Appendix A: Materials Shared with Small Entity Representatives for the Panel Outreach Meeting held on August 3, 2023

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Agenda

Small Business Advocacy Review Panel Outreach Meeting with Small Entity Representatives on EPA's Proposed National Emission Standards for Hazardous Air Pollutants: Lime Manufacturing Plants Amendments

August 3, 2023 -- 1:00pm-3:00pm (Eastern)

Agenda

1:00 Welcome and Opening Remarks

- Bill Nickerson (EPA Small Business Advocacy Chair (SBAC) / Office of Policy (OP))
- Penny Lassiter (Director, Sector Policy and Programs Division, EPA Office of Air Quality Planning and Standards (OAQPS))
- David Rostker (Small Business Administration (SBA), Office of Advocacy)
- Jacob Garcia (Office of Management and Budget (OMB), Office of Information and Regulatory Affairs)

1:15 SER Introductions

1:25 Presentation on Proposed Rule (OAQPS)

1:40 Discussion

2:50 Closing Session

- Closing remarks from EPA, SBA, and OMB
- Wrap-up and next steps

3:00 Adjourn

Panel Process Presentation

An Overview of the Small Business Advocacy Review (SBAR) Panel Process

August 3, 2023 – Lime NESHAP Panel Outreach Meeting with SERs

Office of the Administrator
Office of Policy
Office of Regulatory Policy and Management

Why does EPA convene an SBAR Panel?

The Regulatory Flexibility Act (**RFA**) as amended by the Small Business Regulatory Enforcement Fairness Act (**SBREFA**), requires agencies to:

"assure that small entities have been given an **opportunity to participate** in the rulemaking process" for any rule "which will have a **significant economic impact on a substantial number of small entities**." (SISNOSE)

What is an SBAR Panel?

An EPA Small Business Advocacy Review (SBAR) Panel is made up of **four** managers from **three** federal agencies:

- EPA's Small Business Advocacy **Chair** (EPA's SBAC is from the Office of Policy)
- A **manager** from the EPA program responsible for writing the rule

- The Small Business Administration's **Chief Counsel** for Advocacy

- The **Administrator** of the Office of Management and Budget's (OMB's) Office of Information and Regulatory Affairs (OIRA)

What does an SBAR Panel do?

The RFA tasks the Panel with **reviewing the material** the Agency has available concerning the rulemaking, and **collecting advice and recommendations** from small entity representatives (SERs) on issues related to these **four** elements:

- Who are the small entities to which the proposed rule will apply?
- What are the anticipated compliance requirements of the proposed rule?
- Are there any existing federal rules that may overlap or conflict with the regulation?
- Are there any significant regulatory alternatives that could minimize the impact on small entities?

What is the role of a SER in the Panel process?

SERs are provided this **unique opportunity** because of their status as a small entity expected to be regulated by the proposed rule

SERs are **not Panel members**, however they consult with the Panel members

- Verbally during the Panel Outreach meeting
- Written comments to the Panel due within 2 weeks of the Panel Outreach meeting

SER input **informs decisions** senior EPA officials make about the forthcoming regulation

What does the Panel do with the advice and recommendations from SERs?

The Panel members prepare a Panel Report

- SER advice and recommendations are **synthesized** into a set of Panel findings and recommendations
- Written comments from SERs are included as appendices
- **Submitted** to the EPA Administrator
- Informs EPA's Initial Regulatory Flexibility Analysis (IRFA)
- IRFA and Panel Report will be placed in the **rule docket** with a request for public comment

How is this Panel process unique?

- Normally, an SBAR Panel is conducted **prior to** publication of the NPRM for rules that may have a significant economic impact on a substantial number of small entities (SISNOSE)
- Given the data EPA had at the time of the NPRM publication, EPA certified the rule as not having a SISNOSE
- Since the NPRM published, EPA received additional data via public comments. An initial review of this updated information indicates control costs developed to support the proposal may be understated and there could be significant economic impacts to small businesses.
- Therefore, EPA is convening this SBAR Panel **after** the NPRM published
- EPA will comply with all requirements of the RFA including:
  - Convening the Panel
  - Consulting with SERs
  - Panel Report
  - Publishing an Initial Regulatory Flexibility Analysis for public comment

Thank You

We realize that small entities make significant sacrifices to participate in this process

Thank you for taking time and effort away from your business or organization to assist the Panel in this important work

Contact Information for SBAC Staff

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Panel Outreach Rulemaking Presentation

National Emission Standards for Hazardous Air Pollutants: Lime Manufacturing Plants Amendments

Small Business Advocacy Review Panel

U.S. Environmental Protection Agency
August 3, 2023

Glossary of Acronyms

APCD	-	Air Pollution Control Device(s)
CAA	-	Clean Air Act
CFR	-	Code of Federal Regulations
D/F	-	Dioxins and Furans
HAP	-	Hazardous Air Pollutants
IQV	-	Intra Quarry Variability
MACT	-	Maximum Achievable Control Technology
NESHAP	-	National Emissions Standards for Hazardous Air Pollutants
NPRM	-	Notice of Proposed Rule**m**aking
o-HAP	-	Organic Hazardous Air Pollutants
OMB	-	Office of Management and Budget
PRA	-	Paperwork Reduction Act
RFA	-	Regulatory Flexibility Alternative
RTO	-	Regenerative Thermal Oxide
RTR	-	Risk and Technology Review
SBAR	-	Small Business Advocacy Review
SER	-	Small Entity Representatives
SISNOSE	-	Significant Impact on a Substantial Number of Small Entities
THC	-	Total Hydro**c**arbons

Presentation Outline

- What does section 112 of the Clean Air Act (CAA) require?
- Why are we taking this action now?
- Data Used to Develop Proposed Rule
- Background:
    - Proposed Amendments
- Proposed Compliance Requirements
- Proposed Rule

Presentation Outline (Continued)

- Public Comments' General Summaries
- Comments on the NPRM Related to Small Entities
- Background: Small Entity Representatives (SER) Consultation
- Impact of Proposed Rule
    - Estimated Cost Impact at Proposal
    - Estimated Economic Impact at Proposal

Presentation Outline (Continued)

- Regulatory Flexibility Alternatives (RFA)
- Potential RFA for Small Entities
- Subcategorization by kiln type and size
- Variability of Mercury emissions over time for floor kilns
- Work Practice Std's for dioxin emissions
- Health Based Standards for HCl
- Reduced testing, Reporting and Recordkeeping requirements
- Key Questions for the SERs
- Questions/Comments?

What does section 112 of the CAA require?

- Section 112 of Clean Air Act (CAA) provides that EPA will develop standards for hazardous air pollutants (HAP) for both major and area sources listed under section 112(c)
  - Major source is a facility that emits or has the potential to emit 10 tons per year (tpy) of a single HAP or 25 tpy of total HAP
  - In this action we are only regulating major sources

- Section 112(d)(1) allows EPA to subcategorize based on class, type or size of sources in establishing standards

- Section 112(d)(2) states that standards are based on the maximum achievable control technology (MACT)

What does section 112 of the CAA require? (Continued)

- Section 112(d)(3) sets minimum stringency criteria (MACT floor)
  - For existing sources:
    - "The average emission limitation achieved by the best performing 12 percent of existing sources.."
  - For new sources:
    - "The emission control achieved in practice by the best controlled similar source…"
- Standards under section 112(d) are "technology based" standards and risks are not relevant to determining the minimum stringency except as noted below
- Under section 112(d)(4) EPA may set a health-based compliance alternative for HAP where we have established a health threshold

Why are we taking this action now?

- In 2017, EPA was ordered by the District Court for the District of Columbia to complete a risk and technology review of the NESHAP for Lime Manufacturing Plants by June 30, 2020
  - *Blue Ridge Environmental Defense League v. Pruitt,* Case No: 1:16-cv-00364 (D.D.C. 2017)
  - Related to the review of 13 source categories, this court order tasked the EPA to complete seven final RTR actions December 31, 2018, and six additional RTR actions by June 30, 2020

Why are we taking this action now? (Continued)

- On July 24, 2020, the EPA took final action on the risk and technology review (RTR) required by Clean Air Act (CAA) sections 112(d)(6) and (f)(2) for the NESHAP for Lime Manufacturing Plants (2020 RTR). The current NESHAP for Lime Manufacturing Plants does not have standards for HCL, Hg, D/F and o-HAP, and although we had information that these facilities emitted (or maybe emitted) these HAP, we declined to set standards. Our rationale was section 112(d)(6) of the CAA does not impose upon the Agency any obligation to promulgate new emission standards or expand the scope of an existing regulation

- In the Louisiana Environmental Action Network v. EPA (LEAN) decision issued on April 21, 2020, the U.S. Court of Appeals for the D.C. Circuit held that the EPA has an obligation to address unregulated emissions from a major source category when the Agency conducts the 8-year technology review. Though this decision was issued prior to promulgation of the final RTR, there was insufficient time to add standards for these pollutants and still meet the court ordered deadline

Why are we taking this action now? (Continued)

- Emissions data collected for the 2020 RTR from lime kilns in the source category indicated the following unregulated pollutants were present: HCl, mercury, o-HAP (which we proposed to regulate using THC as a surrogate), and D/F. Therefore, the EPA must now regulate these pollutants by the revised court deadline of June 30, 2024

Data used to Develop the Proposed Rule

- EPA used the emissions data collected from the 2017 questionnaire to develop MACT standards for four unregulated pollutants (HCl, mercury, THC, D/F)
- In addition, supplemental information was provided by industry stakeholders on the mercury content of the raw material feed to the lime kiln, the types of lime kiln designs and their operations, and the types of lime produced
- The data collected and used in this action are provided in the docket.
- In addition, the data collection and analysis of this action are described in detail in the document, “Proposed Maximum Achievable Control Technology” (MACT), EPA-HQ-OAR-2017-0015-0135

Background: What are the proposed amendments to the Lime NESHAP?

- The U.S. EPA proposed amendments to the Lime Manufacturing NESHAP January 5, 2023. [86 FR 805]
- These amendments included numerical emission limits for all unregulated pollutants: HCl, mercury, o-HAP (using THC as a surrogate), and D/F
  - For more information, please visit https://www.epa.gov/stationary-sources-air-pollution/lime-manufacturing-plants-national-emission-standards-hazardous

Background: Proposed Compliance Requirements

- We proposed that existing sources comply with the proposed new standards within 3 years after the promulgation of the final rule. The CAA requires that we require sources to comply with MACT standards as expeditiously as practicable but no later than 3 years after the effective date of a standard
- We proposed that the initial performance tests to demonstrate compliance with the MACT standards be conducted using the methods identified in the Table: Summary of Proposed Test Methods

Pollutant	EPA Method
HCl	320 or 321.
Mercury	29 or 30B.
THC	25A.
D/F	23.

Background: Proposed Rule

- EPA received 30 comment letters on the 2023 proposal (eight requests for a comment period extension, 20 comments on the proposal, and 2 comments unrelated to the Lime NESHAP). We received 20 unique comments on the LEAN proposal, see: https://www.regulations.gov/docket/EPA-HQ-OAR-2017-0015/comments
- Small Business Advocacy Review (SBAR) Panel:
  - Given the data EPA had at the time of the NPRM publication, EPA certified the rule as not having significant economic impact on a substantial number of small entities (No SISNOSE)
  - Since the NPRM published, EPA received additional data and feedback via public comments to update its economic analysis, including impacts to businesses affected by the proposed rule. An initial review of this updated information indicates control costs developed to support the proposal may be understated and there could be significant economic impacts to small businesses. Therefore, EPA is convening an SBAR Panel
  - EPA will publish an Initial Regulatory Flexibility Analysis for public comment prior to issuing a final rule
- **Final Rule: Court Ordered deadline for promulgation of the final rule is June 30, 2024**

Major Comments on the NPRM Related to Potentially Affected Small Entities

- The emissions standards are based on very limited data and do not reflect the actual variability of emissions
- HCl emissions limits should be based on a health-based threshold
- The standard for D/F should be based on work practices due to the high number of non-detects
- THC is not an appropriate surrogate for regulating organic HAP
- Control costs are significantly underestimated, especially for small entities, which do not have the advantage of economies of scale available to larger companies
- Due to the cost underestimation, there is a significant impact to a substantial number of small entities (SISNOSE)

Background: SER Consultation

- EPA is interested in not only relevant data and supporting information, but also recommendations from the small entity representatives (SERs)
- EPA will use this information to develop an initial regulatory flexibility analysis, which becomes part of the record for the potential regulation
- Key elements:
  - The rule's applicability to small entities
  - Projected controls required to comply with the proposed rule
  - Control costs
  - Identification of all relevant federal rules which may duplicate, overlap or conflict with the rule
  - Any significant alternatives to the rule which accomplish the stated objectives, and which minimize significant economic impact of the rule on small entities

Impacts of Proposed Rule: Number of Entities

- EPA estimates there are thirty-five separate lime manufacturing facilities and twelve separate companies in the source category
- EPA estimates of the twelve companies, only three are small businesses, as defined in the definitions at 13 CFR Part 121. These three companies represent 25% of the number of companies, and about seven percent of the total source category lime production capacity
- Note that lime production facilities that are located at a kraft pulp mill, soda pulp mill, sulfite pulp mill, or beet sugar manufacturing plant, or a facility that only processes sludge containing calcium carbonate from water softening processes are not part of the regulated source category

Estimated Cost Impact at Proposal

- This action proposes emissions limits for new/existing sources in the Lime Manufacturing source category.
- Although containing requirements for new sources, we are not aware of any new sources considered now or planned in the next year and did not estimate any costs for new sources.
- Estimated total annualized cost (existing sources): $32,000,000/year.
- Annualized costs: expected based on operation and maintenance of additional control systems.
- *"Proposed Maximum Achievable Control Technology (MACT) Floor Analysis for the Lime Manufacturing Plants Industry."* Source: Docket ID No. EPA-HQ-OAR-2017-0015.

Estimated Economic Impact at Proposal

- The EPA estimated the cost of installing additional air pollution control devices (APCD) to comply with proposed emission limits.
- APCD (cost) = capital costs of initial installation + maintenance/operation costs.
- The EPA compared expected annual costs to total sales revenue for ultimate owners of affected facilities.
- Estimated expected annual cost: $920,000 avg. for each facility.
- Estimated annual cost nationwide: $32,000,000/year.
- 35 facilities owned by 12 parent companies; total cost associated with proposed amendments expected to be less than 1% of sales revenue per ultimate owner. Source: Docket ID No. EPA-HQ-OAR-2017-0015.

Regulatory Flexibility Alternatives

- "…any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes, and which minimize any significant economic impact of the proposed rule on small entities."
- Significant alternatives under the RFA:

  "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities;

  (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities;

  (3) the use of performance rather than design standards; and

  (4) an exemption from coverage of the rule, or any part thereof, for such small entities."
- Must still meet the legal requirements specified in section 112 of the CAA along with applicable case law

Potential Regulatory Flexibility Alternatives for Small Entities

- Subcategorization by kiln type and size
- Account for variability of emissions over time for the floor kilns
- Work Practice Standards for dioxin emissions
- Health Based Standard for HCl
- Regenerative thermal oxidizer (RTO) was evaluated due to having a 99 percent efficiency in removal of Total Hydrocarbon (THC) emissions versus 60 percent efficiency with ACI
- Reduced testing, Reporting and recordkeeping requirements

Subcategorization by kiln type and size

- In the proposed rule EPA subcategorized by kiln type and product for both HCl and mercury
- The ancillary effect is, subcategorizing reduced the cost impacts for HCl control for the source category in general
- Any additional information from SERs would be useful

Variability of Mercury emissions over time for the floor kilns

- The proposed mercury emissions limits included estimates of emissions variability for the floor kilns based on the variability of the test data runs
- EPA did not include the long-term variability of the mercury content of the limestone quarry as was done on the Portland Cement NESHAP and Brick NESHAP
- EPA began a review of the available data and believes that this intra quarry variability (IQV) can potentially be included

Work Practice Standards for dioxin emissions

- EPA considered proposing a work practice standard for D/F emissions
- We did not propose a work practice for the following reason(s)
  - In order to set work practice standards EPA must demonstrate that it is technically and economically infeasible to measure emissions
  - In at least one case a kiln had measured emissions well above detection levels which would imply that emissions can be measured
  - We have no data to demonstrate that the work practices identified in comments reduce D/F emissions and represent MACT
- Industry noted in their comments that D/F measurements are unreliable at low levels, and they believe there are sufficient non-detects to support a work practice standard

Health Based Standard for HCl

- EPA considered a health-based standard for HCl
- The challenge to proposing this standard is that a similar standard in the Brick NESHAP failed D.C. Circuit review and was remanded to the Agency
- The remand was based in part on the Court's opinion that EPA had not sufficiently proved that HCl was a threshold pollutant
- NLA provided information on why they believe a health-based HCl standard for lime was different from *Sierra Club vs. EPA, D.C. Cir. No. 02-1135*
  - NLA cited recent instances where EPA itself concluded that HCl is not a carcinogen.
  - NLA provided a report (Ramboll) to EPA in June of 2021 regarding the carcinogenicity of HCl (EPA-HQ-OAR-2017-0015-0073)
- EPA reviewed these documents, but we are not convinced that these documents address the concerns of the court as they do not provide any new information to support the conclusion that HCl is not a carcinogen

Reduced Testing, Reporting and Recordkeeping requirements

- The proposed rule required testing every five years for all pollutants
- This is typically the minimum testing requirements for NESHAP
- No continuous emissions monitors were required
- Paperwork Reduction Act (PRA) burden estimates the costs of these requirements are estimated to be $3.5 million per year for the 35 major sources in the source category

Key Questions for the SERs

- Do you have any additional small entity flexibilities that we have not already identified
- Can you provide more specific examples of costs where small entities pay a higher cost that the larger firms
- Can you provide any additional data on emissions or raw materials mercury contents

Questions or Comments?

Appendix B: Written Comments Submitted by Small Entity Representatives following the Panel Outreach Meeting on August 3, 2023

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Greer Lime Company

GREER LIME COMPANY

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August 17, 2023

Submitted via Email
Ms. Lanelle Wiggins
U.S. Environmental Protection Agency
RFA/SBREFA Team Leader
US EPA - Office of Policy (1803A)
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RE: Comments on the U.S. EPA's Post-Proposal, Small Business Panel for the *NESHAPs: Lime Manufacturing Plant Amendments*, 88 Fed. Reg. 805 (Jan. 5, 2023)
Docket ID No. EPA-HQ-OAR-2017-0015

Dear Sir or Madam:

On behalf of Greer Lime Company (Greer Lime), I want to extend our gratitude to the representatives of the U.S. Environmental Protection Agency ("EPA"), U.S. Small Business Administration, and the U.S. Office of Management and Budget who participated in the Small Business Advocacy Review Panel ("Panel") related to the EPA's proposal entitled *National Emission Standards for Hazardous Air Pollutants: Lime Manufacturing Plant Amendments*, which was published in the *Federal Register* on January 5, 2023 ("Proposal"). This Panel was convened by EPA on August 3, 2023 at its offices in Washington, D.C. Greer Lime is submitting these supplemental comments by the deadline requested by EPA during the Panel meeting.

National Lime Association ("NLA") has prepared supplemental written comments to EPA following the Panel meeting in support of NLA's small business members. NLA's supplemental comments are enclosed herein. As a long-time member of the NLA, Greer Lime supports NLA's positions and comments and incorporates them by reference. Greer Lime also incorporates by reference its comments, dated February 21, 2023, on EPA's original Proposal. Nonetheless, Greer Lime offers these supplemental comments following the Small Business Panel meeting.

While Greer Lime sincerely appreciates the EPA representatives' willingness to listen to the concerns of the small businesses during the Panel meeting, Greer Lime was disappointed to learn that EPA plans to publish a supplemental proposal that retains the major aspects of the original Proposal.[1] Stated differently, EPA's forthcoming supplemental proposal is unlikely to

[1] Greer Lime notes that EPA convened the Panel *after* it issued the Proposal. This appears to be inconsistent with Congress' mandate in the Small Business Regulatory Enforcement Fairness Act, which requires that small entity representatives be given the opportunity to provide advice and recommendations on the potential impacts of a rule

provide the small businesses within the lime industry any meaningful relief from the severe and devastating economic impacts from the proposed new emission limits, performance testing, and recordkeeping and reporting requirements that are anticipated in EPA's supplemental proposal. As the EPA representatives witnessed first-hand during their visit of Greer Lime's operations on August 16, 2023, Greer Lime has limited available physical space for additional equipment at its lime manufacturing plant and significant excavation, upgrades, and changes would be necessary to install the host of additional pollution control and related equipment that EPA's Proposal would require.

Since submitting its written comments on EPA's original Proposal, Greer has no reason to believe that the total initial capital costs associated with the anticipated requirements in EPA's supplemental proposal will be anything less than the estimated $60.1 million,[2] which is Greer Lime's estimate for the *initial capital costs* of compliance with the Proposal. These estimated initial capital costs include the costs of purchasing and installing the following pollution control systems: water spray systems and baghouse insulation system ($1.0 million); hydrated lime dry sorbent injection (DSI) system ($6.8 million); activated carbon injection system ($5.8 million); and regenerative thermal oxidizer ("RTO") ($17.0 million). The remaining estimated $29.4 million is to construct a pipeline through a special use recreation area of the Monongahela National Forest to deliver natural gas to Greer Lime's plant to run an RTO.[3] Although EPA has indicated that some of the proposed emission limits for hydrogen chloride ("HCl"), mercury, organic hazardous air pollutants ("OHAP"), and dioxins and furans may change in the forthcoming supplemental proposal, Greer Lime has no reason to believe that compliance at its lime manufacturing plant with the anticipated emission limits will be any less costly than the original Proposal. Simply put, the estimated initial capital costs pose an existential threat to Greer Lime's ability to continue manufacturing lime as it has done for more than 60 years at its facility.

During the Small Business Panel on August 3rd, EPA requested information about additional costs that would be imposed under the Proposal and anticipated supplemental proposal. Although Greer Lime has not fully estimated the ongoing operation and maintenance costs associated with the above-referenced systems that may need to be designed and installed to meet EPA's proposed emission limits for the four newly regulated sets of pollutants, it notes that it will be expending upwards to $90,000 for a third-party to conduct the testing needed to assess the extent to which it will be impacted by the Proposal and anticipated supplemental proposal. The cost of this testing alone is nearly equivalent to the initial capital costs of $97,888 per kiln that EPA incorrectly calculated for both DSI and ACI. Under the Proposal, Greer Lime and the other impacted lime manufacturing facilities would be forced to bear these testing costs every five years.

prior to publication of an initial regulatory flexibility analysis. 5 U.S.C. § 609(b). While Greer Lime's appreciation and gratitude for EPA's post-Proposal engagement is sincere, it fears that EPA's decision to wait to convene the Panel may have lasting and potentially severe impacts.

[2] For information on how Greer Lime calculated its estimated initial capital costs, please refer to its comment letter, dated February 21, 2023.

[3] As Greer Lime noted in its February 21, 2023 comments, even if it were economically feasible to install a natural gas line (it is not), Greer Lime has significant doubts that it could obtain the necessary easements, access rights, permits, and other regulatory approvals to construct the pipeline through a National Forest.

Greer Lime also wants to remind EPA that its cost estimates assume that hydrated lime produced at Greer Lime's plant will be used as the sorbent material for a DSI system. Using Greer Lime's own hydrated lime in a new DSI system to control HCl would result in approximately $1 million of lost revenue for Greer Lime *each year*. In addition to this lost revenue, roughly 15 tons per day of hydrated lime will be unavailable for sale to Greer Lime's customers, which include water treatment authorities, operators of acid mine drainage treatment facilities, operators of air pollution control equipment, and domestic steel producers. EPA cannot assume for purposes of performing its estimated economic impacts that hydrated lime will be used for the control of HCl without also accounting for the significant lost revenue from the on-site use of such lime and the associated supply chain impacts. These costs, in addition to the initial capital and ongoing operation and maintenance costs, must be accounted for accurately and comprehensively.

In closing, Greer Lime believes that the Small Business Administration's Office of Advocacy summarized it best when it encouraged EPA to "exercise the maximum flexibility permitted by the Clean Air Act, including the use of health-based standards and work practice standards, to allow small businesses to continue operating without requiring investment in expensive emission control equipment that will have no appreciable public health benefit." Office of Advocacy Comments to EPA, p. 1 (Feb. 16, 2023). EPA must heed this advice to ensure that Greer Lime can continue serving Pendleton County, West Virginia and providing its customers with the lime needed to clean the air and water and produce essential products domestically.

Greer Lime appreciates the opportunity to offer these supplemental comments and looks forward to continuing to engage with EPA on this matter.

Sincerely,

Robert Gwynne
Executive Vice President
Greer Lime Company

Enclosure

Pete Liens & Sons, Inc.

PETE LIEN & SONS, INC.

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August 17, 2023

U.S. Environmental Protection Agency
EPA Docket Center,
Docket ID No. EPA-HQ-OAR-2017-0015
Mail Code 28221 T
1200 Pennsylvania Avenue, NW
Washington, DC 20460.

RE: Comments of Pete Lien & Sons, Inc. on: EPA Small Business Panel (August 3, 2023), Docket ID No. EPA-HQ-OAR-2017-0015, RIN 2060-AV59

Pete Lien & Sons, Inc. (PLS) appreciates the opportunity to participate in the SBAR process. PLS is an American Owned family business, founded by 3 military veterans over 80 years ago. We have lime operations located in South Dakota and Wyoming. We have been in the lime industry for over 50 years and currently employ less than 100 people in our lime operations.

In the lime industry, we are the epitome of small, but we compete hard, and we are a great supporter of the industry through involvement in the National Lime Association (NLA) with PLS representatives serving on the Board and as the environmental committee chair. The proposed Lime MACT is tremendously burdensome for our industry but especially for a small company like ours.

We are submitting these comments (along with supporting comments provided by NLA) with the request that EPA use every tool they have at their disposal to minimize the impact of the rule on small businesses. We understand that EPA is concerned with using previously unused authority in fear of losing it in litigation and not having it available for "other more important rules", as explained by EPA staff. However, no rule is more important to our small lime business than this one. The proposed rule was written without considering small business impacts and has the potential to put them out of business.

To begin, PLS would like to reference our comments submitted to EPA on February 21, 2023. Our thoughts today only build on those comments. PLS operates 3 lime kilns. All 3 kilns are preheater rotary operations that produce high calcium quicklime. We supply multiple customers that use our product for environmental purposes. None of our kilns share a baghouse or a stack. This is important to note because it highlights that small business owned kilns are already disadvantaged when compared to large multinational competition.

We bear a greater burden when it comes to issues such as downtime, testing, and purchasing power as it relates to this rule. For example, a large business with multiple kilns on site, some sharing stacks, can contract extensive stack testing programs at a considerable discount since any stack sharing would result in a fraction of the testing needed and only one mobilization. During preliminary testing conducted after the rule comment period PLS had to wait months for small testing windows to open while our normal stack testers serviced large producers who had them contracted for weeks or months at a time. Given that PLS kilns are in SD and WY, where subfreezing temperatures and/or severe storms are relatively common occurrences during 6 months of each year, our testing options are further limited. We expect to see the same disadvantage when it comes to design services, equipment sourcing, and installation in an already tight construction market.

Most lime customers require a steady and constant supply of material to maintain their systems. During downtime required for construction and testing of new control systems large companies can shift production to avoid any product supply chain disturbance. Small businesses running 24/7 to supply multiple customers, who are also operating 24/7, would be required to ask their customers to find an alternate source during the downtime needed and risk losing those markets in the long term. This "just in time" supply chain is common on the lime user end of the product chain and one of the reasons lime manufacturing was considered essential during the pandemic.

PLS also maintains that the proposed rules are based on data from kilns operating under a variety of conditions, at varying times, with varying levels of data gathering. In other words, the entire rule is based on mismatched information. There is not one kiln operating in the US that has achieved all the limits in the proposed MACT at the same time.

Additionally, the proposed limits are driven by regulation language rather than science and risk assessment. The risks are acceptable within the ample margin of safety meaning no health concerns exist. During the panel meeting with some of the top environmental professionals in the room not one could defend what was being proposed as a net environmental improvement. The proposed controls will create additional transportation, energy, and process waste-based releases to control quantities of pollutants that pose no known risk. The rule is functionally outdated and environmentally unsound due to improvement in detection limits which lead to setting limits that treat beyond the rules originally intended levels. This creates inefficiency, waste and directly contradicts the current administration's climate change policy.

Because the new rule involves 4 distinct pollutants, we will address each specifically.

Dioxins/Furans

1. The calculations used by EPA are incorrect. The corrected standard is 0.037 ng/dsc TEQ @7% O2. This is explained in detail in NLA comments provided to EPA.
2. An acceptable control option that should be added is to demonstrate compliance at an operational temperature for 3 years in a row. This would then allow operating at that temperature to become the control method.
3. Treatment for D/F through lowering temperatures as suggested by EPA staff is not possible because it would require lowering the baghouse inlet temperature to levels that would not allow production of quality product. The only way to effectively do this would be to remove the existing back end of the system meaning the duct work,

baghouse, fan, and potentially the stack to replace it with a much larger system. This would be an extremely costly endeavor at a minimum of $3M per kiln.

4. Installation of injection systems to insert Activated Carbon into the gas stream is the existing technology and it comes at a cost of $2.2M per kiln for a company our size. Annual operating costs are lesser for D/F versus other pollutants which will be addressed under mercury.
5. D/F should not be regulated in our opinion but if it truly moves forward, the standard should be adjusted to 0.037 and a temperature control method in lieu of testing after 3 years of demonstrated compliance should be allowed.
6. Based on the corrected D/F limit of .037 ng/dsc TEQ @7% O2 a 25TPH kiln would produce less than .0000 Tons of annual emissions. If this was the only HAP an operation was emitting, the operation would not even be regulated as a major source until it reached 10 TPY.

Mercury (Hg)

1. Based on preliminary testing done after the proposed rule was published the amount of mercury potentially emitted by PLS kilns in total equates to 56 lbs per year, and the amount to be removed to meet the standard is only a fraction of that. Like D/F the amount of mercury emissions would not trigger a major source designation or any regulation on its own. The PLS site that houses two kilns only has the potential to emit 549 times less than the quantity that triggers regulation on its own.
2. At a minimum an Inter-Quarry Variability standard should be applied. PLS participated in the NLA mass balance testing protocol over a decade ago. Based on that program NLA indicated the PLS Hg emissions to be 38.79 or less. Having ran preliminary stack tests since the rule was proposed we now know emissions numbers over individual consecutive runs of the same kiln can vary by more than 2.3 times under steady operating conditions. The IQV should include as much flexibility as possible since Mercury content within the reserve can vary significantly which means testing feed stone at one point in time is not consistent with the overall average of the formation or reserve.
3. NLA provided guidance in their comments on February 21, 2023, and we support the IQV concept. We also ask that it be taken a step further by subtyping quarries or operations by size or location with respect to limestone quality.
4. To meet the limits proposed by EPA or NLA, the system noted during our D/F comments would be required. However, more material injection is required to accommodate mercury, which results in an annual operating cost increase of $1.4M per kiln. It should be noted that this assumes the same type of carbon could scrub both Hg and D/F. That's not confirmed to date and could lead to additional equipment and material handling.
   Based on the proposed limits PLS would be injecting a chemical with quantities equal to 30,000,000 lbs, in order to remove less than 56 pounds of Hg.
5. This 30M lbs of treatment material would need to be manufactured, loaded, transported, offloaded, injected into the system, collected from the system, hauled to a landfill site and placed in the landfill. Each of these activities would require additional energy inputs and onsite and offsite emissions. The fact this would be

required to treat a quantity of HG that is not an environmental or health risk is counterintuitive and conflicts with other environmental initiatives.

6. Mercury should not be regulated at these levels, but if no other alternative options are availble an IQV should be provided, and small businesses should be given an alternative standard due to the costs associated with the proposed rule.

Hydro-Chloric Acid (HCl)

1. We request a health-based standard first, and adjusting the currently proposed limit second, only if the limit is scientifically proven to be required.
2. There was an error in the calculated floor due to the inclusion of 3 non-preheater kilns. The correction should set the limit at 0.096 lb/ton of quicklime as explained by NLA staff.
3. The capital cost for PLS to treat HCl no matter the limit is estimated to total $2.3M per kiln with an annual operating cost estimate of at least $1.1M per kiln. To treat we will be required to inject over 15,000 tons of hydrated lime, a currently saleable product at PLS. Lost revenues alone far outweigh the annual operating costs noted, to the magnitude of another $3M. When small business impacts were being analyzed it appears the assumption was made that PLS can simply make more lime, but kiln capacity is limited by equipment capacity. Once material is sold out, and in this case used internally to treat our own system, we lose the opportunity never to get it back – meaning the demand is not pent up – it's gone.
4. The proposed limit and control is unreasonable when a health-based standard has been repeatedly proven to be feasible for HCl. The volume emitted today is less than 25 tons per year (from all 3 PLS kilns combined). The volume required to meet health-based standards is over 6,000 tons per year. This leaves a 5,975-ton margin of error.

Organic Hazardous Air Pollutants (OHAP)

1. Preliminary testing has indicated PLS is capable of meeting both the THC and NLA proposed method limits. PLS supports the NLA aggregated o-HAP approach given that nearly all commentors agreed that THC is not a dependable surrogate.

For Pete Lien & Sons, Inc. to comply with the rule as proposed, we are faced with **$14-30M in capital expenditure**.

Our product, LKD, will be changed thereby causing a loss of market and ability to use the material as we do today. The estimated cost impact for this is over $2M not including landfilling of the product rather than selling it to markets where it offsets other polluting facilities.

PLS has worked for over a decade on testing and development of a proprietary use for LKD. Not only will this rule require use to ship, handle, and landfill 30,000,000 pounds of used activated carbon, it will require us to also landfill over 30,000,000 pounds of hydrated lime and LKD that could be put to beneficial use. The added annual operating cost will be $6-15M again – depending on limits set and not including LKD landfilling costs.

In summary, PLS has a proven record of supporting environmental excellence and advancement. This rule as written would be a step backwards for us not just as an industry and small business, but as a country.

Lime is essential for our human livelihood. This rule puts an undue burden on the industry and especially on small businesses like PLS. As proposed this rule WILL hurt small businesses, the lime industry and industries that rely on lime for their environmental treatment processes. Tools to allow small businesses flexibility are at your disposal including health-based standards, longer compliance timelines, exemptions, and less reporting. In other words, you can help small operations where an economy of scale combined with a lack of regulatory flexibility can drive them out of the market.

We would greatly appreciate the opportunity to continue to discuss these issues and thank you for your consideration.

Sincerely,

Brian Tideman
Chief Operating Officer
Pete Lien & Sons, Inc.

National Lime Association

NATIONAL LIME ASSOCIATION

August 17, 2023

Ms. Lanelle Wiggins
U.S. Environmental Protection Agency
RFA/SBREFA Team Leader
US EPA - Office of Policy (1803A)
1200 Pennsylvania Avenue, NW
Washington, DC 20460.

(Submitted via e-mail)

RE: Comments of the National Lime Association on: EPA Small Business Panel (August 3, 2023), Docket ID No. EPA-HQ-OAR-2017-0015, RIN 2060-AV59

Dear Sir or Madam:

The National Lime Association (NLA) appreciates the opportunity to comment on EPA's Small Business Panel for Lime Manufacturing Plants on August 3, 2023. As part of this comment submission, NLA is incorporating by reference its prior comments dated February 21, 2023, on EPA's original proposed rule (dated Jan. 5, 2023), including the attachments thereto (EPA-HQ-OAR-2017-0015-0166).

NLA is the trade association for manufacturers of high calcium quicklime, dolomitic quicklime, dead-burned dolomitic lime, and hydrated lime, collectively referred to as "lime." Lime provides cost-effective solutions to many of society's manufacturing and environmental needs. Lime is an important ingredient in many other manufacturing processes and industries. It is used in the steel manufacturing process, road building, and the creation of building products like mortar and plaster. Lime is also a critical component in environmental compliance for many industries and municipalities, as it is used to purify water and scrub air pollutants from stack emissions.

These comments are submitted in support of NLA's small business members pursuant to the Small Business Panel meeting held on August 3, 2023.

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I. EPA Should Use All of Its Authority and Discretion to Provide Maximum Flexibility Permitted by the Clean Air Act to Minimize Impacts on Small Businesses

EPA has analyzed risk from lime industry emissions, and twice determined that those risks are acceptable with an ample margin of safety, even without additional controls.[1] Because those findings are not in dispute, and because the rule as proposed would impose substantial burdens on the small businesses in the lime industry, EPA should follow the advice of the Small Business Administration's Office of Advocacy:

> EPA should exercise the maximum flexibility permitted by the Clean Air Act, including the use of health-based standards and work practice standards, to allow small businesses to continue operating without requiring investment in expensive emission control equipment that will have no appreciable public health benefit.

Office of Advocacy Comments to EPA at p. 1 (February 16, 2023).

Accordingly, EPA should use its authority and discretion to do the following: adopt an intra-quarry variability factor for mercury; adopt an aggregated o-HAP approach for regulated organic HAPs; promulgate a health-based standard for HCl; and collect more information on dioxins and furans before setting a MACT floor standard (or, in the alternative, correct the numeric standard and allow additional flexibility in demonstrating compliance with that standard). The reasons for these regulatory alternatives (and several additional points) are set out in more detail and explained below.

II. EPA Should Adopt NLA's Proposed Intra-Quarry Variability Factor (IQV) for Mercury

NLA notes with approval that EPA, in the small business panel discussion, indicated a willingness to establish an intra-quarry variability factor (IQV) to adjust the proposed mercury standard. The amount of mercury in limestone within a single quarry can vary greatly, and mercury amounts also vary significantly from one quarry to another. Low levels of mercury are inherent to the mined stone and are not due to treatment technologies or mining techniques. Thus, EPA should take this variability into account in setting a standard. This precedent has been established in both the brick and cement rules.

In its comments, NLA urged EPA to use an IQV based on actual quarry and feed pile measurements performed at the two MACT floor sources. This is appropriate because the IQV is intended to reflect the variability of those sources. It should be noted here that a MACT floor source should be able to meet the required emissions standard without additional controls – that is, controls are supposed to be imposed on sources that emit at levels above the MACT floor. However, if the standard is not adjusted by an appropriate IQV, the MACT floor sources themselves will not be able to meet the standard when using stone with higher mercury amounts in their own quarries. This would defeat the purpose of setting a MACT floor.

[1] *National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants Final Rule,* 69 Fed. Reg. 394, 397 (Jan. 5, 2004); *National Emission Standards for Hazardous Air Pollutants: Lime Manufacturing Plants Residual Risk and Technology Review*, 85 Fed. Reg. 44960 (July 24, 2020).

NLA understands that EPA is considering setting an IQV based on mercury findings at the MACT floor sources but is contemplating using statistical methods to "discount" higher findings at one of those sources. NLA has not seen EPA's statistical analysis, and thus cannot fully comment on this approach, but NLA continues to believe that the method used to derive the IQV proposed by NLA is correct. This IQV reflects real-world mercury levels that the source in question will encounter when it mines the portion of the quarry with higher levels. Accordingly, NLA urges EPA to adopt the IQV described in NLA's prior comments. EPA should provide sources with the maximum flexibility to provide relief for the small business members of unnecessarily burdensome requirements. This is true for all aspects of this rule.

III. EPA Should Adopt an Aggregated O-HAP Approach to Address Organic HAP Emissions

In its comments, NLA provided extensive information demonstrating that total hydrocarbons (THC) are not an appropriate surrogate for organic HAPs emitted by the lime industry. NLA is pleased to note that EPA has apparently also concluded the THC will not serve as an adequate surrogate. NLA proposed that instead of using THC, EPA should establish a standard that would require sources to test all the 15 organic HAPs identified at lime plants using approved EPA test methods, and to meet an aggregate standard of the sum of three times the representative detection limit (RDL) for each of those organic HAPs. At the small business panel meeting, EPA indicated that it is considering setting MACT floors for two organic HAPs, formaldehyde and toluene, to serve as surrogates for all additional organic HAPs. NLA believes that there are numerous problems with this approach, and that the aggregate approach suggested by NLA is preferable both in terms of achievability and in terms of controlling all the appropriate organic HAPs emitted in the lime industry.

a. THC is Not an Appropriate Surrogate for Organic HAPs

NLA's prior comments explained in detail why THC should not be used as a surrogate for organic HAPs in the lime rule. In brief, THC is not a HAP, and it tends to be dominated by other substances that are also not HAPs. For this and other reasons, it does not correlate with emission rates of organic HAPs in the lime industry and would not demonstrate that HAPs are being controlled. It is therefore not a reasonable surrogate pursuant to D.C. Circuit caselaw. See *Nat'l Lime Ass'n v. EPA*, 233 F.3d 625, 637 (D.C. Cir. 2000)(establishing a three-part test for determining whether the use of a surrogate for HAPs is reasonable, including whether: (1) the relevant hazardous air pollutant is invariably present in the proposed surrogate; (2) control technologies for the proposed surrogate indiscriminately capture the relevant HAP along with other pollutants; and (3) the control of the surrogate is the only means by which facilities achieve reductions in emissions of the hazardous air pollutant.)

b. An Aggregated Organic HAP Approach Best Addresses O-HAP Emissions

Instead of THC as a surrogate, the aggregated o-HAP approach would require measurement of all organic HAPs that have been identified at lime plants using approved EPA test methods and would require that levels of organic HAPs in the aggregate remain low.

A similar approach was used in the cement rule, but there the aggregated o-HAP values are used to modify the THC standard, and it is the modified THC standard that must be met for compliance. NLA's proposed approach is superior, because it eliminates uncertainty by ensuring

low levels of all 15 o-HAPs. In NLA's proposed approach, sources would continue to monitor all 15 o-HAPs to ensure that, in the aggregate, they remain at a low level.

There is adequate data in the record to support this approach. Data available to EPA includes the 2016 EPA Information Collection Request responses, and voluntary industry testing performed in 2021. Organics data were analyzed using approved EPA methods 18 and 320 and were obtained from four distinct lime companies. The data set represents ten lime plants and 16 kilns, with data from straight rotary, preheater and vertical kilns fired using coal, coke, and natural gas. This approach ensures that all o-HAPs that have been found in lime kilns will be regulated.[2]

Another reason the aggregated o-HAP approach is appropriate is that organic HAP emissions from lime plants can be extremely variable, based on ambient temperature, fuel input, stone composition, and other factors. NLA members have noted wide variations in emissions from kilns with identical conditions except for ambient temperature, and in some cases the emissions of one HAP went down while another went up. The aggregated o-HAP approach responds to this issue by requiring that all the relevant HAPs be measured and remain below a low level in the aggregate. This approach ensures that there cannot be a situation in which a single HAP is emitted in large quantities but is not measured directly because a different surrogate is being used.

If the aggregated o-HAP approach is characterized as a surrogate, it satisfies the legal requirements set out by the D.C. Circuit Court of Appeals for an appropriate surrogate. *Sierra Club v. EPA*, 353 F.3d 976, 984 (D.C. Cir. 2004). First, a surrogate must be "invariably present" with the relevant HAPs. In this case, the aggregate is composed of the very HAPs that are being regulated. It will be present unless none of these HAPs is being emitted at detectable levels at all. (While none of the 15 HAPs has been individually identified in all tests, most tests have detected at least some of them, albeit at low levels.) Second, control of the surrogate must "indiscriminately capture" the relevant HAPs. With this approach, control of the aggregated o-HAPs would control the individual HAPs as well. Finally, control of the surrogate must be the only means by which facilities achieve reductions in emissions of the HAPs. Here, if the aggregate level is exceeded, control would be required, and it would be the same type of control as for individual organic HAPs.

c. Issues with Using Formaldehyde and Toluene as Surrogates

Because the concept of using only two organic HAPs, formaldehyde and toluene, as surrogates for all organic HAPs is new, NLA and its members are still analyzing the potential impacts of such an approach. However, several concerns have been identified.

First, NLA members are concerned that if MACT floors are set at very low levels for these HAPs, it may be difficult or impossible for any source to meet the standards consistently without new controls. As noted above, emissions of HAPs can vary substantially due to conditions beyond the source's control (such as ambient temperature), and a low standard that can be met on one day may not be met on another. This would be true even for the MACT floor

[2] Note that the suggested aggregated approach uses the sum of three times the RDL for each of the o-HAPs, even though in some cases the upper prediction limit (UPL) is likely to be higher. This guarantees that the aggregate number will be extremely low.

sources, which as noted earlier, should in theory be able to meet standards without additional controls. It is conceivable that a source that emitted no formaldehyde or toluene in previous tests may emit these substances in future tests. As noted above, this is an issue that is avoided by using the aggregated o-HAP approach, which reflects and accounts for this variability, but still ensures that all o-HAPs remain at low levels in the aggregate.

Second, based on our current understanding, using these two substances as a surrogate would be significantly more burdensome on the small businesses in the lime industry, because, as noted above, it could require controls even if aggregate organic emissions are extremely low (despite EPA's own finding that risks from lime plants are acceptable with an ample margin of safety, even without controls).

Accordingly, based on NLA's current understanding, EPA should adopt the aggregated o-HAP approach rather than setting MACT floors for specific HAPs.

IV. EPA Should Adopt a Health-Based Standard for HCl

NLA submitted extensive comments and data showing that EPA should adopt a health-based standard for HCl for the lime industry (including that EPA previously determined that such a standard would be appropriate for the industry, then determining that no standard at all was needed). NLA demonstrated that the case for a health-based standard is stronger in this case than it was in the brick case, and that there is no scientific evidence that HCl is a carcinogen. NLA will not repeat these prior points here but incorporates them by reference.

However, NLA will simply note that if EPA believes that the facts and law support setting a health-based standard for the lime industry, it should do so, even if there is a possibility that the decision will be challenged by others. It would be unfair to the lime industry to impose millions of dollars of unnecessary control costs on the industry, including on its small business members, to preserve the use of a health-based standard for some other, perhaps larger, industry.

NLA also believes that the idea that some future case will provide a more ironclad argument that a substance is not a carcinogen is unrealistic. The case that HCl is not a carcinogen is very strong. EPA should follow the science and should use the tool that Congress provided to avoid an unfair and unreasonable result. Indeed, this is an ideal case for use of this tool because EPA has already twice determined that use of a health-based standard (or no standard at all) would not create an unacceptable risk, including both cancer and non-cancer risks.

V. NLA Supports EPA's Proposed Subcategories for HCl

While NLA continues to believe that EPA should set a health-based standard for HCl, NLA appreciates EPA's proposal to set subcategories for lime industry sources for HCl. These subcategories recognize real differences in operations and products leading to differences in emissions. NLA suggested several modifications to the subcategories, and NLA understands that EPA is addressing these issues.

In addition to subcategorization by kiln type, EPA proposed to subcategorize by production of high calcium quicklime and dolomitic lime (and dead-burned dolomitic lime). As explained in NLA's prior comments, the data in the record show that kilns producing dolomitic lime consistently have higher HCl emissions than kilns producing high calcium lime (this is true

even when the two kinds of product are produced in the same kiln). These differences are due to differences in the stone feedstock, and not because of fuels or equipment. Dolomitic lime is made from naturally occurring stone with a higher percentage of magnesium chloride than high calcium quicklime. It should also be noted that dolomitic lime and high calcium quicklime are different products and have different uses and markets. They are not interchangeable, and sources would not be able to switch products to reduce emissions. Accordingly, the differences in HCl emissions between these two types of lime are appropriate for subcategorization.

VI. NLA Urges More Flexibility for Dioxins & Furans (D/F)

In its prior comments, NLA urged EPA to seek additional data on dioxins and furans because the inadequate data in the record did not support the MACT floor proposed by EPA. NLA continues to believe that more data is needed, but we submit further comments below on how to improve EPA's proposal.

NLA's comments on the proposed rule (EPA-HQ-OAR-2017-0015-0166) drew attention to an inconsistency with the application of the Steffan Johnson memo which was used to develop the MACT limit. To properly utilize Reference Image 4-3 in the memo to obtain an emissions limit, the stack gas sample volume (in dry standard cubic meter (dscm)) is required to select the appropriate 3xRDL value. NLA concurs that a sample volume for D/F testing on a lime kiln should be 3 dscm (or less, desirably, given costs for testing and long sample collection times). However, EPA's proposed D/F limit is set incorrectly in that it improperly references a sample collection volume of 4 dscm (and not 3 dscm as is included in the rulemaking). Thus, the proposed D/F limit is incorrect, and the correct D/F limit is 0.037 ng/dscm. NLA understands that EPA has recognized the need for this correction, for which NLA commends EPA.

If EPA continues with a proposed D/F numerical limit rather than seeking more data, EPA should allow lime plants to meet a numeric MACT standard of 0.037 ng/dscm TEQ @ 7 percent O_2 and demonstrate compliance through periodic stack testing. This is because some lime plants may have non-detectable or extremely low concentrations of D/F present and may be able to achieve the numeric standard without additional controls.

NLA also suggests that, in addition to meeting the numerical standard by periodic testing, EPA should establish an alternative compliance method based on temperature control. NLA understands that EPA has considered developing a temperature-based work practice combined with periodic testing. NLA suggests that instead of a work practice, the agency should consider setting an alternative method of complying with the numerical standard by allowing an appropriate inlet temperature to the air pollution control device (APCD) to be set on a site-specific basis. This is appropriate due to the wide variety of gas temperatures entering the various APCD and the variety of kiln/APCD configurations. This approach would be justified because compliance testing combined with a site-specific temperature (i.e., inlet to APCD temperature) would ensure that each plant's configuration and temperature parameters result in D/F emissions that consistently meet the numeric standard.

Compliance with the site-specific temperature should be on a 30-day rolling average. If annual compliance testing for a period of three years shows the lime plant consistently meets the numeric standard and the temperature requirement is met, then the lime plant should be allowed to opt out of further emissions testing and show compliance through the temperature requirement alone.

This temperature-based approach would be a parametric way of implementing the 0.037 ng/dscm standard. Thus, the temperature-based approach is not appropriately classified as a work practice – measuring 0.037 with either a periodic stack test or measuring temperature would be an alternative means of compliance with the same numerical standard. (NLA would like to emphasize that this temperature-based approach should only be set as an alternative means of compliance to periodic stack testing, and not the sole means of compliance, because some lime plants will be able to meet the numeric standard without temperature control.)

The temperature-based approach to compliance is supported by law and precedent. Past EPA NESHAP rules provide support for such an approach when EPA has promulgated "parametric operating limits" or "operating parameters" alongside HAP numerical emission standards. *See, e.g.*, 40 C.F.R. Part 63 Subpart EEE (NESHAP for Hazardous Waste Combustors), *id.* At Subpart YYYY (NESHAP for Stationary Combustion Turbines), *id.* At Subpart ZZZZ (NESHAP for Stationary Reciprocating Internal Combustion Engines), and *id.* At Subpart AAAAAAA (NESHAP for Asphalt Processing and Asphalt Roofing Manufacturing).[3] These "operating parameters" or "operating limits" allow major sources to demonstrate ongoing compliance with numerical emission standards. Importantly, EPA regulations treat operating limits as distinct from work practice standards. *See, e.g., id.* Subpart EEE § 63.1201(a) ("Operating requirements means operating terms or conditions, limits, or operating parameter limits developed under this subpart that ensure compliance with the emission standards.").

As is being suggested here, EPA has previously required sources to demonstrate compliance through an initial performance test, after which the source must continually monitor performance (such as through use of a particulate matter continuous parametric monitoring system (PM CPMS), a particulate matter continuous emission monitoring system (PM CEMS), or quarterly compliance testing). 40 C.F.R. Part 63 Subpart UUUUU (NESHAP for Coal- and Oil-Fired Electric Utility Steam Generating Units). *See also id.* Subpart AAAAAAA (NESHAP for Asphalt Processing and Asphalt Roofing Manufacturing). EPA has also adopted operations limitations linked to the inlet temperature of an APCD. 40 C.F.R. Part 63 Subpart YYYY (NESHAP for Stationary Combustion Turbines). In Subpart YYYY, EPA imposed "operating limitations" related to the oxidation catalyst inlet temperature to ensure compliance with the numeric emissions limit for formaldehyde. 69 FR 10512-01, 10516 (Mar. 5, 2004).

Both EPA and NLA have sought to identify a standard temperature-based work practice that would be appropriate for the lime industry. However, this has proven to be extremely challenging due to wide variations in temperature, equipment, and other operating parameters. EPA questioned whether temperature could be controlled by using the induced draft (ID) fan on a lime kiln (to provide additional cooling of hot exhaust gases). This approach is infeasible as ID fans are designed and built for normal operating conditions, i.e., production, fuel rates, dust loading, etc., and run with little to no extra capacity. ID fans typically operate at 95 percent capacity or greater. Using the ID fan for cooling the kiln gas temperature to below 400 deg. F

[3] EPA's Credible Evidence Revisions further support the use of using parametric data for proving compliance with emission limits. Credible Evidence Revisions, 62 FR 8314-01, 8315 (Feb. 24, 1997) ("Where available, continuous emission monitoring (CEM) data and well-chosen parametric monitoring data, such as operating temperature and air flow rate of a regenerative thermal oxidizer, generally provide accurate data regarding a source's compliance with emission limits and standards. These data also generally cover a greater percentage of a source's time in operation and are more representative of a source's ongoing compliance status than sporadic performance testing.")

would have significant negative impacts throughout the system. For example, it would lower the air-to-cloth ratio in the baghouse (i.e., the filtration efficiency of the baghouse will be reduced) and would decrease production due to a reduction in process gas loading. Increasing fan capacity would also mean increased operating costs: more bags would have to be installed in the baghouse, additional maintenance costs would be incurred, and more kilowatt hours would be needed to run the fan at a higher rate. Replacing an existing ID fan with a bigger fan would also mean replacing the fan drive assembly, and the project would have to go through Title V re-permitting. Another unintended consequence would be that if production was hypothetically dropped to enable more cooling, this could result in failed stack tests. Stack testing requires the test to be run at 90 percent capacity. The kiln would potentially not be able to achieve 90 percent production at temperatures of 400 deg. F or lower.

Despite these challenges, NLA believes that some lime plants will be able to demonstrate through testing that they operate at temperatures that assure the emissions of D/F are below the numerical standard, and EPA should allow such plants to demonstrate compliance by monitoring temperature.

VII. EPA Should Allow Emissions Averaging for All Regulated HAPs

In its prior comments, NLA requested that emissions averaging, similar in concept to the existing emissions averaging requirements for PM in the current Lime MACT rule, be incorporated into a final rule for the newly regulated HAPs. NLA reiterates that request here. Emissions averaging will allow lime plants to more cost-effectively optimize controls to prevent excessive emissions across the entire facility.

In the 2004 Lime MACT, EPA permitted plant-wide averaging of PM emissions (with some limitations), explaining:

> We believe that allowing averaging is appropriate here because of the identity of the units (kilns and coolers in all cases), and the emissions (same HAP in same type of emissions, since all emissions result from kilns and coolers). Averaged emissions under these circumstances would, thus, still reflect MACT for the affected source. The averaging provisions are included in the final NESHAP as a result of the recommendations of the Small Business Advocacy Panel convened as required by section 609(b) of the Regulatory Flexibility Act (RFA) and improves the compliance flexibility options for small businesses, which is the intent of the RFA.

69 Fed. Reg. 401 (Jan. 5, 2004). For similar reasons, EPA should allow averaging for the additional HAPs added in this rule.

NLA again suggests that for limitations based on pounds or tons of HAP per ton or MMton of lime produced, and for lime kilns seeking to comply with the same numerical standard, EPA should authorize the weighted average methodology currently available for PM in the current Lime MACT (40 C.F.R.§ 63.7111) to show compliance. For concentration-based standards, and again for lime kilns seeking to comply with the same numerical standard, a simple average of results should be allowed for compliance demonstration. For both types of standards, parametric monitoring requirements, as applicable for each kiln in the average, should be set at the injection rate associated with the tests used in the emissions averaging compliance demonstration.

VIII. NLA Supports EPA's Proposed Five Year Stack Testing Interval

NLA again strongly supports EPA's proposal to establish a 5-year stack testing interval and parametric monitoring as the monitoring requirements for emissions standards under the Proposed Rule. This is consistent with the existing requirements for PM for the lime industry, and the parametric monitoring will ensure continuous compliance. Imposing more rigorous and costly monitoring requirements would not be justified in this case, given the low emissions of HAPs generally, and EPA's risk assessment showing that risks are acceptable with an ample margin of safety even without additional controls.

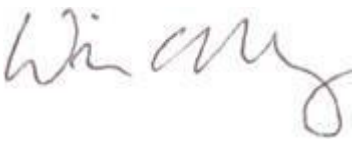
IX. EPA Should Authorize Use of Method 26/26A to Measure HCl

As noted in NLA's prior comments, Method 26/26A should be allowed by EPA to determine compliance with the proposed HCl emissions limits. EPA may have inadvertently omitted Method 26/26A (used in testing HCl) from Table 7 in the preamble (88 Fed. Reg. 815), and from Table 5, Row 19, in the redline in the docket. Method 26/26A is a standard isokinetic method that can be run concurrently with PM sampling.

In Method 26/26A, gas is withdrawn from the source and collected directly in acidified impingers. The impinger solution captures the HCl, and drives it to chloride ions, where it is analyzed by ion-chromatography. This is a simple approach that does not have the sample transport difficulties found in the direct interface FTIR approach. It is one of EPA's promulgated methods (*see* https://www.epa.gov/emc/emc-promulgated-test-methods), and it is allowed in other NESHAP rules (*see, e.g.,* 40.CFR section 63.7520 and Table 5 (boilers and process heaters). Method 26/26A has several advantages over the more technically complex and expensive M.320/321: it can allow for significantly lower detection limits, does not require a trained FTIR specialist on site to operate the equipment, and is significantly quicker. The limited availability of trained FTIR specialists will be problematic for both the lime industry and the testing industry. Additional costs are significant and can easily be greater than $10K/plant using FTIR. M26/26A is a tried and tested accepted method for HCl analyses and is allowed for compliance demonstration in other industries. EPA should authorize the use of Method 26/26A as an approved method for HCl compliance testing.

NLA appreciates the opportunity to comment on these important issues.

Respectfully submitted,



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