiki Coal, LLC*, Order on Petition No. III-2013-1 (Sept. 26, 2014) ("Mettiki Order") at 7. The D.C. Circuit has also acknowledged that the mere existence of periodic monitoring requirements may not be sufficient. 536 F.3d at 676–77. For example, the court noted that annual testing is unlikely to assure compliance with a daily emission limit. *Id.* at 675. In other words, the frequency of monitoring methods must bear a relationship to the averaging time used to determine compliance. 40 C.F.R. § 70.6(c)(1) of EPA's regulations acts as a "gap filler" and requires that permit writers must supplement a periodic monitoring requirement inadequate to assure compliance. *Id.* at 675*; see also* Mettiki Order at 7.

In addition to including permit terms sufficient to satisfy EPA's Title V monitoring and reporting requirements, permitting authorities must include a rationale for the monitoring and reporting requirements selected that is clear and documented in the permit record. Mettiki Order at 7-8. *See also* 40 C.F.R. § 70.7(a)(5) ("The permitting authority shall provide a statement that sets for the legal and factual basis for the draft permit conditions ….").

If a state proposes a Title V permit that fails to include and assure compliance with all applicable Clean Air Act requirements, EPA must object to the issuance of the permit before the end of its 45-day review period. 42 U.S.C. § 7661d(b)(1); 40 C.F.R. § 70.8(c). If EPA does not object to a Title V permit, "any person may petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period … to take such action." 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d). The Clean 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. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(c)(1); *see also N.Y. Pub. Interest Group v. Whitman*, 321 F.3d 316, 333 n.12 (2d Cir. 2003) (explaining that under Title V, "EPA's duty to object to non-compliant permits is nondiscretionary"). EPA must grant or deny a petition to object within 60 days of its filing. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d).

GROUNDS FOR OBJECTION

For all the reasons discussed below, EPA must object to the proposed Title V permit for the Ammonia Production Facility because that permit fails to satisfy substantive requirements of the Clean Air Act and EPA's Title V regulations.

I. ENVIRONMENTAL JUSTICE CONCERNS MANDATE INCREASED FOCUS AND ACTION BY EPA TO ENSURE THAT THE PERMIT'S PROVISIONS—INCLUDING ITS MONITORING AND REPORTING PROVISIONS—ARE STRONG AND COMPLY WITH TITLE V REQUIREMENTS.

As Petitioners pointed out in their initial comments to LDEQ (at pages 2-4), there are serious environmental justice concerns involving the Dyno Nobel ammonia production facility.

The facility is located within an industrial corridor named "Cancer Alley" and "Death Alley" by local residents, which consists of about 300 facilities along the Mississippi River between Baton Rouge and New Orleans.[7] Researchers have demonstrated elevated air toxics cancer risk within the industrial corridor, with majority-African-American and low-income areas experiencing the greatest disparities.[8] A recent study has confirmed that these elevated risk values translate to actual increases in cancer cases among polluted communities in Louisiana.[9]

EPA's EJScreen shows that 38,119 people live within a three-mile radius of the Dyno Nobel facility fenceline and 1,483 people live within a one-mile radius. Seventy-eight percent of those living within a mile of the facility are people of color, which is greater than the state and national averages of 41 and 35 percent people of color, respectively. Forty percent of those living within a mile of the facility are persons with low income, which is equal to the state average and greater than the national average. In a one-mile radius of the facility other socioeconomic indicators also exceed state and national averages, including: unemployment rate, limited English speaking households, less than high school education, over age 64 and low life expectancy. [10] Emissions from Dyno Nobel, therefore, disproportionately impact people of color and people with low income.

EJScreen combines environmental and socioeconomic information to generate environmental justice indices that quantify proximity to sources of environmental pollutants and estimate cancer and respiratory health risk. Within a one-mile radius of Dyno Nobel's ammonia production facility, 13 of the 13 environmental justice indices exceed the 80th percentile in the

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[7] Based on a spatial cluster analysis of facilities that reported emissions to LDEQ in 2019-2021, the industrial corridor contained 378 facilities located along 184 river miles from the Louisiana Generating LLC - Big Cajun II Power Plant in Point Coupee Parish to the Chevron Oronite Co LLC - Oak Point Plant in Plaquemines Parish. *See* Terrell and St. Julien, "Discriminatory outcomes of industrial air permitting in Louisiana, United States" (2023), https://www.sciencedirect.com/science/article/pii/S2667010022002281?via%3Dihub. *See also* Orissa Arend, "Love Comes to Death Alley," The New Orleans Tribune (June 2019), available at https://theneworleanstribune.com/2019/07/04/love-comes-to-death-alley/

[8] James W, Jia C, Kedia S. Uneven magnitude of disparities in cancer risks from air toxics. Int J Environ Res Public Health. 2012 Dec 3;9(12):4365-85. doi: 10.3390/ijerph9124365. PMID: 23208297; PMCID: PMC3546767. Kimberly A Terrell and Gianna St Julien 2022 Environ. Res. Lett. 17 014033, https://iopscience.iop.org/article/10.1088/1748-9326/ac4360

[9] Kimberly A Terrell and Gianna St Julien 2022 Environ. Res. Lett. 17 014033, https://iopscience.iop.org/article/10.1088/1748-9326/ac4360

[10] Ex. 3, EJSCREEN Report (Version 2.2), 1-mile Ring around the Area, Louisiana, EPA Region 6, Dyno Nobel. In comments to LDEQ, Petitioners included an EJSCREEN Report using Version 2.1, and reported accordingly that, "37,802 people live within a three-mile radius of the Dyno Nobel facility fenceline and 1,715 people live within a one-mile radius. Eighty-one percent of those living within a mile of the facility are people of color, which is greater than the state average of 42 percent for people of color. Forty-two percent of those living within a mile of the facility are persons with low income, which is also greater than the state average." On June 26, 2023, after the Petitioners letter to LDEQ, EPA updated EJScreen which integrated more recent demographic data from the U.S. Census. The text of this petition reflects the updated EJSCREEN Version 2.2 dataset.

state and nation.[11] Neighborhoods within one mile of the Dyno Nobel facility exceed the 95th percentile for Air Toxics Cancer Risk and the Air Toxics Respiratory Hazard Index. This means that, on average, these neighbors have a higher estimated risk of cancer and respiratory disease from air toxics than at least 95% of Americans.

Further, ProPublica found that the area within and around the Dyno Nobel fenceline has an excess cancer risk from industrial air pollution of 1 in 7,600, or 1.3 times the level the EPA considers acceptable."[12]

In these circumstances, as Petitioners' comments to LDEQ explained, there is a compelling need for EPA to devote increased, focused attention to ensure that all Title V requirements have been complied with—especially ensuring that monitoring requirements are adequate to assure compliance with the limits for the Ammonia Production Facility. EPA has recognized this in responding to a prior Title V permit petition.[13] EPA also recognized environmental justice concerns in Louisiana's Industrial Corridor in its Order concerning the Exxon Baton Rouge Refinery, where EPA acknowledged that the "high proportion of low-income residents and people of color and a concentration of industrial activity . . . raise[s] potential environmental justice concerns."[14] EPA reaffirmed that it is "committed to advancing environmental justice and incorporating equity considerations into all aspects of EPA's work" and granted the Exxon Baton Rouge petition in full.[15]

A. LDEQ's Response Regarding These Environmental Justice Concerns Fails to Demonstrate that EPA Could or Should Ignore These Important Factors.

[11] *See* EPA, Enforcement and Compliance History Online (ECHO), Detailed Facility Report, https://echo.epa.gov/detailed-facility-report?fid=110071071484 (last visited Jan. 13, 2024). Petitioners' initial comments to LDEQ referenced EJ data accessed on February 1, 2023, which reported that within a one-mile radius of the facility fenceline, 10 of 12 environmental justice indices exceed the 80th percentile in the state and nation. Updated data now show that all 13 of 13 environmental justice indices exceed the 80th percentile.

[12] Al Shaw & Lylla Younes, The Most Detailed Map of Cancer-Causing Industrial Air Pollution in the U.S., ProPublica (Updated Mar. 15, 2022), available at https://projects.propublica.org/toxmap/#location/-81.7762/38.3814. ProPublica mapped cancer risk caused by industrial air emissions across the U.S. using EPA data. *See id.*; https://projects.propublica.org/toxmap/.

[13] *See*, e.g., In the Matter of United States Steel Corp. – Granite City Works, Order on Petition No. V-2011-2 (Dec. 3, 2012) ("Granite City Works Order") at 4-6 (because of "potential environmental justice concerns" raised by the fact that "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") (citing in part to Executive Order 12898 (Feb. 11, 1994)).

[14] *See* In the Matter of ExxonMobil Fuels & Lubricant Company Baton Rouge Refinery, Order on Petition Nos. VI2020-4, VI-2020-6, VI-2021-1, VI-2021-2 at 12 (March 18, 2022), available at https://www.epa.gov/system/files/documents/2022-04/exxonmobil-baton-rouge-order_3-18-22.pdf

[15] Id., 12.

In its response to Petitioners' comments, LDEQ refers to its assessment of environmental justice and civil rights issues provided in Section IX of the Basis for Decision. LDEQ does not dispute that: (1) the communities near the Ammonia Production Facility are predominantly communities of color and have a higher proportion of low-income residents compared to state and national averages; and (2) the communities near the facility are surrounded by multiple other sources that emit large amounts of criteria pollutants and air toxics.

LDEQ responded to the Petitioners' characterization of Louisiana's Industrial Corridor, also referred to as Cancer Alley, where the ammonia production facility is located. Petitioners referred to the EPA's October 12, 2022 Letter of Concern to LDEQ, which states that "census tracts with the highest cancer risks from air toxics in Louisiana are almost exclusively within the Industrial Corridor and also have a high percentage of Black population… EPA has reason to believe that the cancer risks from air toxics exposures may be borne disproportionately by the Black residents of the Industrial Corridor." In this letter, EPA calls on LDEQ to establish limits in Industrial Corridor air permits that appropriately take into account risks faced by affected populations.[16]

In their response to Petitioners, LDEQ stated that "these issues have been resolved" and cited EPA's June 27, 2023 letter administratively closing two Title VI complaints. While EPA declined to pursue Title VI or other enforcement action against LDEQ in response to those complaints, the disproportional adverse environmental impacts imposed by industry remain a reality and continue to harm the lives of Black and low-income Americans in Louisiana's Industrial Corridor. Decades of peer-reviewed academic literature[17] support EPA's initial fact finding, which correctly documents the disproportional impacts of air toxics on Black and low-income communities living in Cancer Alley. These disparities have not been resolved.

LDEQ disputed the petitioners' claim that communities near the facility have "a higher estimated cancer risk from air toxics than at least 95% of Americans and a higher risk of respiratory disease from air toxics than 90% of Americans." LDEQ reported percentages of 52

[16] US Environmental Protection Agency to Louisiana Department of Environmental Quality and Louisiana Department of Health, Letter of Concern, October 12, 2022, https://www.epa.gov/system/files/documents/2022-10/2022%2010%2012%20Final%20Letter%20LDEQ%20LDH%2001R-22-R6%2C%2002R-22-R6%2C%2004R-22-R6.pdf

[17] Kimberly A. Terrell and Gianna St Julien, "Air Pollution Is Linked to Higher Cancer Rates among Black or Impoverished Communities in Louisiana," *Environmental Research Letters* 17, no. 1 (January 2022): 014033, https://doi.org/10.1088/1748-9326/ac4360; P.K.P Perera and N. Lam, "An Environmental Justice Assessment of the Mississippi River Industrial Corridor in Louisiana, U.S. Using a GIS-Based Approach," *Applied Ecology and Environmental Research* 11, no. 4 (2013): 681–97; Kimberly A. Terrell and Gianna St. Julien, "Discriminatory Outcomes of Industrial Air Permitting in Louisiana, United States," *Environmental Challenges* 10 (January 1, 2023): 100672, https://doi.org/10.1016/j.envc.2022.100672; Courtney J. Keehan, "Lessons from Cancer Alley: How the Clean Air Act Has Failed to Protect Public Health in Southern Louisiana," *Colorado Natural Resources, Energy & Environmental Law Review* 29 (2018): 341; Wesley James, Chunrong Jia, and Satish Kedia, "Uneven Magnitude of Disparities in Cancer Risks from Air Toxics," *International Journal of Environmental Research and Public Health* 9, no. 12 (December 2012): 4365–85, https://doi.org/10.3390/ijerph9124365.

and 70, possibly by drawing a different comparison. It is not clear because LDEQ not append any EJScreen reports.

The Petitioners compared the air toxics parameters within a one-mile radius of the facility to the rest of the nation, while LDEQ may have compared the air toxics parameters within the block group to state averages. If this is the case, LDEQ's comparison would leave out residents in very close proximity to the facility. LDEQ may also be referencing cancer and respiratory hazard risk in the proposed project area compared to state rather than federal averages. This would result in slightly lower percentages because the State of Louisiana is already so heavily overburdened with pollution. In Louisiana, more tons of toxic air pollution are emitted than in any other U.S. State[18] and estimated cancer and respiratory disease risk is more than triple the national average.[19]

The Petitioners' initial claim is true: neighborhoods closest to the facility—within one mile—exceed the 95th percentile for Air Toxics Cancer Risk and the Air Toxics Respiratory Hazard Index in the U.S., according to the EJScreen EJ Indexes provided in Ex. 3. While LDEQ commented on the petitioners' accounting of EJ harms, regrettably the agency failed to respond to the reality these statistics describe. People living closest to this facility have a much higher risk of cancer and respiratory disease due to air toxics than most Americans.

In Section IX of LDEQ's Basis for Decision, where the agency describes its environmental justice analysis, LDEQ reasons that the proposed project will not result in adverse impacts in the surrounding area because it will not lead to a violation of the National Ambient Air Quality Standards or Louisiana Ambient Air Standards.[20] This conclusion is not supported by science or EPA guidance. Even in low concentrations, air pollution effects on adverse health are still observable. Exposure to fine particulate matter in particular has been consistently linked to cardiovascular and respiratory mortality and hospitalizations.[21] Particulate matter is a non-

[18] US EPA, Risk-Screening Environmental Indicators (RSEI). "EasyRSEI Dashboard v2.3.11," accessed January 10, 2024, https://edap.epa.gov/public/extensions/EasyRSEI/EasyRSEI.html.

[19] US EPA, "2019 AirToxScreen: Assessment Results," Reports and Assessments, December 12, 2022, https://www.epa.gov/AirToxScreen/2019-airtoxscreen-assessment-results.

[20] *See* Basis for Decision at 20. "EDMS @ LOUISIANA DEQ (Document 14068386)," accessed January 10, 2024, https://edms.deq.louisiana.gov/app/doc/view?doc=14068386.

[21] Georgia Papadogeorgou et al., "Low Levels of Air Pollution and Health: Effect Estimates, Methodological Challenges, and Future Directions," *Current Environmental Health Reports* 6, no. 3 (September 2019): 105–15, https://doi.org/10.1007/s40572-019-00235-7.

threshold pollutant—there is no known safe level.[22] Furthermore, EPA does not consider NAAQS attainment or NAAQS compliance presumptively protective.[23]

II. THE PROPOSED PERMIT'S MONITORING, TESTING, AND REPORTING, REQUIREMENTS CANNOT ENSURE COMPLIANCE WITH THE HOURLY AND ANNUAL PARTICULATE MATTER LIMITS—OR THE SIP TSP LIMIT—FOR THE NEW BOILER.

As Petitioners explained in their initial comments to LDEQ (at pages 9-10), the proposed Title V permit does not include adequate monitoring, reporting, recordkeeping, or testing requirements to ensure compliance with the federally-enforceable hourly and annual PM2.5 and PM10 limits for the new Cogeneration Boiler—or the boiler's SIP limit for total suspended particulate ("TSP"). Specifically, in violation of the requirements from 40 C.F.R. §§ 70.6(a)(3)(i)(B) and 70.6(c)(1), as well as the requirements from 42 U.S.C. §§ 7661c(a) and 7661c(c), the proposed permit's monitoring, reporting, and other requirements cannot ensure compliance with the boiler's federally-enforceable 1.99 lb/hr and 7.28 tons/year limits for PM2.5 and PM10.[24] Nor can the permit's provisions ensure compliance with the applicable SIP TSP limit of 0.6 lb/mmBtu.[25]

Petitioners initially commented that LDEQ's draft permit did not include *any* testing, monitoring, or reporting requirements for PM emissions from the new boiler (Emissions Point EQT 0021). In the proposed permit, LDEQ added a requirement for a performance/emissions test for the Cogeneration Boiler to be conducted within 180 days of start-up and once every five years thereafter.[26] If EPA were to determine that Petitioners did not raise the objections from this petition with reasonable specificity during the public comment period, it was impracticable to raise the objections to the once-every-five-years testing during the comment period—and the grounds arose after the comment period—because LDEQ did not introduce the requirement to test every five years for PM until LDEQ issued the proposed permit at issue here, after the close of the comment period. *See* 42 U.S.C. § 7661d(b)(2).

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[22] "Reconsideration of the National Ambient Air Quality Standards for Particulate Matter," Federal Register, January 27, 2023, https://www.federalregister.gov/d/2023-00269/p-401

[23] USEPA External Civil Rights Compliance Office Compliance Toolkit, https://www.epa.gov/sites/default/files/2017-01/documents/toolkit-chapter1-transmittal_letter-faqs.pdf

[24] *See* Proposed Permit's Emission Rates for Criteria Pollutants and CO2e at 21. "EDMS @ LOUISIANA DEQ (Document 14064977)," accessed January 10, 2024, https://edms.deq.louisiana.gov/app/doc/view?doc=14064977.

[25] *Id.,* at 33.

[26] *See* Proposed Permit's Specific Requirements for Source "EQT 0021 1-22 – Cogen Boiler" at p. 34 of 36. "EDMS @ LOUISIANA DEQ (Document 14064977)," accessed January 10, 2024, https://edms.deq.louisiana.gov/app/doc/view?doc=14064977.

Testing once every five years is not frequent enough to ensure compliance with either the hourly or annual PM limits—especially the maximum hourly limit. Nor can testing every five years assure compliance with the SIP TSP limit of 0.6 lb/mmBtu. Stack tests are often conducted under ideal conditions when boiler PM emissions would not be at typical levels. Even if the stack tests were conducted once every five years under realistic operating conditions, emissions any given hour, day, week, month or year could be much higher than those from a test conducted days, weeks, months, or years ago.

Each Title V permit must contain monitoring, recordkeeping, and reporting conditions that assure compliance with all applicable requirements.[27] Requirements of a federally enforceable SIP that are incorporated into a Title V permit (such as the TSP limit) are "applicable requirements," as are minor NSR limits (such as the boiler's PM2.5 and PM10 limits).[28] The rationale for the selected monitoring requirements must be clear and documented in the permit record.[29]

Under Title V, the frequency of monitoring must be reasonably related to the averaging time to determine compliance with a limit. EPA has found that annual stack testing alone is insufficient to assure compliance with an hourly limit.[30]

Quinquennial tests—once every five years—are clearly not sufficient to assure continuous compliance with short-term emission limits that must be met on an hourly basis — nor with annual limits—for the Cogeneration Boiler. Nor can testing once every five years ensure compliance with the 0.6 lb/mmBtu SIP limit, which lists no averaging period but applies continuously.

To ensure compliance with the boiler's hourly, annual, and SIP PM limits, EPA should require LDEQ to revise the Title V permit to require Dyno Nobel to use PM CEMS.

In addition to the permit failing to include monitoring sufficient to ensure compliance with these PM limits, the permit is deficient for the additional reason that LDEQ has not adequately explained how testing once every five years can ensure compliance with these limits. The Department has failed to provide a clear and documented rationale in the Title V Significant Modification Permit, Response to Comments, or Basis for Decision Document that describes

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[27] 42 U.S.C. § 7661c(a) and (c); 40 C.F.R. § 70.6(a)(3) and (c)(1); Wheelabrator Baltimore Order, at 10, https://www.epa.gov/sites/default/files/2015-08/documents/wheelabrator_decision2009.pdf.

[28] 40 C.F.R. § 70.2.

[29] 40 C.F.R. § 70.7(a)(5); Granite City I Order, at 7–8.

[30] *See* Northeast Maryland Waste Disposal Authority, Order on Petition No. III-2019-2, at 9, (Dec. 11, 2020), available at https://www.epa.gov/sites/default/files/2020-12/documents/montgomery_response2019.pdf. In that order, EPA found that petitioners demonstrated that the annual stack testing required to demonstrate compliance with an hourly limit for HCl at Covanta's incinerator in Montgomery County, Maryland was insufficient and that the additional monitoring measures cited by the permitting agency did not cure the deficiency.

how quinquennial emissions tests assure continuous compliance with short-term emission limits for particulate matter from the Cogeneration Boiler as required by 40 C.F.R. § 70.7(a)(5).

A. Sufficient monitoring and testing are especially important to ensure that the new boiler will not trigger PSD for particulate matter.

Requiring robust monitoring of PM from this boiler is especially important given the environmental justice concerns discussed above and to ensure that the boiler's annual PM2.5 emissions will not exceed the major modification threshold of 10 tons/year. The new boiler's annual PM2.5 limit is 7.28 tons/year—only 2.72 tons/year below the PSD threshold of 10 tons/year for PM2.5.

B. LDEQ's Response to Comments Is Inadequate to Address the Problems with the Permit's Monitoring and Testing Requirements for Particulate Matter from the Cogeneration Boiler.

In its Response to Comments, LDEQ explained that the PM10 and PM2.5 emissions limits for the new Cogeneration Boiler were not calculated (as related to whether the boiler could trigger PSD requirements), but rather were provided by a manufacturer's guarantee. LDEQ argues that a CEMS is not warranted because PM emissions are "typically low" for natural gas fired sources and the estimated PM emissions from the new boiler "total only 7.28 tons/year." Further, LDEQ stated that a CEMS is not warranted because Dyno Nobel will perform periodic tune-ups to the boiler in accordance with 40 CFR 63 Subpart DDDDD; and because PM emissions will not depend on the proper functioning of an add-on control device.

Petitioners previously commented that neither LDEQ nor Dyno Nobel had provided sufficient justification for the accuracy of the estimated PM2.5 emissions increase of 7.28 tons/year. Dyno Nobel's permit application references "Manufacturer's guarantee per Rentech Proposal OFB-DTb-6516-CR-21-KBR" to support this estimate, however the guarantee itself is not provided as an appendix. Without the manufacturer guarantee, it is impossible to verify the accuracy of the 0.004 lb/mmBtu PM2.5 emission factor that Dyno Nobel provides for the new boiler. There is no way for the public or regulators to know from the permit or accompanying materials if or how Dyno Nobel or the manufacturer attempted to account for variability of PM emissions from the boiler or whether either company incorporated a certain "safety factor."

Even if the 7.28 tons/year PM2.5 emissions estimate for the new boiler is supported by a verifiable manufacturer guarantee and confirmed by testing, the estimated PM2.5 emissions increase of 7.28 tons/year is not a trivial quantity. Whether the emissions are "low" compared to other types of sources is immaterial—testing once every five years is insufficient to demonstrate compliance with an hourly or annual requirement. Periodic tune-ups do not guarantee that the required limits will be met, and the absence of control devices only underscores the importance of periodic testing.

Importantly, regardless of whether PM CEMS is required or not (it should be for the reasons discussed above) and regardless whether this boiler could trigger PSD for PM2.5, this does not change the fact that stack testing once every five years cannot ensure compliance with the hourly and annual PM2.5 and PM10 limits—or the SIP TSP limit—for this boiler.

III. CONCLUSION

For the foregoing reasons, and as explained in Petitioners' timely-filed public comments, LDEQ's Title V Significant Modification Permit, Response to Comments, and Basis of Decision document failed to resolve Petitioners' significant comments. EPA should require LDEQ to revise Dyno Nobel's Title V permit in the ways discussed above to assure compliance with the boiler's hourly and annual PM2.5 and PM10 limits and SIP TSP limit. Ensuring that the Title V permit complies with all Clean Air Act requirements is especially important to help mitigate and minimize the disproportionately high and adverse effects faced by the environmental justice communities surrounding Dyno Nobel's facility.

Respectfully submitted this 16th day of January, 2023 on behalf of the Harahan/River Ridge Air Quality Group, JOIN for Clean Air, Environmental Integrity Project, and Sierra Club.

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Exhibits:

1) Comments of Harahan/River Ridge Air Quality Group, JOIN for Clean Air, Environmental Integrity Project, and Sierra Club on the Draft Part 70 Air Operating Significant Modification Permit for Dyno Nobel Louisiana Ammonia, LLC's Ammonia Production Facility (AI No. 184235, Permit No. 1340-00352-V9, Activity No. PER20220002). March 1, 2023.
2) Supplemental Public Comments of Harahan/River Ridge Air Quality Group, JOIN for Clean Air, Environmental Integrity Project, and Sierra Club on the Draft Part 70 Air Operating Significant Modification Permit for Dyno Nobel Louisiana Ammonia, LLC's Ammonia Production Facility (AI No. 184235, Permit No. 1340-00352-V9, Activity No. PER20220002). March 22, 2023.
3) EJScreen Report (Version 2.2), 1-mile Ring around the Area, Louisiana, EPA Region 6, Dyno Nobel. January 13, 2024.