The Panel also recommends that EPA take comment on whether the rule should specify separate, longer averaging time periods (or greater frequencies of occurrence) for demonstrating compliance with parameter limits, or other alternative approaches for demonstrating compliance with operating parameter limits.

The Panel recommends that EPA request comment on an approach for demonstrating compliance involving two tiers of standards for monitoring operating parameters whereby, if the conditions of the first monitoring tier are exceeded, the facility operator would be required to implement corrective actions specified in an established plan to bring the operating parameter levels back to established levels, and if the conditions of the second tier are exceeded, the exceedance would constitute a violation of the standard in question.

The EPA will request comment in the proposal preamble about the technical feasibility or appropriateness of using a bag leak detector on a positive pressure, multi-stack baghouse, and whether EPA Method 9 (manual observation of opacity) should be allowed in lieu of bag leak detectors for this type of PM control device.

## (b) ACGIH Industrial Ventilation manual

The Panel recommends that the incorporation by reference of Chapters 3 and 5 of the American Conference of Governmental Industrial Hygienists (ACGIH) *Industrial Ventilation* manual be removed from the rule. The Panel believes these requirements are highly complex and unnecessary, and that EPA should not dictate how to design and operate a source industrial ventilation system, as long as the source is in compliance. The EPA intends to adopt these recommendations.

### (c) Other PM Control Device Operating Parameters

The Panel recommends that EPA take comment in the preamble about the suitability of other PM control device operating parameters that can be monitored to demonstrate compliance with the PM emission limits, in lieu of or in addition to the parameters currently required in the draft rule. For example, for scrubber-equipped kilns, EPA should consider modifying the proposal preamble language to discuss allowing the use of operating parameters other than scrubber liquid flow rate (*e.g.*, wet scrubber water pump amperage and wet scrubber exhaust gas outlet temperature). This approach would potentially offer sources some flexibility in choosing which parameters to monitor. The EPA intends to adopt these recommendations.

#### 9.6 Economic Impacts Analyses

The Panel recommends that EPA reevaluate the assumptions used in modeling the economic impacts of the standard, taking into consideration the inputs provided by the NLA and other SERs. Given that the NLA and other SERs have stated there is little ability to pass on control costs to their customers and there is considerable opportunity for product substitution in a number of the lime industry s markets, EPA will conduct a sensitivity analysis using different price and supply elasticities reflective of such conditions to provide a broader picture of the potential impact of this regulation on the lime industry.

## Appendix A: List of Materials SBAR Panel sent to SERs

- Seven-page detailed summary of draft proposed rule sent December 11, 2001.
- Technical memorandum detailing how cost and economic impacts were estimated sent December 12, 2001.
- Draft Economic Impacts Assessment Report sent December 13, 2001.
- A detailed breakdown of EPA s estimate of annual costs to comply with rule for each small business sent December 11, 2001.
- A detailed breakdown of EPA.s estimate of cost/sales to potential SERs, with the sources of information used for the sales figures sent January 8, 2002.
- One page summary of draft proposed rule sent December, 2000.
- Pre-decisional draft preamble language which included sections on the monitoring requirements, area source determination, and the rationale for selection of all of the rule.s requirements. sent January 30, 2002.
- In conjunction with this draft preamble language, various technical memoranda that support the MACT standards determinations.
- A detailed breakdown of EPA.s estimate of capital costs to comply with rule for Austin White Lime Company sent December 11, 2001.

In addition to the above items sent to the SERs, the docket for this rulemaking has been established for over a year, and all items, reports, and memoranda that have been finalized have been added to docket and have been available to all interested parties through the Air Docket office in Washington, D.C.. A list of all items in the docket was sent to the NLA and has been available to anyone requesting one. There are over 500 items in the docket currently, and over 100 technical memoranda. Docket items can be requested of the Air Docket Office over the phone and sent to interested parties for a small fee.

In addition to all the materials in the docket, numerous draft memoranda not yet in the docket have been sent to the NLA for their review. These include all of our draft cost memoranda and analyses, which were sent to the NLA in the 1<sup>st</sup> quarter of 2001. The NLA has scrutinized these cost analyses, and EPA has\_revised some of its\_memoranda in consideration of their comments. These memoranda have since been put into the docket. Other pertinent memoranda

that have been sent to the NLA (in addition to the aforementioned cost-related memoranda) include, but are not limited to, the following:

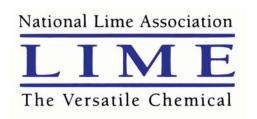
- Memorandum related to baseline emissions estimates sent December 28, 2001.
- Memorandum related to lime cooler exhaust sent December 28, 2001.
- Memorandum related to the MACT for HCl sent December 28, 2001.

## Appendix B: Summary of the Potential SER Outreach Meeting Held on December 20, 2001

Appendix C: Pre-Panel Written Comments Submitted by Potential SERs on January 15, 2002

Appendix D: Summary of the SBAR Panel's Outreach Meeting with SERs on February 19, 2002

Appendix E: Written Comments Submitted by SERs on March 5, 2002



# THE NATIONAL LIME ASSOCIATION COMMENTS ON EPA'S PROPOSED PREVENTION OF SIGNIFICANT DETERIORATION AND TITLE V GREENHOUSE GAS TAILORING RULE, 74 Fed. Reg. 55,292 (October 27, 2009)

EPA Docket No: EPA-HQ-OAR-2009-0517

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## **INTRODUCTION**

The National Lime Association (NLA) is submitting comments on EPA's proposed rule to tailor the major source applicability thresholds and significance levels for greenhouse gas ("GHG") emissions under the Clean Air Act's ("CAA") Prevention of Significant Deterioration ("PSD") and operating permit ("Title V") programs.

NLA is the trade association for manufacturers of high calcium quicklime, dolomitic quicklime, and hydrated lime, collectively referred to as "lime." All NLA members will be directly affected if the PSD program and Tailoring Rule apply to GHG emissions. Nearly half of NLA's members are small businesses.

We commend EPA for being proactive by proposing regulations intended to mitigate the devastating impact that GHG regulation could have on the regulated community, state permitting agencies, and our fragile economic recovery. The Tailoring Rule is designed to phase in regulation of GHG emissions. For at least six years, EPA would temporarily:

- 1. increase major source applicability thresholds from 100/250 tpy under PSD and 100 tpy under Title V to 25,000 tons per year (tpy) in carbon dioxide equivalent emissions ("CO<sub>2</sub>e") for both programs; and
- 2. increase the PSD significance levels from zero to 100 tpy to a level between 10,000 tpy  $CO_{2e}$  and 25,000 tpy  $CO_{2e}$ .

EPA recognizes this Rule is necessary because *current* applicability and significance levels would capture a vast number of small sources such as residences, schools, and hospitals and subject them to one of the most complex and time-consuming regulatory programs. Relying on the doctrines of administrative necessity and "absurd results," EPA claims the Rule provides a "tailored" approach to avoid a paralyzing administrative burden on small sources and regulators. EPA requests comment on whether:

- 1. the 25,000 tpy applicability threshold adequately relieves administrative burdens;
- 2. the significance threshold should be 10,000 tpy, 25,000 tpy, or some level in between; and
- 3. there are other mechanisms to streamline the PSD and Title V programs.

NLA's overarching concern with the Tailoring Rule is that it will require lime plants and other pyroprocessing facilities to engage in the futile and time-consuming exercise of going through PSD review only to conclude what is already known - - that BACT for calcination emissions is no controls. The Tailoring Rule focuses exclusively on the eighty percent of GHG emissions that result from combustion of fossil fuels. The proposed Rule fails to address emissions from industries that emit carbon dioxide ("CO<sub>2</sub>") as a by-product of the chemical reaction inherent in the process. Failure to address these process emissions is significant as more than one half of

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<sup>&</sup>lt;sup>1</sup> The cement and soda ash industries also have significant process emissions from pyroprocessing.

GHG emissions from lime plants come from calcining (cooking) limestone. Throughout our comments, NLA will refer to these as "process" or "calcination" emissions.

If calcination emissions are subject to the PSD program, then lime plants will be discouraged from undertaking energy efficiency projects that would otherwise reduce GHG emissions. As discussed below, energy efficiency projects reduce fuel consumption, GHG combustion emissions, and emissions of other criteria pollutants. However, some of these very same energy efficiency projects present the potential to increase lime production and, therefore, increase related calcination emissions. Because BACT for calcination emission will be demonstrated to be "no additional controls," the only way a lime plant could avoid PSD review would be to make less lime, thereby eliminating the incentive to invest in energy efficiency projects. Thus, the Rule puts lime plants between a rock and a hard place - - they can either forgo energy efficiency projects, thereby consuming more fossil fuels, emitting more combustion emissions, and producing less lime; or they can invest in energy efficiency projects and undergo lengthy PSD review, only to conclude at the end of the day that BACT for calcination emissions is no additional controls.<sup>2</sup>

Before finalizing the Tailoring Rule, a comprehensive regulatory impact analysis is needed to determine its economic impact on affected stationary sources and, in particular, small businesses with process emissions that would otherwise avoid the PSD program.<sup>3</sup> These and other comments are set forth more fully below.

## I. The PSD Program Should Encourage Energy Efficiency Projects By Excluding Calcination Emissions

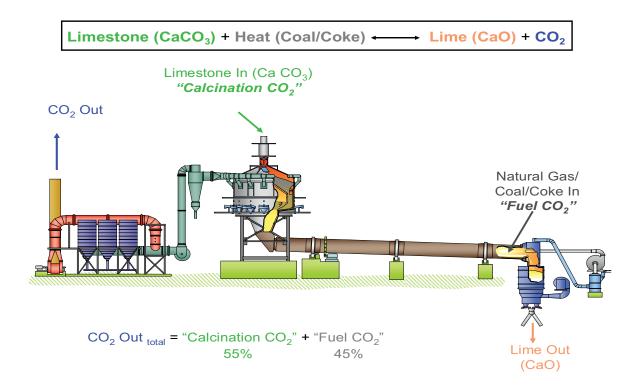
EPA most likely intended to promulgate a rule that would encourage energy efficiency projects. Unfortunately, the proposed Tailoring Rule will discourage industries with process emissions from undertaking energy efficiency measures or will penalize those that do undertake these projects. A brief explanation of how process emissions are generated in the lime industry shows how the PSD program will harm such industries.

Lime is used in a variety of products and applications, including many that benefit the environment.<sup>4</sup> As shown on the diagram below, lime (calcium oxide or "CaO") is made by heating limestone (calcium carbonate) to high temperatures.

<sup>3</sup> Small businesses within the lime industry are defined by Small Business Administration as any company with a total employment of 500 or less. 13 C.F.R. § 121.201.

<sup>&</sup>lt;sup>2</sup> Energy efficiency and other physical changes and changes in method of operation will, of course, remain subject to PSD review for all other regulated pollutants.

<sup>&</sup>lt;sup>4</sup> Lime plays a key role in many air pollution control applications. Lime is used to remove acidic gases, particularly sulfur dioxide (SO<sub>2</sub>) and hydrogen chloride (HCl), from flue gases, and it is being evaluated for the removal of mercury from power plant emissions. In addition, lime is used for effective treatment of municipal wastewaters, sewage biosolids, animal wastes, industrial liquid wastes and sludges, and petroleum wastes.



Once limestone is heated by the combustion of fuel (most lime plants use solid fuels), the limestone (calcium carbonate) is "calcined" into lime. During the calcining process, calcium carbonate ("CaCO<sub>3</sub>") is converted to CaO (quicklime) and carbon dioxide ("CO<sub>2</sub>") is released as an essential part of the process. The release of CO<sub>2</sub> inherent in calcining limestone (process emissions) cannot be reduced through the application of any economically or technologically "available" controls, as defined in EPA's NSR Manual. In addition to these process emissions, lime manufacturing also results in combustion-related CO<sub>2</sub> emissions ("combustion emissions") from the use of fossil fuels.

Due to the high temperatures required to "cook" limestone, lime production is energy intensive. To reduce potential global warming impacts, the lime industry committed to reduce its CO<sub>2</sub> emissions intensity as part of DOE's Climate VISION program. There are energy efficiency measures to *decrease* fuel consumption and related GHG emissions from the combustion of fossil fuels. As shown on the graphic below, efficient use of available fuel ensures that less energy is "lost" and more energy is directed to producing lime, resulting in a decrease in the