

1. Technology to Implement the Hazardous Air Pollutant Emission Standards is Not Feasible

Cliffs has provided numerous technical reports and declarations⁵ evidencing that new HAP limitations in the II&S Rule for the Cliffs' facilities listed above are unachievable and require development and installation of unproven control technologies and/or retrofitting that have never been installed domestically or internationally for these sources because the technologies are not available and have not been demonstrated in practice. The II&S Rule fails to consider that not only is this untested technology, but that the facilities also require time for development, trialing, design, procurement, fabrication, and testing to ensure the technology could even achieve its intended purpose. As one industry engineering expert notes: "Typical capital project delivery steps for a major emission control project of this scale typically require 2–3 years to implement. The research and development required to conceive of, test and validate a novel solution which does not exist today could easily add another 2-3 years to this typical implementation timeline, provided that a solution is identified."⁶

The affected sources and specific issues with the feasibility of HAP emission limit control technologies are summarized as follows:⁷

- **BOPFs:** Together, the five Cliffs' facilities have fifteen (15) BOPF furnaces, and there is no existing emission control system that can be added to a BOPF furnace that is known to address dioxin/furan, total hydrocarbons, or hydrogen chloride to meet the limits provided in the 2024 II&S Rule. Addressing HAPs for BOPF furnaces will require significant retrofit upgrades to the current systems, the extent of which will depend on whether there is dry electrostatic precipitator or wet scrubber technology already in place. These system upgrades are expected to be particularly challenging, given they will likely need to incorporate (or in the case of wet scrubbers, completely replace with) novel treatment technology such as a recirculating baghouse system with injected lime and/or carbon, which are not commercially available.
- **BF Casthouses:** Together, the five Cliffs' facilities have seven (7) BF casthouses, and there is no existing add-on emission control that is proven to meet the HAP limitations for hydrogen chloride or total hydrocarbons. Moving forward with the limits in the rulemaking

⁵ See Comments of the American Iron and Steel Institute [including member Cliffs] and United States Steel Corporation on National Emission Standards for Hazardous Air Pollutants: Integrated Iron and Steel Manufacturing Facilities Technology Review; Proposed Rule, 88 Fed. Reg. 49,402 (July 31, 2023), submitted September 29, 2023 ("AISI Comments"), Docket No. EPA-IIQ-OAR-2002-0083-1631; Cliffs' Petition for Reconsideration and Request for Administrative Stay ("Cliffs' Reconsideration Petition"), submitted June 3, 2024; Cliffs' Motion for Stay, filed June 28, 2024, in *Cleveland-Cliffs Inc. v. U.S. EPA*, Case No. 24-1170 (D.C. Cir.) ("Cliffs' Motion for Stay"; Cliffs' Reply in Support of Motion for Stay, filed September 19, 2024, in *Cleveland-Cliffs Inc. v. U.S. EPA*, Case No. 24-1170 (D.C. Cir.) ("Cliffs' Reply") and associated exhibits/attachments.

⁶ Declaration of David Mysko, P.E. of Hatch Associates Consultants, Inc. (Sept. 17, 2024) (attached as Exhibit L to Cliffs' Reply). See also Declaration of Stephen Palmer, Cleveland-Cliffs Enterprise Director Engineering (June 13, 2024) (attached as Exhibit C to Cliffs' Motion for Stay).

⁷ Declaration of David Mysko, P.E. of Hatch Associates Consultants, Inc. (Sept. 17, 2024) (attached as Exhibit L to Cliffs' Reply); Declaration of Ryan Siats of Barr Engineering (June 18, 2024) (attached as Exhibit E to Cliffs' Motion for Stay).