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March 31, 2025

U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460
Submitted by Electronic Mail to: airaction@epa.gov

RE: REQUEST FOR PRESIDENTIAL EXEMPTION: National Emission Standards for Hazardous Air Pollutants: Lime Manufacturing Plants Technology Review, EPA Docket No. OAR-2017-0015, RIN 2060-AV59, 89 Fed. Reg. 57,738

Pursuant to Section 112(i)(4) of the Clean Air Act (“CAA”), Cleveland-Cliffs Inc. and Cleveland-Cliffs Steel LLC-Indiana Harbor East and West (collectively “Cliffs”) hereby requests that the President issue a two-year exemption of the compliance date for emissions standards promulgated in the final rule *National Emission Standards for Hazardous Air Pollutants: Lime Manufacturing Plants Technology Review* (the “Lime Rule”), published in the *Federal Register* at 89 Fed. Reg. 57,738 (July 16, 2024), for the lime plant at Cliffs’ Indiana Harbor facility subject to the rule, pending EPA’s reconsideration of the rule. Lime is an essential raw material to the domestic steel industry, many of Cliffs’ lime raw material suppliers are members of the National Lime Association (“NLA”). Cliffs also endorses and references the Presidential Exemption request for the lime industry submitted by the NLA.

This request explains why an exemption is appropriate for the source impacted by the Lime Rule. As specified in CAA §112(i)(4), the technology to implement such standard is not available and an exemption is in the national security interests of the United States.

Emissions standards or limitations subject to the request include limits for Dioxins/Furans (“D/F”), Organic Hazardous Air Pollutants (“oHAP”), Hydrogen Chloride (“HCl”), and Mercury for lime manufacturing kilns and coolers.

Cliffs, together with the NLA, strongly supports EPA's plan to reconsider this final regulation, for numerous legal and technical reasons many of which have been raised in the NLA's comments during the notice and comment period preceding the Lime Rule, in NLA's lawsuit challenging the Lime Rule, and in NLA's petition for reconsideration of the Rule.¹

¹ See, e.g., Comments Submitted by NIA (March 11, 2024) and NIA Petition for Reconsideration (September 13, 2024), EPA Docket No. OAR-2017-0015, and associated technical support.

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A. TECHNOLOGY TO IMPLEMENT THE LIME STANDARDS IS UNAVAILABLE

1. Standards in the Lime Rule Are Not Achievable with Available Technology in the Industry

EPA identified three different candidate control technologies as necessary for lime kilns to comply with the rule. Installation and use of these technologies will require significant research and development, pilot plant experimentation, and great expense (and uncertainty). Furthermore, as discussed further below, the candidate technologies' application to achieve the very low levels of HAP emissions from lime kilns is far from demonstrated in practice and may not be achievable for many lime kilns.² EPA imposed standards in the Lime Rule requiring the use of multiple control technologies, even though none of these technologies are currently in use at any U.S. lime plant. Based on the foregoing, the efficacy of these technologies in lime plants is speculative, and significant testing and piloting will be required before compliance can be assured. In a number of cases there is serious doubt whether compliance is possible at all. The record is thus insufficient to demonstrate that these technologies are available to meet the proposed emission standards. Issues specific to the four HAPs are provided in the following;

- The Lime Rule will require many existing sources, including Cliffs' Indiana Harbor facility, to install Activated Carbon Injection ("ACI") to control for Mercury, oHAP and D/Fs control, and Dry Sorbent Injection ("DSI") using Sodium Bicarbonate for HCl control. The use of such technologies has significant negative environmental impacts. Activated carbon will become an impurity in Lime Kiln Dust, thus reducing the commercial value of this byproduct and necessitating disposal, contrary to beneficial use preferences. The DSI technology utilizes lime in the control technology, thus using up this valuable end-product that can be used in many industries and is predominantly used in the Cliffs' Indiana Harbor iron and steelmaking process.
- No current lime kiln is using ACI technology to control D/F, oHAP or mercury. There are numerous known challenges to using ACI to control D/F, oHAP or mercury in lime kilns, especially with the extremely low limits set in the standard. EPA's projections of the feasibility and costs of using this technology were not based on data from lime kilns and thus are speculative. An added challenge of using ACI technology is that the same technology is to be used to treat mercury, oHAP and D/F, and testing will be required to make sure that parameters can be set so that both standards are met in the same device. Again, this will require extensive testing, to be carried out on equipment that currently does not exist.
- Regenerative Thermal Oxidation ("RTO") is the control technology that EPA states would be used to control organic HAP ("oHAP") emissions. RTOs have not been installed on any lime kiln in the United States for oHAP control. RTOs have multiple technical issues which

² See National Lime Association comments on EPA Lime Rule EPA-HQ-OAR 2017-0015 (Feb. 21, 2023) at p. 59. NLA's comments are incorporated herein by reference.

make their use impractical and technically infeasible. For example, sulfur dioxide (“SO₂”) in the kiln exhaust may need to be removed by a wet scrubber to prevent oxidation of SO₂ to SO₃ in the RTO combustion chamber and creating acid mist and visible emissions. Most lime kilns do not currently utilize a wet scrubber, including Cliffs’ Indiana Harbor facility.

Accordingly, even for technologies that theoretically exist and could potentially be installed at lime plants, the standard of unavailability in CAA section 112(i)(4) is met due to the short time frame for compliance, and therefore the two-year presidential exemption is necessary.

2. New Technology to Implement the Standard Is Not Available and Must First Be Tested in the Industry

Overall, EPA’s candidate control technologies identified as necessary for lime kilns to comply with the rule will require significant research and development, pilot plant experimentation, and great expense (and uncertainty). Furthermore, the candidate technologies’ application to achieve the very low levels of HAP emissions from lime kilns is far from demonstrated in practice and may not be achievable for many lime kilns including at Cliffs’ Indiana Harbor facility.³ Adding to this level of complexity is the fact that all lime plants in the country will be seeking to make major, experimental, additions of control technology at the same time because no lime plant in the United States has such technology in place.

Cliffs will have to make substantial capital expenditures, and to purchase and install major pieces of emissions control equipment. All emission controls will have to be newly installed, which will require substantial physical changes to retrofit the lime plant at Cliffs’ Indiana Harbor facility.

3. The Standards Cannot Be Implemented with Cost-Effective Technology

No *cost-effective* technology is available, or could be available, to implement the standards established in the Lime Rule. EPA’s estimated cost to the industry is \$2.4 billion over the next 20 years (\$485 million in capital investment) or \$175 million annually. NLA’s cost estimates are even higher: \$924 million capital investment and \$180 million annually. Cliffs’ cost estimate for the Indiana Harbor facility is at a minimum approximately \$1.1 million in capital investment and over \$3.1 million in annual costs. It should be noted that EPA’s own previous risk assessment demonstrated that even without controls, emissions from the industry presented an acceptable level of risk to public health with an ample margin of safety. As a result, any costs expended to meet these standards are unreasonable, and, by definition, not cost-effective.

For the above reasons, as well as those summarized by the NLA, none of the technologies identified to control to the standards in the Lime Rule are either available now or unlikely to be demonstrated in the industry by the compliance date of July 16, 2027. Therefore, a Presidential exemption is warranted to extend the compliance date while EPA reconsiders the rule.

³ See *National Lime Association comments on EPA Lime Rule* EPA-HQ-OAR 2017-0015 (Feb. 21, 2023) at p. 59. NLA’s comments are incorporated herein by reference.

B. IT IS IN THE NATIONAL SECURITY INTERESTS OF THE UNITED STATES TO PROVIDE AN EXEMPTION FROM THE LIME RULE COMPLIANCE DATE

The impact of the Lime Rule is far-reaching and undermines U.S. national security interests given that lime is an essential raw material input for the integrated iron and steel industry, which is an industry critical to national security. The U.S. Geological Survey has noted that the major markets for lime, in *descending* order of consumption are “steelmaking, chemical and industrial applications (such as the manufacture of fertilizer, glass, paper and pulp, and precipitated calcium carbonate, and in sugar refining), flue gas treatment, construction, water treatment, and nonferrous-metal mining.”⁴ These are all essential industries essential to national security interests.

EPA’s Lime Rule, if implemented, would both increase the cost of lime, and restrict the availability of lime products. For Cliffs’ steel production, lime is used as a flux and slagging agent to remove impurities. The domestic steel industry accounts for approximately 30% of all lime sold and used in the United States. While Cliffs’ Indiana Harbor facility manufactures its own lime used in the iron and steel making process, Cliffs also needs to purchase additional lime to use at its other four integrated steelmaking plants. Lime products are typically not stored or stockpiled for a long period of time, with most of the lime industry practicing on-demand production and delivery. If lime production were to be disrupted, stocks of lime would be rapidly depleted, in some cases in a matter of days. There is a direct correlation between the lime industry and the steel industry in relation to national security concerns.

The U.S. Department of Commerce recognized that domestic steel production is essential for national security applications which it indicated encompasses transportation systems, the electric power grid, water systems, and energy generation systems in its report summarizing the findings of an investigation conducted by the Department of Commerce pursuant to Section 232 of the Trade Expansion Act of 1962, as amended (19 U.S.C. §1862 (“Section 232”)), into the effect of imports of steel mill products on the national security of the United States. In a 2021 Congressional Research Service Report on U.S. Steel Manufacturing: National Security and Tariffs, it was noted that under the Defense Production Act, 50 U.S.C. §4533, “Congress provides the President with a broad set of authorities ..., including Title III, which authorizes the use of economic incentives to secure domestic industrial capabilities essential to meet national defense and homeland security needs. DOD has funded several Title III projects to increase domestic production of steel products,” including a \$56 million agreement in 2020 to boost steel production.⁵

The American iron and steel industry is already among the most regulated and cleanest steel industries in the world. Rulemaking must take into consideration the necessary role that the domestic integrated iron and steel industry plays in our country. Members of Congress have already

⁴ More details on the essential uses of lime can be found in U.S. Geological Survey documents at <https://pubs.usgs.gov/myb/vol1/2019/myb1-2019-lime.pdf>.

⁵ Congressional Research Service Report, *U.S. Steel Manufacturing: National Security and Tariffs* (August 12, 2021), <https://www.congress.gov/ers-product/1F11897>

expressed their concern on rulemakings impacting the steel industry. Eight current or former U.S. Senators (Senators Brown, Vance, Braun, Manchin, Casey, Klobuchar, Capito and Young) wrote a letter to EPA warning the Agency that its three proposed rules aimed at the steel industry “would dramatically undermine the domestic steel industry and national security while driving production overseas”⁶ Similarly, Congressmen Crawford and Mrvan, Chair and Vice-Chair of the Congressional Steel Caucus, respectively, wrote a letter to then EPA Administrator Regan, expressing their concerns over proposed rulemakings targeting the steel industry, concluding that the rulemakings would threaten advancements already made by the industry into environmental initiatives while “pos[ing] a threat to the competitiveness of steel producers and tens of thousands of good-paying union jobs.”⁷

Similarly, the Lime Rule could further “diminish the ability of the American steel industry to meet the demands of our economy” which may lead to those demands being met by “foreign made and illegal subsidized steel entities that do not meet our current environmental, labor, and accountability standards.” These fears ring true, as the U.S. Department of Commerce has already found excessive quantities of imports displacing domestic steel – steel that is not produced as clean as the United States. Such a result is counterintuitive to the purpose of the CAA and threatens the nation’s domestic steelmaking supply chain. The Congressmen conclude in their letter by “strongly encourage[ing]” EPA to communicate with “industry experts and other stakeholders” and ensure that the final rulemakings are “technically feasible, financially reasonable, and continue to protect the livelihoods, health, and safety of workers and steel-producing communities throughout our nation.” That is exactly what this Administration is doing by providing outreach in the form of a Presidential Exemption, and we ask that you consider this request on its merits.

The threat of global steel imports raised by the Senators in the letters to EPA is a material threat. Foreign steel imports risk the competitiveness and advancement of the domestic steel industry, to the point of potentially threatening U.S. domestic production capacity and continued investment in taconite iron mining, coke manufacturing, and iron and steelmaking capacity based on the costs outlined above. As emphasized by the U.S. Department of the Treasury’s Committee on Foreign Investment in the United States (“CFIUS”), without such domestic steelmaking investment, there could be ripple effects on the supply chains that depend on such steel, particularly supply chains that are part of our national defense infrastructure such as “critical manufacturing, energy, transportation, and communications (all vital to national security).”⁸ National defense infrastructure, for example, needs ready access to high purity steel from blast furnaces.⁹ Once these complicated iron and steel making operations are shut down and/or idled, it is no simple matter to restart them. In short: “The loss of domestic production is a critical national security concern given

⁶ Letter from U.S. Senators Brown, Vance, Braun, Manchin, Casey, Klobuchar, Capito, and Young to Michael Regan, EPA Administrator (Dec. 6, 2023), pp. 1-2.

⁷ Letter from Congressmen Crawford and Mrvan, Chair and Vice-Chair of the Congressional Steel Caucus, to Michael Regan, EPA Administrator (Dec. 18, 2023).

⁸ Letter from Andrew Fair, Acting Assistant Secretary for Investment Security, U.S. Department of the Treasury, to Ama Adams, Ropes & Gray LLP, and Mark Plotkin, Covington & Burling LLP, Re: CFIUS Case 24-154 (Dec. 14, 2024) (“CFIUS Letter”), p. 28.

⁹ *Id.* at p. 24.

the ubiquitous nature of steel throughout multiple critical industries.”¹⁰ Cliffs is advocating not only for the steel industry, but also for lime and taconite industries, both of which are integral parts of the integrated iron and steelmaking process.

For all the reasons stated above, Cliffs requests the issuance of a two-year exemption from the compliance date of the final Lime Rule: *National Emission Standards for Hazardous Air Pollutants: Lime Manufacturing Plants Technology Review* (the “Lime Rule”), published in the *Federal Register* at 89 Fed. Reg. 57,738 (July 16, 2024), extending the compliance date pending EPA’s review of the rule.

If you have questions or need additional information, please contact Walter Tamukong at 216-694-4862 or at walter.tamukong@clevelandcliffs.com.

Sincerely,



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¹⁰ *Id.* at p. 28.