> "Available technology" is an elastic concept. In many instances . . . technology is available in an engineering sense to eliminate pollution entirely. If we were willing to spend hundreds of billions of dollars, we could have drinking water flowing from industrial waste discharge pipes (although disposing of the pollutants removed from waste streams could present serious problems). *Accordingly, most decisions about "available" technology must implicitly or explicitly take costs into account.*[17]

The same commonsense understanding has also guided courts reviewing the EPA's authority to find that consideration of regulatory costs is an essential prerequisite for reasoned decision making and to find that controls imposing "possibly disabling costs upon the regulated industry" should not be deemed "available."[18] The radically cost-ineffective controls imposed by the Copper Rule may be "possibly disabling" to maintaining economically viable operations at the Miami Smelter, which creates the risk that curtailed domestic production will make the United States strategically vulnerable.

As discussed below, consideration of (i) the cost of the requisite controls on a dollars per ton of emissions reduced basis and (ii) EPA policy acknowledging that extraordinarily expensive controls are not "available" under the Act's New Source Review program further support a finding that the requisite controls are not available.

Using the annualized capital and operating cost approach under the EPA's Air Pollution Cost Control Manual, these controls will cost between $21 million and $164 million per ton of metal HAP removed. That figure is between 16 and 123 times higher than the EPA's long-established cost-effectiveness limit of $1.3 million per ton metal HAP. Such radical cost-ineffectiveness renders the control technology "not available."

EPA guidance interpreting the term "best available control technology" under the Act further supports a finding that the extraordinarily expensive requisite controls are "not available." Even when the Act tasks the EPA with determining the "best" control technology "available," the Act requires

---

[17] Bruce A. Ackerman & Richard B. Stewart, *Reforming Environmental Law*, 37 Stan. L. Rev. 1333, 1359 n.60 (1985) (emphasis added).

[18] *Am. Petroleum Inst. v. EPA*, 787 F.2d 965, 972 (5th Cir. 1986) (evaluating "best available technology economically achievable" (BAT) limitations under the Clean Water Act in offshore drilling-related permits and explaining, "EPA would disserve its mandate were it to tilt at windmills by imposing BAT limitations which removed de minimis amounts of polluting agents from our nation's waters, while imposing possibly disabling costs upon the regulated industry" (citations omitted)); *id.* ("We agree with the Ninth Circuit's comment that, 'at some point[] extremely costly more refined treatment will have a de minimis effect on the receiving waters.'" (quoting *Ass'n of Pac. Fisheries v. EPA*, 615 F.2d 794, 818 (9th Cir. 1980))); *see also Michigan v. EPA*, 576 U.S. 743, 755–57 (2015) (finding that EPA unreasonably deemed cost irrelevant when it decided to regulate HAPs from power plants under the Act); *Riverkeeper, Inc. v. EPA*, 358 F.3d 174, 181–83 (2d Cir. 2004) (evaluating BAT limitations and recognizing that "EPA is permitted to consider a *technology's cost* in determining whether it is practicable, economically achievable, *or available*") (emphasis added) (internal quotation marks and citation omitted).