

BUCKING *WHITE STALLION*: WHY EPA SHOULD HAVE PROHIBITED COST CONSIDERATIONS FROM CLEAN AIR ACT EGU REGULATORY DESIGNATIONS AND WHY THE D.C. CIRCUIT WOULD HAVE UPHELD IT

SAMUEL WORTH*

Abstract: In 2012 the Environmental Protection Agency issued a Final Rule subjecting coal and oil-fired electric utility steam generating units, or EGUs, to EPA regulation under section 112 of the Clean Air Act, officially listing them as “source-categories” of Hazardous Air Pollutant, or HAP, emissions. Additionally, the agency held that situation-specific factors, such as implementation and compliance costs, should not be considered when designating EGUs for regulation. In *White Stallion Energy Center, LLC v. U.S. Environmental Protection Agency*, the U.S. Court of Appeals for the D.C. Circuit held that the CAA does not require EPA to consider implementation and compliance costs when designating coal and oil-fired EGUs for regulation. The legislative purpose and statutory language of CAA section 112, however, supports a finding that EPA is actually barred from such cost consideration. This Comment argues that in light of the D.C. Circuit’s holding in *White Stallion*, EPA could have interpreted section 112 in its 2012 Final Rule to completely prohibit the agency from considering EGU regulatory compliance costs. If EPA had taken a stronger position on the statutory bar to cost consideration, the D.C. Circuit would have affirmed the agency’s decision as the correct interpretation of section 112. Such a holding, in turn, would have ensured more environmentally friendly decision-making for years to come.

INTRODUCTION

In the third century B.C., the Chinese emperor Qin Shihuang, in an effort to achieve immortality, directed his court doctors and alchemists to concoct an elixir that could halt or perhaps even reverse his body’s natural aging process.¹ He began taking mercury, having observed that bodily decay was stunted in persons with prolonged exposure to the substance.² Before long, the

* Staff Writer, BOSTON COLLEGE ENVIRONMENTAL AFFAIRS LAW REVIEW, 2014–2015.

¹ See DAVID CURTIS WRIGHT, THE HISTORY OF CHINA 49 (Frank W. Thackeray et al. eds., 2001) (detailing the emperor’s use of mercury to combat aging and later death).

² *Id.*

first emperor of the Qin dynasty was dead—believed to have been poisoned, in a cruel twist of fate, by the very mercury intended to grant him eternal life.³

Today, it is well known that mercury is toxic to the central and peripheral nervous systems.⁴ Humans who are exposed to mercury are not the only organisms at risk of severe health problems; wildlife and entire ecosystems can also be adversely affected by contact with the toxin.⁵ In 1970, Congress passed the Clean Air Act (“CAA”) to empower the Environmental Protection Agency (EPA) to reduce air emissions of Hazardous Air Pollutants (“HAPs”).⁶ Since that time, there has been increasing recognition of the dangers of mercury as an air pollutant and of the need to control mercury emissions.⁷ Nevertheless, the question of who should bear the costs associated with mercury emissions reductions has proven contentious.⁸

In an effort to better understand the economics of clean air, Congress directed EPA to conduct a study to estimate the pecuniary costs and benefits of the CAA.⁹ In the study, EPA estimated that the economic benefits of the CAA amounted to an average of \$22.2 trillion from 1970 to 1990, and appraised the costs of complying with the statute’s standards at \$500 billion.¹⁰ Further, since 1970, the CAA has improved human health and welfare, which has led to

³ *Id.*

⁴ See National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Steam Generating Units, 77 Fed. Reg. 9304, 9354 (Feb. 16, 2012) (codified at 40 C.F.R. pts. 60, 63) (identifying mercury as a toxic substance); *Mercury and Health Fact Sheet N°361*, WORLD HEALTH ORG. (Sept. 2013), www.who.int/mediacentre/factsheets/fs361/en/, archived at <http://perma.cc/LB2B-29F7> (discussing health effects of mercury on the central and peripheral nervous systems).

⁵ See Anthony DePalma, *Mercury’s Harmful Reach Has Grown, Study Suggests*, N.Y. TIMES, Jan. 23, 2013, http://www.nytimes.com/2012/01/24/science/study-finds-mercury-in-more-northeastern-bird-species.html?_r=0&pagewanted=print, archived at <http://perma.cc/4562-RMXP> (discussing adverse effects of mercury on wildlife and ecosystems); *Mercury and Health Fact Sheet N° 361*, supra note 4 (discussing health effects of mercury on humans).

⁶ See *History of the Clean Air Act*, ENVTL. PROT. AGENCY, <http://www.epa.gov/air/caa/amendments.html#caa70> (last updated Aug. 15, 2013), archived at <http://perma.cc/N7LA-9JHB> (discussing the history of the CAA and EPA power to reduce hazardous and toxic air pollutants).

⁷ See Final Brief for State and Local Government Intervenors-Respondent in Support of EPA at 2, *White Stallion Energy Ctr., LLC v. Env’tl. Prot. Agency*, 748 F.3d 1222 (D.C. Cir. 2014) (No. 12-1100), 2013 WL 1386233, at *2 (noting concerns over mercury by state intervenors); ENVTL. HEALTH & ENG’G INC., EMISSIONS OF HAZARDOUS AIR POLLUTANTS FROM COAL-FIRED POWER PLANTS 1, 18 (2011), available at <http://www.lung.org/assets/documents/healthy-air/coal-fired-plant-hazards.pdf>, archived at <http://perma.cc/Z7MV-CF3Q> (noting thirty-nine have issued warnings relating to the dangers of mercury consumption).

⁸ See Al Bredenberg, *The Clean Air Act—Was It Worth the Cost?*, THOMASNET.COM (Oct. 31, 2011), <http://news.thomasnet.com/IMT/2011/10/31/the-clean-air-act-was-it-worth-the-cost/>, archived at <http://perma.cc/S46J-VR4U> (observing that political forces are debating the controversial question of who should bear the cost of regulation).

⁹ See JANE Q. KOENIG, HEALTH EFFECTS OF AMBIENT AIR POLLUTION: HOW SAFE IS THE AIR WE BREATHE? 131 (2000) (noting Congress directed EPA to conduct a study of the costs and benefits of the CAA).

¹⁰ *Id.*

longer lives and significant savings through reduced health-care expenses and increased work efficiency.¹¹ Despite an abundance of scientific evidence indicating that the benefits of the CAA far outweigh the costs, petitioners have continually asked courts to direct EPA to weigh implementation and compliance costs in its regulatory policymaking.¹² In *White Stallion Energy Center, LLC v. Environmental Protection Agency*, the U.S. Court of Appeals for the D.C. Circuit held that the CAA does not require EPA to consider implementation and compliance costs when designating coal and oil-fired electric utility steam generating units (“EGUs”) for regulation.¹³

This Comment argues that EPA could have interpreted CAA section 112 to entirely bar the agency from considering EGU implementation and compliance costs when enacting regulations on EGUs, rather than to merely not require the agency to do so.¹⁴ EPA could have taken a stronger position on costs—one that precludes the possibility of including industry implementation and compliance expenses in the regulatory calculus—and in so doing, unequivocally prioritized public health and welfare over compliance expenses and corporate balance sheets.¹⁵ Had the agency adopted this position, this Comment argues that, in light of the D.C. Circuit’s holding in *White Stallion*, the court would have upheld EPA’s interpretation of section 112.¹⁶

I. FACTS AND PROCEDURAL HISTORY

The hazardous effects of mercury emissions have been well documented by the scientific community.¹⁷ Elemental mercury, once released into the environment, is transformed by bacteria into the organic compound methylmercury, which is highly toxic, extremely bioavailable,¹⁸ and biomagnifies¹⁹ in aquatic

¹¹ See J. SCOTT HOLLADAY, INST. FOR POL’Y INTEGRITY, N.Y. UNIV. SCH. OF LAW, VALUING THE CLEAN AIR ACT: HOW DO WE KNOW HOW MUCH CLEAN AIR IS WORTH? 1, 11–12 (2011), available at http://policyintegrity.org/files/publications/Valuing_the_Clean_Air_Act.pdf, archived at <http://perma.cc/85JV-D4LP> (discussing how savings are achieved through the CAA); Bredenberg, *supra* note 8 (describing estimated savings under the CAA).

¹² See *Lead Indus. Ass’n, Inc. v. Envtl. Prot. Agency*, 647 F.2d 1130, 1150 (D.C. Cir. 1980) (noting petitioners request that the court consider an EPA mandate to consider costs of CAA implementation and compliance); Bredenberg, *supra* note 8 (discussing benefits of the CAA in light of costs).

¹³ *White Stallion Energy Ctr., LLC v. Envtl. Prot. Agency*, 748 F.3d 1222, 1236, 1241 (D.C. Cir. 2014).

¹⁴ See *infra* notes 87–105 and accompanying text.

¹⁵ See *infra* notes 87–105 and accompanying text.

¹⁶ See *infra* notes 105–107 and accompanying text.

¹⁷ See *Mercury*, GREENFACTS, <http://www.greenfacts.org/en/mercury/mercury-1.htm> (last updated Feb. 6, 2015), archived at <http://perma.cc/XG57-RH4L>; DePalma, *supra* note 5.

¹⁸ *Bioavailability*, MERRIAM-WEBSTER, <http://www.merriam-webster.com/dictionary/bioavailability> (last visited Feb. 18, 2015), archived at <http://perma.cc/HV7H-XK7S> (defining bioavailability as the degree and rate at which a substance—as a drug—is absorbed into a living system or is made available at the site of physiological activity).

food chains.²⁰ Mercury exposure can have devastating neurological effects on living organisms and it can also disrupt microbiological activity in soils that are vital to terrestrial food chains.²¹ The effects of mercury emissions are highly destructive and even lethal.²² Humans—especially unborn children and subsistence fish-eating populations—are particularly susceptible to the risk of mercury poisoning.²³ Wildlife and entire ecosystems also stand to be destroyed by toxic mercury emissions.²⁴

EPA has identified mercury from coal and oil-fired EGUs as the HAP of “greatest potential concern” to public health and the environment.²⁵ An EGU is a fossil fuel-fired combustion unit of more than twenty-five megawatts that serves a generator for the production of sellable energy.²⁶ Coal and oil-fired EGUs represent the largest source of human-generated mercury emissions in the United States.²⁷ In 2010 alone, coal-fired EGUs in the United States released sixty tons of mercury, and oil-fired EGUs released an additional point-one-three tons.²⁸

Enacted in 1970, section 112 of the CAA (or “the Act”) originally required EPA to reduce HAPs—defined as “an air pollutant to which no ambient air quality standard is applicable and which in the judgment of the Administrator [of EPA] may cause, or contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.”²⁹ The statute fur-

¹⁹ *Biomagnification*, MERRIAM-WEBSTER, <http://www.merriam-webster.com/dictionary/biomagnification> (last visited Feb. 18, 2015), *archived at* <http://perma.cc/YH44-3E35> (defining biomagnification as the process by which a compound, such as a pollutant or pesticide, increases its concentration in the tissues of organisms as it travels up the food chain).

²⁰ *Mercury and Health Fact Sheet N° 361*, *supra* note 4.

²¹ INTER-ORG. PROGRAMME FOR THE SOUND MGMT. OF CHEMICALS, UNITED NATIONS ENV'T PROGRAMME, GLOBAL MERCURY ASSESSMENT 72, 80 (2002), *available at* <http://www.chem.unep.ch/mercury/Report/Chapter5.htm>, *archived at* <http://perma.cc/XY8X-M9NG>.

²² *Id.* at 75.

²³ *White Stallion Energy Ctr., LLC v. Env'tl. Prot. Agency*, 748 F.3d 1222, 1231 (D.C. Cir. 2014) (stating that mercury becomes concentrated in the bodies of predatory fish, which are then consumed by humans; also noting that the toxin can easily pass from pregnant women to their fetuses).

²⁴ DePalma, *supra* note 5.

²⁵ OFFICE OF AIR QUALITY & STANDARDS, ENVTL. PROT. AGENCY, 1 STUDY OF HAZARDOUS AIR POLLUTANT EMISSIONS FROM ELECTRIC UTILITY STEAM GENERATING UNITS—FINAL REPORT TO CONGRESS, at ES-27 (1998), *available at* <http://www.epa.gov/ttn/oarpg/t3/reports/eurtc1.pdf>, *archived at* <http://perma.cc/4Z8L-Y996>.

²⁶ Clean Air Act, 42 U.S.C. § 7412(a)(8) (2012).

²⁷ Regulatory Findings on the Emission of Hazardous Air Pollutants from Electric Utility Steam Generating Units, 65 Fed. Reg. 79,825, 79,827 (Env'tl. Prot. Agency Dec. 20, 2000) (notice); *see* Jim Marston, *Texans to Benefit from Vital Clean Air Safeguards*, ENVTL. DEF. FUND (Apr. 15, 2014), <http://www.edf.org/media/texans-benefit-vital-clean-air-safeguards>, *archived at* <http://perma.cc/ZY33-ZVQJ>; *Mercury and Health Fact Sheet N° 361*, *supra* note 4 (discussing health effects of mercury on humans).

²⁸ OFFICE OF AIR QUALITY & STANDARDS, *supra* note 25, at ES-5.

²⁹ Clean Air Act of 1970, Pub. L. No. 91-604, § 4(a), 84 Stat. 1676, 1685 (1970) (later amended in 1977 and 1990).

ther mandated that EPA list each HAP for which it intended to establish an emission standard, thus providing enough safety to protect public health.³⁰

By 1990, however, EPA had only listed eight HAPs and established emission standards for only seven of them; for those seven, it addressed only a limited number of possible emission sources.³¹ Because EPA was moving so slowly, in 1990, Congress amended section 112, listing 189 HAPs for EPA to regulate, and directing EPA to list categories of “major sources” or “area sources” emitting them.³² For each listed category or subcategory, section 112 requires EPA to promulgate emission standards that will protect public health within acceptable margins of safety.³³ Among the HAPs listed in the 1990 amendment was “mercury compounds,” which includes any unique chemical that contains mercury.³⁴

In 2000, EPA found that it was appropriate and necessary to regulate coal and oil-fired EGUs under the CAA, and added them to the list of sources subject to regulation under the 1990 amendment.³⁵ In 2005, however, EPA reversed the finding that EGUs were subject to regulation and removed them from the list.³⁶ EPA reversed its determination on a number of grounds.³⁷ Notably, EPA determined that various situation-specific factors, such as implementation and compliance costs, might reasonably affect whether an EGU is subject to regulation.³⁸ In 2012, in a Final Rule,³⁹ EPA again reversed course, and reaffirmed its initial 2000 finding that EGUs are subject to regulation under section 112.⁴⁰ The Agency overturned the determinations it made in 2005, including its finding that other situation-specific factors, such as implementation and compliance costs, should be considered when designating EGUs for regulation.⁴¹

³⁰ *Id.*

³¹ *White Stallion Energy Ctr., LLC v. Env'tl. Prot. Agency*, 748 F.3d 1222, 1230 (D.C. Cir. 2014).

³² *Id.*

³³ *See id.*

³⁴ *See* 42 U.S.C. § 7412(b)(1) (2012) (noting that “compounds” refers to any unique chemical containing the named substance).

³⁵ Nick Hutson, *Regulations*, in *MERCURY CONTROL FOR COAL-DERIVED GAS STREAMS* 45, 47 (Evan J. Granite et al. eds., 2014).

³⁶ *Id.*

³⁷ *White Stallion*, 748 F.3d at 1232.

³⁸ *Id.*

³⁹ *Frequently Asked Questions About Dockets: The Rulemaking Process*, ENVTL. PROT. AGENCY, <http://www.epa.gov/dockets/faqs.htm#112> (last updated Aug. 21, 2014), *archived at* <http://perma.cc/C52K-8LRE>.

⁴⁰ *Regulatory Finding on the Emissions of Hazardous Air Pollutants from Electric Utility Steam Generating Units*, 65 Fed.Reg. 79,825, 79,826 (Dec. 20, 2000).

⁴¹ *White Stallion*, 748 F.3d at 1232–33.

Reducing EGU HAP emissions to an acceptable level can be costly for industry.⁴² EPA's own estimates place the cost of compliance in excess of \$9 billion annually.⁴³ Industry leaders have argued that complying with EPA's regulations will force EGUs out of the energy market and permanently retire a significant segment of the U.S. coal-fired energy generation capacity.⁴⁴ The U.S. Energy Information Administration estimates that the Final Rule will shut down one-sixth of all U.S. coal-fired EGUs by 2016.⁴⁵

EPA's Final Rule was challenged in the D.C. Circuit on a number of grounds by state, industry, labor, and environmental entities (together the "Joint Petitioners") in the consolidated action *White Stallion Energy Center v. U.S. Environmental Protection Agency*.⁴⁶ Industry petitioners asserted that even if EPA had correctly interpreted portions of the CAA, the emission standards that the agency set out in the Final Rule were flawed.⁴⁷ Environmental petitioners challenged the provisions of the Final Rule that allow compliance with emission standards to be demonstrated through emissions averaging and options for non-mercury metal HAP emissions monitoring.⁴⁸ Julander Energy, an oil and natural gas company, petitioned for the adoption of stricter emission standards requiring EGUs to switch from coal to natural gas.⁴⁹ Finally, state, industry and labor petitioners challenged EPA's interpretation that the provision of the CAA regulating EGUs, section 112, precludes consideration of implementation and compliance costs.⁵⁰

The EGU provision states, "[t]he Administrator shall regulate electric utility steam generating units under this section, if the Administrator finds such regulation is appropriate and necessary"⁵¹ Joint Petitioners argue that EPA unlawfully constrained the factors it may consider when interpreting the terms "appropriate" and "necessary" in the statute.⁵² In relevant part, the petitioners

⁴² Petition for a Writ of Certiorari at *19–20, *Util. Air Regulatory Grp. v. Env'tl. Prot. Agency*, 135 S. Ct. 889 (2014), *petition for cert. filed*, 2014 WL 3530750 (2014) (No. 14-47).

⁴³ *Id.*

⁴⁴ Joint Brief of State, Industry and Labor Petitioners at 24, *White Stallion Energy Ctr., LLC v. Env'tl. Prot. Agency*, 748 F.3d 1222 (D.C. Cir. 2014) (No. 12-1100). The U.S. Chamber of Commerce has expressed concerns that the Final Rule could raise electricity rates, stifle economic development, and even compromise the reliability of our electric grid. Sean Hackbarth, *It's Only Common Sense for EPA to Consider Costs When Regulating Power Plants*, *Appeals Judge Says*, U.S. CHAMBER OF COMMERCE (Apr. 15, 2014, 4:30 PM), <https://www.uschamber.com/blog/it-s-only-common-sense-epa-consider-costs-when-regulating-power-plants-appeals-judge-says>, *archived at* <http://perma.cc/MX4C-WANS>.

⁴⁵ Petition for a Writ of Certiorari, *supra* note 42, at 19–20.

⁴⁶ *White Stallion Energy Ctr., LLC v. Env'tl. Prot. Agency*, 748 F.3d 1222, 1229 (D.C. Cir. 2014).

⁴⁷ *Id.* at 1245.

⁴⁸ *Id.* at 1252.

⁴⁹ *Id.* at 1256.

⁵⁰ *Id.* at 1236.

⁵¹ 42 U.S.C. § 7412(n)(1)(A) (2012).

⁵² *White Stallion*, 748 F.3d at 1236.

contend EPA must consider the costs of implementing and complying with HAP emissions standards for EGUs in its analysis of designating them for regulation.⁵³

II. LEGAL BACKGROUND

The Clean Air Act (“CAA” or the “Act”) was enacted in 1970 to improve the Nation’s air resources and to promote public health and welfare.⁵⁴ Section 112 of the Act sets National Emission Standards for Hazardous Air Pollutants (“HAPs”).⁵⁵ It also regulates electric utility steam generating units (“EGUs”).⁵⁶ Congress directed that prior to listing an EGU for regulation, the Environmental Protection Agency (EPA) must conduct a study of the hazards to public health reasonably anticipated to occur as a result of HAP emissions, after the imposition of the other requirements of section 112.⁵⁷ EPA must regulate EGUs if the EPA Administrator (the “Administrator”) finds that it is “appropriate and necessary” to do so after considering the results of the study.⁵⁸ The Supreme Court of the United States has long acknowledged that EPA should be granted considerable deference in its interpretation and implementation of the CAA.⁵⁹

In addition to section 112, Congress also initiated three other significant regulatory programs for stationary pollution sources: National Ambient Air Quality Standards (“NAAQS”), State Implementation Plans (“SIPs”), and New Source Performance Standards (“NSPS”), authorized under sections 109, 110, and 111 respectively.⁶⁰ The Supreme Court and the U.S. Court of Appeals for the D.C. Circuit have addressed the consideration of costs for each of these regulatory programs.⁶¹

The Supreme Court held that EPA is altogether barred from considering costs when setting NAAQS under section 109.⁶² In *Whitman v. American Trucking Associations*, the Court held that section 109 requires explicit authorization for EPA to consider costs in setting NAAQS.⁶³ The Court explained

⁵³ *Id.*

⁵⁴ Clean Air Act, 42 U.S.C. § 7401(b)(1) (2012).

⁵⁵ *Id.* § 7412(d)(1).

⁵⁶ *Id.* § 7412(n)(1)(A).

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ See *Chevron, U.S.A., Inc. v. Natural Res. Def. Council*, 467 U.S. 837, 844–45 (1984) (noting that EPA is entitled to deference when interpreting the CAA).

⁶⁰ 42 U.S.C. §§ 7409–7412 (2012); *History of the Clean Air Act*, *supra* note 6.

⁶¹ See *Whitman v. Am. Trucking Ass’ns*, 531 U.S. 457, 467–68 (2001); *Union Elec. Co. v. U.S. Evtl. Prot. Agency*, 427 U.S. 246, 252–53 (1976); *Natural Res. Def. Council v. U.S. Evtl. Prot. Agency* 824 F.2d 1146, 1164 (D.C. Cir. 1987); *ASARCO Inc. v. Evtl. Prot. Agency*, 578 F.2d 319, 329–30 (D.C. Cir. 1978).

⁶² *Whitman*, 531 U.S. at 467–68; see *infra* notes 63–66 and accompanying text.

⁶³ 531 U.S. at 467–68.

that because subsequent amendments to the Act have explicitly authorized or directed EPA to consider implementation and compliance costs, the omission by Congress of similar language in section 109 was intentional.⁶⁴ The Court also examined the statutory and historical context of the CAA and found that because the primary purpose of the Act is to protect public health, Congress intended to bar EPA from considering implementation and compliance costs, which can interrupt that purpose.⁶⁵ The *Whitman* Court stated that implementation and compliance costs can never be a factor in EPA's consideration of development and implementation of NAAQS because "[cost] is *both* so indirectly related to public health *and* so full of potential for canceling the conclusions drawn from direct health effects that it would surely have been expressly mentioned in . . . [section] 109 had Congress meant it to be considered."⁶⁶

The Supreme Court has also held that EPA is barred from considering implementation and compliance costs when evaluating a SIP.⁶⁷ Authorized under section 110, a SIP is a NAAQS compliance plan designed by individual states and submitted to EPA for approval.⁶⁸ In *Union Electric Co. v. U.S. Environmental Protection Agency*, the Supreme Court considered a petition from a Missouri electric utility company to review EPA's approval of a SIP establishing sulfur dioxide emission standards.⁶⁹ The Court found that the Act and its amendments subjected the states to strict minimum compliance requirements that might appear economically infeasible.⁷⁰ The Court reasoned that EPA could not consider costs in SIP approval decisions because Congress deliberately excluded an authorization to do so.⁷¹ The Court also noted that the 1990s CAA amendments reflected congressional dissatisfaction with the progress of existing air pollutant programs and concluded that an amendment's silence on the issue of cost evinces the legislature's commitment to public health, regardless of economic feasibility.⁷²

Similarly, with regard to the NSPS, the third major regulatory program, the D.C. Circuit, in *ASARCO Inc. v. U.S. Environmental Protection Agency*, held that EPA is precluded from considering implementation and compliance costs when considering whether a facility is subject to the NSPS under section

⁶⁴ *Id.*

⁶⁵ *Id.* at 490–91.

⁶⁶ *Id.* at 469.

⁶⁷ *Union Elec.*, 427 U.S. at 252–53.

⁶⁸ 42 U.S.C. § 7410(a)(1) (2012).

⁶⁹ 427 U.S. at 252–53.

⁷⁰ *Id.* at 256–58.

⁷¹ *Id.* at 257 n.5 (explaining that if Congress wanted EPA to consider costs it would expressly say so).

⁷² *See id.* at 249, 256–58 (noting EPA Administrator should not be concerned with factors that are not specified).

111.⁷³ In *ASARCO*, the D.C. Circuit concluded that EPA was barred from considering costs when deciding whether a copper smelting facility is subject to the NSPS.⁷⁴ Section 111 allows EPA to consider costs in setting the NSPS, but explicitly disallows it from doing so when determining whether the standards will apply to plants or to individual facilities within those plants.⁷⁵ Judge Leventhal's concurrence stated, "costs may not be considered in determining whether a facility will be subject to an NSPS"⁷⁶

Courts have found that with regard to National Emission Standards for Hazardous Air Pollutants ("NESHAPs"), section 112 authorizes EPA to consider implementation and compliance costs when setting the appropriate regulatory levels.⁷⁷ Before EPA can do this, however, it must first make an initial determination of safety based exclusively on the risk to public health at a particular emission level.⁷⁸ The D.C. Circuit, in *Natural Resources Defense Council v. U.S. Environmental Protection Agency*, held that the CAA mandate to provide "an ample margin of safety" requires EPA to make an initial determination of what is safe—a determination that must be based solely on risk to health—and further stated that "[EPA] cannot under any circumstances consider cost and technological feasibility at this stage of the analysis."⁷⁹ Thus, the court held that before EPA can set a level of regulation under section 112, it must make an initial safety judgment with no regard to costs of implementation or compliance.⁸⁰

III. ANALYSIS

In *White Stallion Energy Center v. U.S. Environmental Protection Agency*, the U.S. Court of Appeals for the D.C. Circuit affirmed the Environmental Protection Agency's (EPA) Final Rule, holding that the agency is not required to consider implementation and compliance costs in listing decisions for electric utility steam generating units ("EGUs").⁸¹ The court affirmed EPA's conclusion in the Final Rule that it is inappropriate to require the Agency to consider implementation and compliance costs when setting regulations of EGUs because, whereas cost consideration is authorized elsewhere in the Clean Air Act

⁷³ *ASARCO Inc. v. U.S. Envtl. Prot. Agency*, 578 F.2d 319, 329–30 (D.C. Cir. 1978).

⁷⁴ *Id.* at 320–21, 329–30.

⁷⁵ *Id.* at 329.

⁷⁶ *Id.* at 329–30.

⁷⁷ 42 U.S.C. § 7412(d)(2) (2012); *see* *Natural Res. Def. Council v. U.S. Envtl. Prot. Agency*, 824 F.2d 1146, 1164 (D.C. Cir. 1987) (stating EPA Administrator must first determine the level of attainable emissions and then determine the costs).

⁷⁸ *Natural Res. Def. Council*, 824 F.2d at 1164.

⁷⁹ *Id.* at 1164–65.

⁸⁰ *See id.*

⁸¹ 748 F.3d 1222, 1241 (D.C. Cir. 2014).

(“CAA” or the “Act”), it is never addressed in the provision regarding EGUs.⁸² The court noted that when language is included in one section of a statute, but excluded from another, it likely reflects a deliberate intent by Congress.⁸³ The court also found EPA’s interpretation to not consider costs is consistent with the congressional intent to encourage regulation of Hazardous Air Pollutants (“HAPs”).⁸⁴ Whereas petitioners argued that the provision’s “appropriate and necessary” threshold compelled a consideration of costs, the court found that EPA’s evaluation of the results of the pollutant study determine whether sources are in fact “appropriate” to regulate.⁸⁵

Although the *White Stallion* court affirmed EPA’s conclusion in the Final Rule that the Agency is not required to consider costs when designating EGUs for regulation, it also agreed that such a consideration is not altogether prohibited.⁸⁶ This reading of section 112 diverges sharply from previous Supreme Court and D.C. Circuit interpretations of sections 109, 110, and 111, which expressly prohibit EPA from considering implementation and compliance costs when setting National Ambient Air Quality Standards (“NAAQS”), approving or rejecting State Implementation Plans (“SIPs”), and listing new sources subject to New Source Performance Standards (“NSPS”).⁸⁷

Despite the fact that the holding in *White Stallion* is anomalous on the issue of cost, courts have repeatedly referenced the same two reasons to justify limiting or prohibiting the role of implementation and compliance cost considerations under CAA stationary source regulatory programs.⁸⁸ First, costs accounted for elsewhere in the statute evince Congress’s deliberate intent to exclude concerns of economic feasibility from the stationary source regulatory programs.⁸⁹ Second, the provisions’ silence on the issue of costs is consistent

⁸² *Id.* at 1238.

⁸³ *Id.* at 1237.

⁸⁴ *Id.* at 1238.

⁸⁵ *See id.* at 1233, 1239.

⁸⁶ *Id.* at 1237, 1241.

⁸⁷ *See Whitman v. Am. Trucking Ass’ns*, 531 U.S. 457, 471 (2001) (holding cost considerations are barred during the setting of NAAQS); *Union Elec. Co. v. U.S. Envtl. Prot. Agency*, 427 U.S. 246, 265 (1976) (refusing to consider economic feasibility during SIP approval process); *ASARCO Inc. v. U.S. Envtl. Prot. Agency*, 578 F.2d 319, 329–30 (D.C. Cir. 1978) (stating cost considerations can be applied to some aspects of NSPS listings, but not others).

⁸⁸ *See Whitman*, 531 U.S. at 471; *Union Elec.*, 427 U.S. at 265; *White Stallion*, 748 F.3d at 1237, 1241; *Natural Res. Def. Council v. U.S. Envtl. Prot. Agency*, 824 F.2d 1146, 1164 (D.C. Cir. 1987); *ASARCO*, 578 F.2d at 329–30.

⁸⁹ *See Whitman*, 531 U.S. at 467 (noting they will not extend cost considerations that have been expressly granted elsewhere in the statute); *Union Elec.*, 427 U.S. at 257 n.5 (explaining that if Congress wanted EPA to consider economic feasibility, it would expressly say so); *White Stallion*, 748 F.3d at 1237 (noting language included in one section of a statute, but omitted in another, reflects congressional intent not to require consideration of costs); *ASARCO*, 578 F.2d at 329–30 (noting that Congress explicitly provided for cost consideration in the emissions-level-setting process, not the initial determination of whether a source should be regulated).

with Congress's intent to protect public health without regard for economic feasibility.⁹⁰ The *White Stallion* court's affirmation of EPA's conclusion that section 112 does not prohibit cost consideration is inconsistent with a faithful reading of the CAA.⁹¹

All stationary source regulatory programs are enacted under the CAA, and thus they share the common purpose of the CAA: to protect human health and the environment.⁹² The courts in *Whitman v. American Trucking Associations*, *Union Electric Co. v. U.S. Environmental Protection Agency*, and *ASARCO, Inc. v. U.S. Environmental Protection Agency*, all stated that the public health goals of the provisions considered by each court—sections 109, 110, and 111, respectively—precluded considering implementation and compliance costs for initial program determinations.⁹³ Similarly, the *White Stallion* court also cited the legislative purpose as a reason that EPA should not be required to consider implementation and compliance costs when deciding whether it is “appropriate and necessary” to regulate EGUs.⁹⁴ Based on the plain statutory language, it is evident that Congress intended all four of the stationary source regulatory programs—authorized in sections 109, 110, 111, and 112—to prioritize public health concerns over economic costs by prohibiting cost considerations in determinations of regulatory designation.⁹⁵

The courts have held, in *Whitman*, *Union Electric*, and *ASARCO*, that EPA is barred from considering implementation and compliance costs when setting NAAQS, approving or rejecting SIPs, and listing new sources subject to the NSPS, because Congress deliberately foreclosed the possibility by making no mention of costs in those provisions.⁹⁶ This reading of the CAA is con-

⁹⁰ See *Whitman*, 531 U.S. at 492 (noting the main responsibility Congress cognized of in passing the Act was to protect public safety without regard to economic feasibility); *Union Elec.*, 427 U.S. at 258 (finding first responsibility is to protect public health rather than economic feasibility); *White Stallion*, 748 F.3d at 1240 (noting CAA amendments reflect Congress's intent to remedy public health hazards); *ASARCO*, 578 F.2d at 327 (noting NSPS standards are designed to protect and improve air quality).

⁹¹ See Clean Air Act, 42 U.S.C. § 7401(b)(1) (2012) (stating the purpose of the CAA is to protect human health and welfare); *White Stallion*, 748 F.3d. at 1241 (holding EPA is not prohibited from considering costs of EGU mercury regulations); DePalma, *supra* note 5 (discussing adverse health effects of Mercury).

⁹² See 42 U.S.C. § 7401(b)(1) (noting the purpose of the CAA subchapters are to promote public health and welfare).

⁹³ See *Whitman*, 531 U.S. at 492 (noting Congress's main responsibility in the Act was to protect public safety without regard to economic feasibility); *Union Elec.*, 427 U.S. at 258 (finding first responsibility is to protect public health rather than economic feasibility); *ASARCO*, 578 F.2d at 327 (noting NSPS standards are designed to protect and improve air quality).

⁹⁴ See *White Stallion*, 748 F.3d. at 1236 (noting Congress's amendment of the CAA and emphasis on public health).

⁹⁵ 42 U.S.C. §§ 7409–7411; see *Whitman*, 531 U.S. at 492; *Union Elec.*, 427 U.S. at 258; *White Stallion*, 748 F.3d at 1240; *ASARCO*, 578 F.2d at 327.

⁹⁶ See *Whitman*, 531 U.S. at 467 (noting the Court will not extend cost considerations that have been expressly granted elsewhere in statute); *Union Elec.*, 427 U.S. at 257 n.5 (explaining that if Con-

sistent with the plain statutory language.⁹⁷ For example, section 109 provides that NAAQS are set, based on certain criteria, at a level necessary to provide a sufficient margin of safety to protect public health, but makes no mention of cost considerations in setting NAAQS.⁹⁸ Similarly, there is no reference to cost consideration governing the approval of SIPs in section 110 and further, none of the eight factors enumerated in section 110 allow for a consideration of costs.⁹⁹ In the case of the NSPS, the only criteria mentioned in section 111 for including a source category is a finding by EPA that the source could jeopardize public health.¹⁰⁰

Similarly, section 112(n)(1)(A) governing EGUs emphasizes the results of a pollution study, but allows no consideration of other factors—notably implementation and compliance costs.¹⁰¹ The *White Stallion* court refused to import such a cost consideration into EGU regulatory designation decisions by using similar arguments relied upon by past courts, such as statutory construction and legislative intent.¹⁰² At least one court has found that section 112 requires EPA to ignore costs in forming an initial determination of what level of safety is necessary to protect public health.¹⁰³ In *Natural Resources Defense Council v. U.S. Environmental Protection Agency*, the D.C. Circuit held that an initial determination of safety should be made, and that it should be consistent with the statutory requirement to provide an ample margin of safety.¹⁰⁴ Such an initial determination requirement is consistent with the regulatory procedure for other stationary source programs.¹⁰⁵

gress wanted EPA to consider economic feasibility, it would expressly say so); *ASARCO*, 578 F.2d at 329–30 (noting that Congress explicitly provided for cost consideration in the emissions level setting process, not the initial determination of whether a source should be regulated).

⁹⁷ See *infra* notes 98–100 and accompanying text.

⁹⁸ See 42 U.S.C. § 7409 (2012) (declining to mention costs in setting NAAQS).

⁹⁹ See *id.* § 7410(a)(2) (declining to mention costs at SIP approval stage).

¹⁰⁰ See *id.* § 7411(a)(1)(A) (stating public health, not costs, factor into listing of sources).

¹⁰¹ See *id.* § 7412(n)(1)(A). The provision states, “The Administrator shall regulate electric utility steam generating units under this section, if the Administrator finds such regulation is appropriate and necessary after considering the results of the study required by this subparagraph.” *Id.*

¹⁰² See *White Stallion Energy Ctr., LLC v. U.S. Env’tl. Prot. Agency*, 748 F.3d 1222, 1241 (D.C. Cir. 2014) (holding EPA reasonably excluded costs from determination regarding EGUs); *supra* note 88–89 and accompanying text (discussing instruction that courts will not import cost requirement into programs where expressly granted elsewhere in CAA and noting courts find importation of cost requirement contrary to congressional intent).

¹⁰³ See *Natural Res. Def. Council v. U.S. Env’tl. Prot. Agency*, 824 F.2d 1146, 1164 (D.C. Cir. 1987).

¹⁰⁴ *Id.*

¹⁰⁵ See *Whitman v. Am. Trucking Ass’n*, 531 U.S. 457, 465 (2001) (noting that the NAAQS-setting process is an “initial calculation” to ensure an adequate margin of safety to protect public health); *Union Elec. Co. v. U.S. Env’tl. Prot. Agency*, 427 U.S. 246, 258–59 (1976) (holding that the first responsibility is protecting public health, not making technological or economic judgments); *White Stallion*, 748 F.3d at 1240 (characterizing the decision of whether to list EGUs as subject to regulation as EPA’s “initial decision”); *Natural Res. Def. Council*, 824 F.2d at 1164 (noting the im-

If EPA had ruled that the agency is prohibited from considering costs when making an initial determination designating EGUs for regulation, the D.C. Circuit would likely have affirmed its decision.¹⁰⁶ The courts have been consistent in upholding EPA's faithful imputation of the CAA's purpose to protect public health in its interpretation of the stationary source regulation provisions.¹⁰⁷ An interpretation of section 112 that would allow adverse health consequences in deference to considerations of implementation and compliance costs is not faithful to the plain language of—or the congressional intent behind—the CAA, and thus both public health and the environment would have been better served if EPA had interpreted section 112 as prohibiting implementation and compliance cost considerations in initial determinations of EGU designation for regulation.¹⁰⁸

CONCLUSION

As the largest generator of mercury emissions in the United States, electric utility steam generating units, or EGUs, pose a serious threat to public health. In *White Stallion Energy Center, LLC v. U.S. Environmental Protection Agency*, the U.S. Court of Appeals for the D.C. Circuit upheld EPA's Final Rule that the agency is not *required* to consider implementation and compliance costs when designating EGUs for regulation under the Clean Air Act. Had EPA written the Final Rule to *strictly prohibit* implementation and compliance costs from being considered in its EGU listing decisions, Supreme Court and D.C. Circuit precedent suggests that the court would have affirmed its interpretation. This stance is decidedly stronger than the agency's current position that it is merely "not required" to consider such costs in light of the statutory text, the legislative intent underlying the CAA, and the decisions in *Whitman v.*

portance of health at the initial determination phase); *ASARCO Inc. v. U.S. Env'tl. Prot. Agency*, 578 F.2d 319, 329–30 (D.C. Cir. 1978) (distinguishing the determination of whether a facility will be subject to an NSPS from the determination of the level at which the emissions standard should be set).

¹⁰⁶ See *Chevron, U.S.A., Inc. v. Natural Res. Def. Council*, 467 U.S. 837, 844–45 (1984) (holding that the Court defers to EPA in matters of CAA interpretation). Compare *White Stallion*, 748 F.3d at 1241 (allowing EPA to ignore costs in designating EGUs for regulation, but declining to grant express prohibition on cost considerations), with *Whitman*, 531 U.S. at 471 (noting that the CAA explicitly bars costs from the NAAQS-setting process), and *Union Elec.*, 427 U.S. at 265–66 (stating economic infeasibility cannot play a role in requirements to meet CAA standards).

¹⁰⁷ See 42 U.S.C. § 7401(b)(1) (2012) (stating the purpose of the CAA is to promote public health and welfare); *Whitman*, 531 U.S. at 492 (noting Congress' main responsibility in the CAA was to protect public safety without regard to economic feasibility); *Union Elec.*, 427 U.S. at 258 (finding first responsibility is to protect public health rather than economic feasibility).

¹⁰⁸ See 42 U.S.C. § 7401(b)(1); *White Stallion*, 748 F.3d at 1241 (declining to grant express prohibition of cost considerations when designating EGUs for regulation); Regulatory Findings on the Emission of Hazardous Air Pollutants from Electric Steam Generating Units, 65 Fed. Reg. 79,825, 79,827 (Env'tl. Prot. Agency Dec. 20, 2000) (notice) (stating EGUs are the largest source of Mercury emissions in the United States); DePalma, *supra* note 5 (discussing adverse health effects of Mercury).

American Trucking Associations, Union Electric Co. v. U.S. Environmental Protection Agency, and ASARCO Inc. v. U.S. Environmental Protection Agency. If EPA decided that considering implementation and compliance costs is not allowed as a factor in regulatory listing decisions, it would have effectively shut the door on future petitions to involve cost considerations in initial regulatory determinations for EGUs. Removing cost considerations from the determinative calculus of whether to regulate EGUs would, in turn, better effectuate CAA public health and environmental protection goals, and thus better promote Congress's intention to protect the environment.