

EPA Lime Rule Summary

January 4, 2024

EPA proposed a regulation one year ago titled: “*National Emissions Standards for Hazardous Air Pollutants for Lime Manufacturing Plants*, 88 Fed. Reg. 805 (January 5, 2023) (“Lime Rule”). This rulemaking will have an unnecessary, substantial, and detrimental economic impact on the lime industry without any significant environmental benefits. Lime plants supply products (such as quicklime, dolomitic lime, and hydrated lime) essential for the proper functioning of critical activities in the national interest including steel production, road construction, power generation, pollution abatement, and drinking water treatment.

EPA’s own technical experts have analyzed lime plant emissions on several occasions over the past twenty years. The agency’s latest and most comprehensive scientific risk assessment in 2020 found that human health and environmental risks from lime plant air emissions are acceptable with an ample margin of safety, even without new regulations. EPA stated that:

The EPA proposed no changes to 40 CFR part 63, subpart AAAAA NESHAP based on the risk review conducted pursuant to CAA section 112(f). In this action, we are finalizing our proposed determination that **risks from the source category are acceptable, the standards provide an ample margin of safety to protect public health, and more stringent standards are not necessary to prevent an adverse environmental effect.** The EPA received no new data or other information during the public comment period that causes us to change that proposed determination. Therefore, we are not making any revisions to the existing standards under CAA section 112(f), and we are readopting the existing standards.

85 Fed. Reg. 44,963 (July 24, 2020) (emphasis added).

Despite this finding (and a similar finding in 2004), the agency is now proposing stringent new emissions standards for the lime industry requiring the installation of costly, unproven, and unnecessary controls for hydrogen chloride (HCl), mercury, organic hazardous air pollutants (HAPs), and dioxins and furans. These unnecessary controls are estimated to cost this small \$2.3 billion industry approximately \$924 million in capital cost and \$180 million annually thereafter.

These regulations not only fail a cost/benefit analysis, but they do not even pass an environmental benefit analysis and directly conflict with the administration’s primary environmental policy on climate. Lime plants that require regenerative thermal oxidizers to remove extremely small quantities of organics (in the parts per million) will do so only by burning large quantities of natural gas, resulting in the release of tens of thousands of tons of unnecessary CO₂ emissions.

Since EPA has already found that such standards are NOT required in order to provide an ample margin of safety, new regulations are not “necessary.” Since new regulations are clearly and admittedly not necessary, EPA should either: (1) withdraw the proposed rule and reiterate that

new regulations are not necessary in this instance to comply with § 112 of the Clean Air Act; or, at a minimum; (2) promulgate regulations that provide the maximum flexibility possible under the Clean Air Act to ensure that any new rules do not cause significant adverse economic impacts to the lime manufacturing sector.

EPA has authority under the Clean Air Act to use reasonable alternatives to make this proposed lime rule significantly less burdensome in several ways. These include:

- (1) EPA should propose a “health-based” standard for HCl (which is expressly authorized under Clean Air Act §112(d)(4));
- (2) EPA should include an intra-quarry variability factor (IQV) in the calculated mercury emission limit. The IQV is a way to account for the natural variability in mercury concentrations found in limestone, and enables a more representative and achievable limit to be set. IQVs have been utilized in mercury emissions limit calculations for MACT standards in other sectors, including brick and cement; and
- (3) EPA should propose an aggregated standard for organic hazardous air pollutants (oHAP) based on the sum of representative detection limits for individual oHAP known to be emitted from lime kilns for which EPA has data. A similar aggregated oHAP limit has been used by EPA to regulate oHAP in the cement industry.

Adopting these measures, as well as others identified in NLA’s comments, would allow the agency to both meet its legal obligations of promulgating emissions standards for all HAPs while significantly reducing unnecessary burdens on the lime manufacturing industry and minimizing greenhouse gas emissions.