

**American Lung Association * Clean Air Task Force * Environmental Defense *
Environmental Integrity Project * Mid-Atlantic Environmental Law Center *
National Environmental Trust * Natural Resources Defense Council *
Southern Environmental Law Center * U.S. Public Interest Research Group**

May 2, 2003

Attention Docket Number A-2002-04

Administrator Christine Todd Whitman
U.S. Environmental Protection Agency
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Washington, DC 20004

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**Re: Comments on the Proposed Rule: “Prevention of Significant Deterioration (PSD)
and Non-Attainment New Source Review (NSR): Routine Maintenance, Repair and
Replacement”**

Dear Administrator Whitman:

On behalf of the undersigned organizations, we object in the strongest possible terms to EPA’s proposal to create sweeping new exemptions from the Clean Air Act’s new source review (NSR) protections. This proposal represents the most harmful and unlawful air pollution initiative ever undertaken by the federal government. It would allow millions of tons of air pollution to escape clean-up measures, from over 17,000 of the nation’s largest industrial pollution sources, in every corner of the country.

The overriding purpose and guaranteed consequence of this rulemaking would be to allow *every* industrial polluting activity qualifying for the proposed new loopholes to increase pollution significantly without cleaning up. “Grandfathered” industrial polluters that have escaped modern pollution control measures and that dominate the remaining, serious air pollution problems in this country would be allowed to continue to belch deadly levels of pollution without cleaning up. Factories and refineries and chemical and power plants would be able to increase pollution levels by hundreds and thousands and even tens of thousands of tons each year without control. There is no defensible public health or environmental justification for this rulemaking.

The proposal inexcusably promises to legalize polluting activities just as destructive to public health as those that EPA, states, and environmental and public health organizations are prosecuting today in enforcement actions against coal-fired power plants, oil refineries, and other facilities. Our analysis concludes that virtually all – if not all – of the harmful Clean Air Act violations being prosecuted by EPA, or settled and heralded by EPA, would have been acceptable under the vast exemptions that EPA is now proposing. Harmful violations of the same or greater magnitude would be blessed in the future.

The benefits of enforcement settlements struck under the previous administration have been delayed and denied to the American public by this administration's campaign to undermine the NSR program and its enforcement: first, by the administration's energy task force and its political interference with pending NSR enforcement cases, through a directive to the Justice Department to explore legal grounds for abandoning the cases; second, through promulgation of final NSR rules systematically weakening the program's health protections; third, through EPA's announced intention to pursue these proposed loopholes, which prompted utility company defendants to rush into court arguing that EPA's intended reversal of course warranted dismissal of the enforcement cases; and finally through issuance of this rulemaking proposal to codify industry abuses of the law and its public health safeguards.

In light of these enormous pollution consequences, the grave insults to public health, the damage to the enforcement cases, and the radical retreat from continuing progress being made under the Clean Air Act that this proposal represents, it is especially appalling that EPA's proposal does not – and cannot – identify a single *word* in the Clean Air Act that authorizes these loopholes and drastic departures from the statute's health protections. We cannot recall another proposed Clean Air Act rulemaking – certainly not one of this magnitude, controversial nature, and threat to public health – where EPA acted with less legal authority and policy justification. The administration's adoption of this rulemaking would represent an abdication of its responsibility to uphold the law and to protect the health of the American people.

Before you consider adopting this proposal, we call upon you to explain to the American public why EPA should allow harmful industrial air pollution increases to escape control altogether, worsening air quality and harming public health. Over 170 million Americans live in areas of the country that fail to meet EPA's more protective air quality standards for smog and soot. We ask why you would put your signature on any rule changes that weaken public protections, allow the air to get any dirtier than it already is today and retreat from meaningful law enforcement.

We join the country's bi-partisan associations of state and local air pollution control officials in urging you to rescind this rulemaking proposal and to abandon any further attempt to adopt its proposed loopholes.¹ We embrace the finding in the recently issued report by the congressionally chartered National Academy of Public Administration that "Congress specifically intended that NSR would prevent the indefinite operation of older, more-polluting equipment and the indefinite persistence of emission disparities between older and newer facilities."² This proposal would directly thwart that intent by creating an immortality provision for these old, highly polluting sources. It must be abandoned.

¹ In testimony on this proposal presented at EPA's five public hearings held around the country, the State and Territorial Air Pollution Program Administrators and Association of Local Air Pollution Control Officials (STAPPA-ALAPCO) called upon EPA to rescind and abandon this proposed rulemaking, due to its devastating public health consequences and its elimination of a key safeguard relied upon by state and local officials to protect air quality, public health, national parks and the environment in their communities. *See, e.g.*, OAR-2002-0068-0550, Testimony of Lloyd L. Eagan, STAPPA President, on behalf of STAPPA-ALAPCO, March 31, 2003.

² National Academy of Public Administration, *A Breath of Fresh Air: Reviving the New Source Review Program* (April 2003), at 96.

Respectfully submitted,

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I. The Act's Definition of "Modification"

The Clean Air Act requires preconstruction permits for the construction and operation of new or modified major stationary sources in attainment and nonattainment areas.³ The Act defines "modification" for NSR purposes as

any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted.⁴

There is no language in the Act excluding anything from the meaning of "any physical change" or "any . . . change in the method of operation."⁵

A. "Any"

As the Supreme Court has recently noted, "the word 'any' has an expansive meaning, that is, 'one or some indiscriminately of whatever kind.'"⁶ The Court has already interpreted Congress' use of the word "any" in one part of the 1977 Clean Air Act Amendments, namely, Section 307(b)(1), which requires that a petition for review of "any other final action of the Administrator . . . which is locally or regionally applicable be filed only in the United States Court of Appeals for the appropriate circuit."⁷ The Court discerned "no uncertainty" in the meaning of "any other final action".⁸

This expansive language offers no indication whatever that Congress intended the limiting construction . . . that the respondents now urge. . . . Rather, we agree with the petitioners that the phrase, "any other final action," in the absence of legislative history to the contrary, must be construed to mean exactly what it says, namely, *any other* final action.⁹

³ See 42 U.S.C. § 7475(a) (Prevention of Significant Deterioration, or "PSD," permits in attainment areas) and 42 U.S.C. §§ 7502(c)(5) and 7503 (Nonattainment New Source Review, or "NSR," permits in nonattainment areas). For the remainder of these comments, we will refer to PSD and NSR requirements together as NSR, except where otherwise indicated.

⁴ *Id.* §§ 7411(a)(4), 7479(2)(c), 7501(4).

⁵ See *id.*

⁶ *Dept. of Housing and Urban Development v. Rucker*, 535 U.S. 125 (2002) (quoting *U.S. v. Gonzales*, 520 U.S. 1, 5 (1997)).

⁷ 42 U.S.C. § 7607(b)(1).

⁸ *Harrison v. PPG Industries, Inc.*, 446 U.S. 578, 588-89 (1980).

⁹ *Id.* (emphasis in original).

Similarly, there is nothing in the legislative history of the 1977 Amendments to indicate that “any” in the definition of “modification” means something other than what every English speaker understands the word to mean. Congress’ use of “any” to denote unlimited scope was in keeping with the purposes of the NSR provisions. As a court recently held: “Congress sweepingly defined modification as ‘any physical change’ at an existing facility, and the goal of the CAA was ‘to speed up and intensify’ the war against pollution.”¹⁰

B. “Physical Change”

The Act’s definition of “modification” does not refer to only a *major* physical change, or a *fundamental* physical change. Rather, it refers to “any physical change.”¹¹ As EPA itself has recently acknowledged in litigation, “The term ‘any physical change’ means exactly that.”¹² In the words of the D.C. Circuit, “the term ‘modification’ is nowhere limited to physical changes exceeding a certain magnitude.”¹³ The plain language of the statute affixes the “modification” label to all manner of physical changes that increase emissions.

The language enacted in 1977 reflects, in part, Congress’ decision not to revive the notion, rejected by EPA in 1974, that the trigger for permitting review of existing sources should be expansion:

Describing the scope of the Senate Bill, Senator Buckley stated, “‘No significant deterioration’ is a policy that has no effect on existing sources, unless a source undertakes a major expansion program. It requires the States to study the impact on air quality resulting from the siting of new major sources of pollution” 122 Cong.Rec. 23,833 (1976). Senator Buckley was ranking minority member of the Subcommittee on Environmental Pollution at the time the bill was drafted, and took a leading role in its drafting and in explaining it on the floor of the Senate. When this debate took place, the statutory language did not apply PSD preconstruction review to source “modification.” In November 1977, the Senate and House passed technical

¹⁰ *U.S. v. SIGECO*, 2003 WL 367901 (S.D.In. 2003), at *18.

¹¹ 42 U.S.C. § 7411(a)(4).

¹² Pl.’s Opposition to Def.’s Motion for Summary Judgment on Fair Notice, *filed in U.S. v. SIGECO*, Civil Action No. IP99-1692-C-M/S (S.D.In.), at 7.

¹³ *Alabama Power v. Costle*, 636 F.2d, 323, 400 (D.C. Cir. 1980).

amendments, one of which had the effect of defining “construction” to include “modifications.” It was this new language that had the effect of overriding Senator Buckley’s interpretation of the meaning of “no significant deterioration.”¹⁴

The language of the “modification” definition also reflects Congress’ decision not to limit the applicability of the permitting requirements to changes in the design or nature of sources. In its case before the Seventh Circuit, WEPCO argued that Congress did not intend simple equipment replacement to qualify as “any physical change”:

[A] unit should not be deemed “modified” as a result of the replacement of equipment with equipment similar to that replaced. . . . [S]uch like-kind replacement does not “change or alter” the design or nature of the facility. Rather, it merely allows the facility to operate again as it had before the specific equipment deteriorated.¹⁵

The court rejected WEPCO’s attempt to define “physical change” as an alteration in the design or nature of the source:

[T]o adopt WEPCO’s definition of “physical change” would open vistas of indefinite immunity from the provisions of NSPS and PSD. Were we to hold that the replacement of major generating station systems – including steam drums and air heaters – does not constitute a physical change (and is therefore not a modification), the application of NSPS and PSD to important facilities might be postponed into the indefinite future. There is no reason to believe that such a result was intended by Congress.¹⁶

Referencing both legislative history and judicial decisions, the court concluded that Congress did not intend to require that physical activity work a “basic or fundamental change” in a source before it would qualify as a “physical change”:

The Supreme Court reported in *Chevron* that Senator Muskie, one of the principal supporters of the Clean Air Act, remarked: “A source . . . is subject to all the nonattainment requirements as a modified source if it makes *any physical change* which increases the amount of any air pollutant” 467 U.S. at 853, 104 S.Ct. at 2787 (quoting 123 Cong. Rec. 26874 (1977)) (emphasis supplied). And other courts considering the

¹⁴ *Id.* at 400 n.47.

¹⁵ *Wisconsin Electric Power Company (“WEPCO”) v. Reilly*, 893 F.2d, 901, 908 (7th Cir. 1990).

¹⁶ *Id.* at 909.

modification provisions of NSPS and PSD have assumed that “any physical change” means precisely that. *See, e.g., National-Southwire Aluminum Co. v. EPA*, 838 F.2d 835 (6th Cir.), *cert. denied*, 488 U.S. 955, 109 S.Ct. 390, 102 L.Ed.2d 379 (1988) (turning off pollution control equipment constitutes “physical change” and modification); *Alabama Power v. Costle*, 636 F.2d 323, 400 (D.C. Cir. 1979) (“[T]he term ‘modification’ is nowhere limited to physical changes exceeding a certain magnitude.”); *ASARCO Inc. v. EPA*, 578 F.2d 319, 322 (D.C. Cir. 1978) (NSPS applies to any stationary source that is “physically or operationally changed in such a way that its emission of any air pollutant increases.”) (emphasis removed). *Cf. United States v. Narragansett Improvement Co.*, 571 F.Supp. 688, 694-95 (D.R.I. 1983) (replacement program not modification because, despite physical change, no increase in emissions).¹⁷

The court cited approvingly to a commentator’s statement that the Act’s preconstruction permitting requirements “are triggered not only when an operator builds a new plant, but also whenever the operator installs or *alters a piece of equipment* in an existing plant and thereby increases emissions.”¹⁸

C. The Effect of the Unbounded Language Used to Define “Modification”

The unbounded language of the Act’s “modification” definition means that “[i]f these plants increase pollution, they will generally need a permit.”¹⁹ Exceptions to the rule occur “when the increases are *de minimis*, and when the increases are offset by contemporaneous decreases of pollutants.”²⁰ Citing the Act’s sweeping language and the legislative history, the D.C. Circuit has rejected EPA “attempts to make broad, categorical exclusions from the [Act’s] definition of modification,”²¹ and the U.S. District Court for the Southern District of Indiana has

¹⁷ *Id.* at 908-09.

¹⁸ *Id.* at 908 (quoting Butler, *New Source Netting in Nonattainment Areas under the Clean Air Act*, 11 Ecology L.Q. 343, 349-50 (1984)) (emphasis supplied by the court).

¹⁹ *Alabama Power*, 636 F.2d at 400.

²⁰ *Id.*

²¹ *SIGECO*, 2003 WL 367901, at *12; *see also Alabama Power*, 636 F.2d at 399-400. In his deposition in EPA’s enforcement case against Duke Energy, former EPA Assistant Administrator for Air, Noise and Radiation, David Hawkins, testified that both EPA and the Department of Energy recognized after the 1977 Clean Air Act Amendments were enacted that many activities at many existing sources would fall within the scope of the Act’s definition of “modification”:

held that it would be “inconsistent” with the statute “for EPA to broadly define” the term “routine maintenance.”²²

II. Core Elements of the Current Proposal

EPA proposes two new ways for the owner or operator of a major air pollution source to demonstrate that proposed activities would not constitute “any physical change in, or change in the method of operation of, a stationary source....”.²³ If the proposed activity did not fall within either of the two new exclusions, the owner or operator would still be able to avail itself of the multi-factored analysis that EPA currently uses to determine whether proposed activity amounts to routine maintenance, repair, and replacement (RMRR) under its regulations.²⁴

Pursuant to the first new exemption, a change would be exempt from the preconstruction requirements as long as its cost did not cause the annual expenditure for maintenance, repair, and

[O]ne of the items of controversy in the rulemaking process within the executive branch was how, how many activities would be subject to, to the PSD programs in particular, which was the, as I recall where it came up. And the Department of Energy was concerned that, that the PSD rules might apply to a very large number of projects because of the modification language. And the proposal, the way the Department of Energy proposed to deal with that concern was to establish a large emission increase test. It did not propose any, to my knowledge, it didn't propose any language to revise the definitions of excluded activities. Instead, it argued that we should have an emission increase test and essentially that a modification needed to be a, quote, major modification in order to trigger, in order to trigger review. And there was back and forth within the agency, within the executive branch about that. Ultimately, the agency decided to adopt that suggestion in the rules. That was challenged and the D.C. Circuit overturned that attempt to create that exclusion through the use of an emission increase test, so the revised rules adopted instead a significant increase test that had to meet the de minimis criteria established by Alabama Power.

Deposition of David G. Hawkins on January 31, 2003 in *U.S. v. Duke Energy Corp.*, Civil Action No. 00-1262 (M.D.N.C.), at 95 ln. 8 – 96 ln. 9.

²² *SIGECO*, 2003 WL 367901, at *18. Even EPA has declared that the “wide reach” of the Act’s “modification” definition “is demonstrated by the very narrow” regulatory exclusion “from the definition of physical change.” EPA Acting Assistant Administrator for Air and Radiation Don R. Clay, Memorandum to EPA Region 5 Director of Air and Radiation David A. Kee (September 9, 1988) (“Clay Memo”), at 3, *quoted in SIGECO*, at *23. In describing the longstanding interpretation of “physical change” that led the agency to find a “modification” at WEPCO’s plant in 1988 and at SIGECO’s plant ten years later, EPA has stressed in its briefs to the Southern District of Indiana that “the exemption applies to a narrow range of activities, in keeping with EPA’s limited authority to exempt activities from the Clean Air Act.” *Id.*, at *12 (quoting Pl.’s Opposition to Def.’s Motion for Summary Judgment on Fair Notice at 1) (emphasis added).

replacements at the entire source in question, or process unit in question (EPA proposes both alternatives), to exceed a certain level.²⁵ The level, or allowance, would be equal to “the product of the replacement cost of the source and a specified maintenance, repair and replacement percentage.”²⁶ EPA proposes to establish a single percentage – between 0.5 percent and 20 percent – for each industry.²⁷ EPA also solicits comment on “whether a stationary source should have the option of a multi-year allowance, such as over 5 years.”²⁸ This proposed alternative would not be available to exempt the following: (1) the construction of a new process unit; (2) the replacement of an entire process unit; (3) any activity that would result in (a) an increase in the source’s maximum achievable hourly emissions rate of any regulated pollutant, or (b) the emission of any regulated pollutant not previously emitted by the source.²⁹

Pursuant to the second new exemption, a change would be exempt from NSR requirements as long as it constituted the replacement of existing equipment with equipment that served the same function and that did not alter the basic design parameters of a unit, provided that the cost of the replacement equipment did not exceed a certain percentage of the cost of the unit to which it belonged.³⁰ EPA solicits comment on “whether the capital replacement percentage should be 50 percent or another lesser percentage, and whether different percentages should apply to different industrial groupings or different types of industrial processes.”³¹

As additional exemptions to the exemptions described above, EPA proposes a capacity-based exemption and an age-based exemption that an owner or operator could use to qualify for exemption from NSR requirements. Under the former, “an owner or operator could undertake

²³ 67 Fed. Reg. 80,290, *et seq.* (Dec. 31, 2002).
²⁴ *Id.* at 80,292/3, 80,293/3-94/1, and 80,295/3 n.3.
²⁵ *Id.* at 80,294/1, 80,297/3-98/1.
²⁶ *Id.* at 80,294/2.
²⁷ *Id.* at 80,298/2.
²⁸ *Id.* at 80,294/2. *See also id.* at 80,296/3-97/1-2.
²⁹ *Id.* at 80,294/3-95/1.
³⁰ *Id.* at 80,295/2-3.
³¹ *Id.* at 80,301/3.

any activity that did not increase the capacity of the process unit.”³² Under the latter, any process unit under a specified age (which EPA says would “likely be in the range of 25-50 years”) could undergo any activity “that does not increase the capacity of a process unit on a maximum hourly basis” without triggering NSR requirements.³³

III. The Proposed Rule Contravenes the Definition of “Modification” in the Clean Air Act.

The broad, categorical exclusions that EPA proposes would exempt from NSR requirements physical changes or operational that increase emissions by significant (*i.e.*, non-*de minimis*) amounts. In fact, the proposed exclusions would exempt numerous and substantial physical or operational changes that cause immense emissions increases. The exemption of such changes would contravene the Act’s definition of “modification.” Any action to finalize any or all of the proposed exemptions would therefore be arbitrary, capricious, and otherwise not in accordance with law.

A. The Proposed Rule Would Exempt From the NSR Requirements Physical or Operational Changes That Cause Significant Emissions Increases.

The proposed exclusions from the definition of “modification” would exempt from the NSR requirements the types of massive construction projects that caused immense emissions increases at major air pollution sources owned by the Tennessee Valley Authority, Alcoa, and others. Descriptions of these changes, their costs, and their emissions consequences are contained in documents referenced below and included in the appendix to these comments.³⁴ Descriptions of other emissions-increasing changes that the proposed rule would exempt are presented in other documents contained within this administrative record (A-2002-04).³⁵ EPA is thus in possession

³² *Id.* at 80,304/3-305/1.

³³ *Id.* at 80,305/1.

³⁴ *See, e.g.*, Appendix A to Final Order on Reconsideration in *In re Tennessee Valley Authority*, (EPA Environmental Appeals Board Docket No. CAA 00-6 (September 15, 2000).

³⁵ *See, e.g.*, Mem. In Supp. Pl.’s Motion for Partial Summary Judgment and Pl.’s Proposed Findings of Fact in *U.S. v. Ohio Edison Co.*, Civil Action No. C2-99-1181 (S.D. Oh.). In addition, this docket contains extensive information submitted by industry, state and local government, and other parties

of materials proving that the proposed rule would exempt from the NSR requirements a wide array of physical and operational changes that cause significant emissions increases. Were the agency nevertheless to finalize any part of its proposed rule, that action would be arbitrary, capricious, and otherwise not in accordance with law.

1. TVA Enforcement Example

Analysis of EPA's Environmental Appeals Board decision and the publicly-available record in the NSR enforcement case against coal-fired power plants owned by the Tennessee Valley Authority demonstrates that *all* of the polluting activities prosecuted by EPA – and that the EAB held to have been undertaken in violation of the Clean Air Act – would have been completely excused from complying with NSR protections under approaches proposed by EPA. If one of the approaches proposed and apparently favored by EPA were adopted, 13 of the 14 TVA violations would have been acceptable.

Table A illustrates this point. In the preamble, EPA suggests that for the utility industry, an annual maintenance, repair and replacement allowance would be set at 5.0 percent of the replacement cost of the *entire* source. Use of the IRS's "Annual Asset Guideline Repair Allowance Percentages" (AAGRAP) would set the percentage numerator at 5.0 percent of the original cost basis of the asset (for a power plant the asset would be the individual generating unit). The cost percentages of all but one disputed TVA project as a percentage of the entire of source replacement cost EPA's *preferred* approach - ranged from 0.18 percent to 1.38 percent. See Table A. Even basing the allowance exemption on unit replacement cost would yield percentages for all but the same one TVA project ranging from 1.10 percent to 3.34 percent. The

identifying activities that plainly constitute physical or operational changes. It is incumbent upon EPA to explain why all of these activities do not constitute physical changes or changes in the method of operation.

We hereby petition EPA to include within the docket for this rulemaking all information concerning the projects (physical or operational changes), cost data, and emissions data for the settled and pending NSR and NSPS enforcement cases, and ongoing NSR and NSPS investigations, concerning the wood products industry, oil refineries, electric power plants, ethanol production facilities and other

AAGRAP percentages, if applied to electric power plant replacement costs in the way that EPA proposes, would allow complete immunity from NSR protection for massive projects that EPA's EAB has held to be major modifications requiring pollution controls and pollution-increasing NSR permits under the Act.

Table A
Projects at Issue in *In Re Tennessee Valley Authority*, 9 EAD 357 (September 15, 2000)

		Cost of Illegal Modification Targeted in NSR	Year Of the Enforcement MW	Multiplier Of the Work	CPI Cost of Illegal Modification To (Millions \$) ³⁶ (2001\$) ³⁸	Unit Replacement Cost (Millions \$) ³⁹	Plant Replacement Cost (Millions \$) ⁴⁰	Allowance % Under EPA's Proposed Unit Exemption ⁴¹	Allowance % Under EPA's Proposed Plant Exemption
Allen 3	330	\$10.78	1991	1.30	\$13.97	\$431	\$1,292	3.24%	1.08%
Bull Run 1	900	\$8.30	1987	1.55	\$12.90	\$1,175	\$1,175	1.10%	1.10%
Colbert 5	500	\$57.10	1982	1.83	\$104.44	\$653	\$1,697	16.01%	6.15%
Cumberland 1	1,300	\$22.91	1993	1.22	\$27.98	\$1,697	\$3,393	1.65%	0.82%
Cumberland 2	1,300	\$18.41	1993	1.22	\$22.49	\$1,697	\$3,393	1.33%	0.66%
John Sevier 3	135	\$3.94	1988	1.49	\$5.88	\$176	\$959	3.34%	0.61%
Kingston 6	175	\$2.60	1989	1.42	\$3.70	\$228	\$2,055	1.62%	0.18%
Kingston 8	175	\$2.90	1989	1.42	\$4.13	\$228	\$2,055	1.81%	0.20%
Paradise 1	770	\$16.30	1985	1.64	\$26.74	\$1,005	\$3,510	2.66%	0.76%
Paradise 2	770	\$15.79	1985	1.64	\$25.90	\$1,005	\$3,510	2.58%	0.74%
Paradise 3	1,150	\$29.44	1985	1.64	\$48.29	\$1,501	\$3,510	3.22%	1.38%
Shawnee 1	175	\$4.50	1989	1.42	\$6.41	\$228	\$2,284	2.80%	0.28%
Shawnee 4	175	\$5.10	1989	1.42	\$7.26	\$228	\$2,284	3.18%	0.32%
Widows Crk 5	141	\$4.13	1989	1.42	\$5.88	\$184	\$2,572	3.19%	0.23%

Source: NRDC and Clean Air Task Force, prepared from data included in Trial Exhibits from *In Re: Tennessee Valley Authority*, CAA Docket No. 00-6.

industries (*e.g.*, Alcoa). This should include all information within the government's possession relevant to determining whether these activities are or may be physical changes or changes in the method of operation.

³⁶ *Id.*

³⁷ *Id.*

³⁸ Costs have been adjusted to 2001 dollars using the Consumer Price Index.

³⁹ See "Documentation of EPA Modeling Applications Using the Integrated Planning Model," Table 4-12 (unit replacement cost equals \$1.305 million multiplied by the number of megawatts produced by the unit).

⁴⁰ See *id.* (plant replacement cost equals \$1.305 million multiplied by the aggregate number of megawatts produced by all units at the plant).

⁴¹ Under its "annual cost allowance" exemption, EPA proposes to exempt polluting activities whose annual costs are up to 20% of the replacement cost of a unit or the entire plant. EPA also proposes to allow polluting activities to be exempt if their costs are less than the annual cost allowance added up over 5 years or longer.

The extremely small numbers in Table A are a function of EPA’s radically imbalanced cost allowance exemption. It is further a product of the concept behind the suggested cost allowance exemption being severed entirely from the air quality objectives and “emissions increase” focus of the NSR modification provision. Physical changes with smaller relative costs could have enormous emissions consequences that should be controlled to protect public health and air quality; by the same token, physical changes of greater magnitude and relatively larger costs could cause no significant emissions increases, in which case they would not constitute NSR modifications. EPA’s proposal and administrative record, in fact, demonstrate no necessary or reasonable correlation between costs and emissions increases. By proposing an exemption unmoored from the air quality and emissions concerns of the NSR provisions, EPA acts contrary to the statute, reasonable grounds for its rulemaking, available evidence, and defensible public policy.

Using AAGRAP in the context IRS intended shows that the kinds of projects undertaken at the TVA facilities would not have been considered by the IRS as “routine” for tax purposes – but would have been capitalized. When we investigate the original cost basis of some of the units that were the subject of the TVA enforcement actions (as would be the case if the AAGRAP were applied in its intended context), where all costs are expressed in year 2001 dollars for purposes of direct comparison, the resulting project cost over original cost basis fractions for the projects range from about 9 percent (for the physical changes undertaken at Bull Run Unit 1) to about 172 percent (for the physical changes undertaken at Colbert Unit 5).⁴² None of the challenged TVA projects would be considered “routine maintenance, repair or replacement, using the AAGRAP 5 percent as the IRS would have. Table B illustrates this point.

Table B
Comparison of TVA Modification Costs with Original Costs (Normalized to 2001 Dollars)

Repair	Repair	Repair CPI	Repair	Original	Original	CPI	Original	Percentage
	Multiplier	Cost	Cost	Cost	Multiplier	Cost	of Original	

⁴² See *In re: Tennessee Valley Authority*, EAB Docket No. CAA 00-6, EPA Exh. Nos. 216-229.

	\$millions	Year	to 2001\$	2001\$	\$millions	Year	to 2001\$	2001\$	Cost (2001\$)
Allen 3	10.78	1991	1.30	13.97	7.41	1959	6.07	44.96	31%
Bull Run 1	8.3	1987	1.55	12.90	26.78	1967	5.29	141.64	9%
Colbert 5	57.1	1982	1.83	104.44	10.85	1965	5.61	60.83	172%
Cumberland 1	22.91	1993	1.22	27.98	39.08	1973	3.98	155.42	18%
Cumberland 2	18.41	1993	1.22	22.49	37.78	1973	3.98	150.25	15%
John Sevier 3	3.94	1988	1.49	5.88	4.21	1956	6.71	28.26	21%
Kingston 6	2.6	1989	1.42	3.70	4.21	1955	6.59	27.75	13%
Kingston 8	2.9	1989	1.42	4.13	4.1	1955	6.59	27.02	15%
Paradise 1	16.3	1985	1.64	26.74	16.76	1963	5.77	96.72	28%
Paradise 2	15.79	1985	1.64	25.90	16.76	1963	5.77	96.72	27%
Paradise 3	29.44	1985	1.64	48.29	32.03	1963	5.77	184.84	26%
Shawnee 1	4.5	1989	1.42	6.41	3.0	1953	6.61	19.83	32%
Shawnee 4	5.1	1989	1.42	7.26	3.0	1954	6.56	19.68	37%
Widows Creek 5	4.13	1989	1.42	5.88	2.25	1954	6.56	14.76	40%

Source: MSB Energy Associates. Prepared for Clean Air Task Force from:
CPI Multipliers

Consumer Price Index – All Urban Customers

<http://data.bls.gov/servlet/SurveyOutputServlet>

Series Id: CUUR0000SA0

TVA Cost Figures (repair costs and original costs)

In re Tennessee Valley Authority, CAA Docket No. 00-6 (September 15, 2000), EPA Exhs. 216-229.

And if the costs were not normalized to 2001 dollars, but project cost was instead compared with true unadjusted basis, the TVA projects become even more obviously capital not “routine” maintenance in terms of their costs. Table C illustrates this point for all of the TVA modifications found by the EAB to be violations of the Act.

Table C
Comparison of TVA Modification Costs with Original Costs
(Dollars of the Year in Which They Were Expended)

	Refurbishment Cost \$millions	Original Cost \$millions	Percentage of Original Cost
Allen 3	10.78	7.41	145%
Bull Run 1	8.3	26.78	31%
Colbert 5	57.1	10.85	526%
Cumberland 1	22.91	39.08	59%
Cumberland 2	18.41	37.78	49%
John Sevier 3	3.94	4.21	94%
Kingston 6	2.6	4.21	62%
Kingston 8	2.9	4.10	71%
Paradise 1	16.3	16.76	97%
Paradise 2	15.79	16.76	94%

Paradise 3	29.44	32.03	92%
Shawnee 1	4.5	3.00	150%
Shawnee 4	5.1	3.00	37%
Widows Creek 5	4.13	2.25	184%

Source: MSB Energy Associates. Prepared for Clean Air Task Force. TVA Cost Figures (repair costs and original costs) from *In re Tennessee Valley Authority*, CAA Docket No. 00-6 (September 15, 2000), EPA Exhs. 216-229.

But does all of this mean that the AAGRAP 5 percent figure is appropriately used as a generalization of the annual cost of actual utility industry experience with “routine” projects at power plants? No.

EPA also requests comment about other sources of information that, it claims, might yield useful information concerning appropriate cost-based percentages representing “routine” maintenance, repair or replacement activities. Specifically, EPA requests comment, with respect to the electricity generating industry, on whether or not the information available in the NERC/GADS database, the “Integrated Environmental Control Model Maintained by the Energy and Environmental Center at Carnegie-Mellon University,” or from the Federal Energy Regulatory Commission (FERC) is useful for purposes of defining industry-specific routine maintenance, repair and replacement costs.⁴³ MSB Energy Associates has evaluated each of these sources for us. Their assessment is that there is no information contained in or publicly available from either the NERC/GADS database or the Carnegie-Mellon model that is or could be useful in defining standardized costs associated with truly “routine” maintenance, repair and replacement for the utility industry. This is so both because of the source-specific nature of the “routine-ness” of repair, replacement and maintenance activities, and because of the inadequacies of each of these data sources for the job.⁴⁴

The NERC-GADS online database is set up to analyze the availability and reliability of existing power plants of various types. Data on typical generation, outage rates, and scheduled

⁴³ 67 Fed. Reg. at 80,298/3.

⁴⁴ Memorandum from David Schoengold, Principal, MSB Energy Associates, to Ann B. Weeks, Esq., Clean Air Task Force, April 24, 2003 (*see* Appendix).

maintenance are included in the reports, however there is no publicly reported information on the associated costs. This database therefore is not useful or permissible for determining what reasonable levels of costs associated with “routine” maintenance activities would be. The documentation for the Carnegie-Mellon model, as well as various articles about the model found on the Carnegie-Mellon Center for Energy and Environmental Studies web site,⁴⁵ indicate that it has little relevance to this inquiry. The Carnegie-Mellon model is used to analyze the cost and performance of various emission control technologies. Nothing in the model documentation or associated reports suggests that the model is or could be useful in determining levels of maintenance costs for existing power plants that could be considered “routine.”

The data available from the Federal Energy Regulatory Commission (FERC) does include information on the costs associated with maintenance activities, reported annually by the industry. Each year, investor-owned utilities file a detailed report on their operating and financial activities with FERC. This report, known as “FERC Form 1,” includes financial statistics, details about power sales and generation, in addition to other information. The utilities also report to FERC details about each generating station, including kWh generated, fuel use, staffing, and operating costs. One of the data elements filed each year for each power plant is a report on the total amount of capital invested in the plant as of that year. Another useful set of data elements is the monetary expenditures in that year allocated towards maintenance.

MSB Energy Associates analyzed seventeen years (1981-1997) of power plant FERC Form 1 data, through the use of a data base developed by the Utility Data Institute. This data base includes 6,946 plant-years of data records for coal-fired power plants.⁴⁶ For each record the expenditures allocated to maintenance were converted to year 2001 dollars using inflation adjustment factors and divided by the plant capacity to determine the maintenance expenditures

⁴⁵ <http://www.iecm-online.com/>

⁴⁶ There are 524 coal-fired power plants represented in the database. On average, there are 13.3 years of data for each plant.

in dollars per kW-year (again, in year 2001 dollars). The mean annual maintenance expenditure was \$18.64 per kW-year, while the median was \$16.64 (both in year 2001 dollars).

According to the Energy Information Administration's "Assumptions to the Annual Energy Outlook 2002," the replacement cost for a new coal plant in year 2001 dollars is \$1,119 per kW. Using that figure as the denominator, the mean annual maintenance expenditure reported by coal-fired power plants during the seventeen-year period for which we have information, and based on almost 7,000 data points is 1.7 percent of the replacement cost. That value is significantly less than the figures suggested by EPA for use for the utility sector (5 percent) (But as evidence of the fundamentally flawed and unlawful nature of EPA's allowance exemption, it still would legalize all but one of the harmful TVA violations using EPA's preferred approach and even many violations using the unit cost exemption). While we categorically reject the concept of a purely cost-based definition of "routine maintenance, repair, and replacement" – without regard to the emissions increases and public health harms that are the concern of the NSR modification provision, the FERC Form 1 figures demonstrate that the AAGRAP, particularly as EPA proposes to apply them, grossly overestimates the industry's actual routine maintenance experience.

Finally, in addition to the sources about which EPA specifically requested comment, MSB Energy Associates also evaluated projections contained in the Energy Information Agency (EIA) Annual Energy Outlook reports,⁴⁷ and that include the EIA's best estimate of the expected capital and operating costs associated with new power plants. Although these estimates might, theoretically, also be useful in defining a level of routine maintenance against which departures could be compared, on closer inspection, they are not helpful for this purpose.

To understand the results of the analysis of the EIA projections, it is first necessary to understand the components of the operating costs projected by the EIA. From an engineering

⁴⁷ For 2002: Energy Information Administration, "Assumptions to the Annual Energy Outlook 2002," DOE/EIA-0554 (2002). Available at a.doe.gov/oiaf/archive/aeo02/assumption/index.html.

standpoint, the difference between routine maintenance and a major plant refurbishment project is clear. For power plants, routine maintenance is frequent, and follows a predictable pattern set by annual utility Operation and Maintenance (O&M) budgets. Routine maintenance is performed while the plant is operating or during brief periods of downtime. The work is performed by permanent plant staff and includes: repair of leaking pipes, pumps, valves, and fans, cleaning and lubrication of parts, and inspections. These activities are readily distinguishable from power plant overhauls or refurbishments, which take place only infrequently over the life of a facility and are major capital projects for which special funding is set aside as the result of years of planning and design work. Life extension projects occur less frequently, and involve complete replacement, often with redesign, of major components of the plant. These activities require long plant or unit shutdowns.

Operating and maintenance expenses for power plants furthermore fall into two main categories – variable and fixed. Variable operating costs are a function of how much the plant operates, and much of those costs are expended for materials consumed in day-to-day plant operations. Fixed O&M is a fairly constant value from year to year and is less dependent on how much the plant operates. Much of fixed O&M costs pay for the permanent staff necessary to keep the plant operating.

According to the EIA projections, the ongoing total annual O&M costs for an entire new coal-fired power plant can be expected to average about 4 percent of the replacement cost of the plant. However, these are total O&M costs, and include the cost of permanent staff as well as the cost of ongoing “consumable materials.” Consumables, which for a new plant largely include the costs of catalyst and other costs associated with maintaining pollution control equipment, make up about 50 percent of the EIA projected O&M cost. These costs would necessarily drop out if the goal were to estimate routine maintenance costs for power plants without modern pollution controls. That leaves 2 percent of replacement cost, annually, associated with both O&M costs for older facilities. But that figure also is too high, as it includes all costs associated with

operating the facility in addition to routine maintenance activities. In particular, permanent staffing makes up about 30 percent of the total EIA projected annual O&M costs. Because the personnel costs are reported in the aggregate, we have no way of further adjusting the figure to reflect what percentage, even roughly, of the permanent staff costs are associated with maintenance activity. All that can be said from the EIA projections, then, is that “routine” annual maintenance activities for an entire plant must be considerably less than 2 percent of the plant replacement cost. Comparing this with the AAGRAP formulation proposed by EPA demonstrates that the 5 percent-of-replacement cost figure is too high by several orders of magnitude.

Evidence from the TVA enforcement cases further supports our position that 5 percent of replacement cost radically overstates the actual routine maintenance annual costs typical in the utility industry. For example, for the Allen Plant in 1991, the total operating and maintenance costs for the entire 3-unit facility were less than the \$10.78 million dollar cost of the physical changes undertaken at Unit 3.⁴⁸ Total O&M costs for the source in that year were thus less than 1 percent of the source replacement cost figure reported in Table X. And because “routine maintenance, repair and replacement” is necessarily a subset of total plant O&M, the figure associated with those costs, at that plant in that year would have been some fraction of 1 percent of the plant’s replacement cost. Clearly 5 percent of plant replacement cost is excessive.

2. Alcoa Enforcement Example

The Sandow power plant, owned and operated by Alcoa, Inc., to provide power for its aluminum smelter in Rockdale, Texas, is a lignite coal-fired electrical generating facility that began operating in 1953. Alcoa’s Sandow units currently employ no controls on SO₂ emissions, sub-optimal controls for particulates, and had no controls on NO_x emissions until very recently. In the mid-1980’s, Alcoa performed a major overhaul of the three Sandow units and the common

⁴⁸ *In re Tennessee Valley Authority*, 9 EAD 357, 483 (Appendix A) (2000) (citing record testimony of Alan M. Hekking).

facilities serving such units. This project was described by Alcoa as the “Sandow Betterment Project.”⁴⁹

In 1985, Alcoa’s project manager for the “Sandow Betterment Project” stated that the purpose of the alterations was to “. . . restore the reliability and operational integrity of the units – to bring them back up to where they once were.”⁵⁰ In discussing the overhaul of Sandow Unit 3, an Alcoa spokesman stated in 1985, “[w]e’ve torn apart as much as we can without throwing the whole thing away.”⁵¹ In fact, Alcoa replaced and/or upgraded significant aspects of all three boilers. The systems common to the three boilers were significantly overhauled as well, including the fuel processing and handling systems, the ash removal system, and the boiler common. Alcoa never requested or obtained any NSR permit for the overhaul of the Sandow plant. This Betterment Project was clearly an example of a modification that should never be considered exempt from NSR protections.⁵²

On December 26, 2002, Neighbors for Neighbors, Inc., Environmental Defense, and Public Citizen, Inc., filed a complaint against Alcoa for failing to obtain PSD permits and meet BACT for the plant modifications of the Sandow Betterment Project. Shortly thereafter, the EPA and the state of Texas issued notices of violation to Alcoa with the same PSD claims. On April 9, 2003, EPA and the environmental groups gave notice of a proposed consent decree with Alcoa to bring the three Sandow units into compliance with BACT requirements that should have been met over fifteen years ago. EPA’s fact sheet for the settlement with Alcoa states that, as a result of

⁴⁹ All data on the specific repairs, replacements, and upgrades of the Sandow Betterment Project including expenditure data as well as original capital costs of the Sandow Power Plant were taken from Alcoa’s November 14, 1990 letter to EPA responding to an EPA request for information pursuant to CAA §114.

⁵⁰ Statement of Dan DeBoalt, Alcoa’s Sandow Betterment Project Manager, in “Alcoa, An Encouraging Word,” from the Rockdale Reporter, October 24, 1985.

⁵¹ Statement of Alcoa’s Power Supply Superintendent Leroy Hiller in “Alcoa, An Encouraging Word,” from the Rockdale Reporter, October 24, 1985.

⁵² The Seventh Circuit found “no reason to believe” that Congress intended to exclude “the replacement of major generating station systems – including steam drums and air heaters” from the definition of “physical change.” *WEPCO*, 893 F.2d at 909.

the Sandow Betterment Project, Sandow's pollution emissions increased over 13,000 tons per year.

To examine whether such a massive power plant overhaul would be subject to review under EPA's proposed revisions for the cost allowance, we examined the annual plantwide maintenance expenditures during the Sandow Betterment Project. Then we compared the annual expenditures to the replacement cost of the 3-unit power plant.⁵³ The current estimated replacement cost in 2000 dollars is \$524,610,000. The annual maintenance expenditures were also adjusted to 2000 dollars.⁵⁴ The following table shows Alcoa's annual maintenance expenditures during each year of the Sandow Betterment Project and the percent those expenditures reflect of the current plant replacement cost.

Comparison of Sandow Betterment Annual Maintenance Expenditures to Plant Replacement Cost in 2000 Dollars

Year	Maintenance Expenditures Adjusted to 2000 Dollars	% of Maintenance Expenditures Compared to Current Plant Replacement Cost
1984	\$2,560,112	0.49%
1985	\$37,542,460	7.16%
1986	\$22,833,060	4.35%
1987	\$13,768,600	2.62%

EPA has proposed a range of maintenance percentages of 0.5% to 20% of the plant replacement cost, so it is obvious that the Sandow Project would not trigger NSR requirements across the range of most of EPA's contemplated exemption levels. Since Alcoa's Sandow units are currently considered non-utility boilers, a possible maintenance percentage that EPA has referenced under its proposal proposed rule is the AAGRAP value of 2.5% for industrial steam and electric generation. Under that assumption, the annual allowance based on the current plant replacement cost would be \$13,115,250. On first glance, it would appear that the majority of

⁵³ Capital replacement cost was determined by multiplying the total megawatts of the Sandow plant (134 MW per unit) by \$1.305 million per MW, which is the estimated 2000 capital costs for a new power plant from EPA's "Documentation of EPA Modeling Applications Using the Integrated Planning Model," Table 4-12.

⁵⁴ Maintenance expenditures were adjusted for inflation using a similar ratio of Consumer Price Index in the year 2000 and the Consumer Price Index in the year of the modifications.

work done in 1985-1987 would not be exempt under EPA's proposed RMRR allowance.

However, the majority of work on all three boilers was performed in 1985. Had Alcoa spread the work over a longer period – such as 5-6 years – all of the maintenance expenditures could have fallen under the annual maintenance allowance and the entire life extension project would have escaped NSR controls.

As EPA stated in its proposal, industry will “find ways to make the [needed] replacements without having to obtain permits and install state-of-the-art controls.”⁵⁵ EPA's proposal opens the door for once-in-a-lifetime projects at power plants such as Sandow to handily escape the pollution controls, and other protections of the NSR program regardless of any increase in emissions (which in Sandow's case resulted in increases in over 13,000 tons per year of SO₂, NO_x, and PM₁₀).

A source such as Alcoa's Sandow power plant might not even need to spread a similar life-extension project over a longer time period when a significant portion of the work and expenditures would be exempt from NSR under EPA's proposed equipment replacement exemption. The majority of the maintenance work performed for Alcoa's Sandow Project was the replacement of equipment as would likely occur for any life-extension project. If a significant portion of the maintenance expenditures could be excluded under the proposed equipment replacement exemption, then it is very likely the remainder of work done under the Sandow Project would not be greater than the annual maintenance allowance. For a conservative comparison of the Sandow Betterment Project to the EPA's proposed equipment replacement exemption, we assumed that all of the work of the Sandow Betterment Project could have been considered equipment replacement under EPA's proposal. EPA has proposed that equipment replacement costs totaling greater than 50% of the capital cost of a new unit would trigger NSR permitting requirements. However, when we determined the cost of the entire Sandow Project on a per-unit basis, we found that the total project expenditures per unit would not equate to more

than 15%. Thus, the equipment replacement exemption provides even more certainty that industries can completely overhaul a source, significantly increase pollution, and evade NSR pollution controls and other health safeguards.

As a further example of EPA's misplaced use of the already out of date IRS AAGRAP allowances, we compared the annual maintenance expenditures to a cost allowance based on the AAGRAP industrial steam and electric generation allowance of 2.5% and the original cost of the plant of \$39,600,000, which would provide for a cost allowance of \$990,000. This approach is truer to the intent of the AAGRAP values and would be a more reasonable benchmark against which to judge the routineness of Alcoa's expenditures during its once-in-a-lifetime project (were a cost test that ignores pollution consequences permissible). Alcoa's annual expenditures based on costs at the time of the modifications ranged from 3.9% to 59.2% of the original cost of the plant.

In summary, Alcoa's complete overhaul of its Sandow Power Plant, which cost the equivalent of almost \$77 million dollars in 2000 dollars and which increased air pollution by over 13,000 tons per year, easily could have escaped NSR requirements under the exemptions in EPA's December 31, 2002 proposed rule by spreading out the maintenance work over a slightly longer period and/or because the majority of work could be exempt from NSR under the EPA's equipment replacement provision. This shows that the EPA's proposed annual maintenance allowance and equipment replacement provisions will simply provide for more loopholes for industry to continue to operate older, uncontrolled plants well into the future.⁵⁶

3. Other EPA Enforcement and Other Physical or Operational Changes.

We call upon EPA to replicate the analysis above for each of the illegal modifications addressed in each of the NSR enforcement settlements under this administration and the previous

⁵⁵ 67 Fed.Reg. at 80,302.

one, all pending NSR enforcement cases, and all pending NSR investigations. We would have done so ourselves, but the necessary information is unavailable to the public, either because it is confidential business information, is covered by judicial protective orders, or is otherwise unobtainable. To the extent that this information is available to EPA, it is of central relevance to this rulemaking and must be placed in this rulemaking docket in accordance with Clean Air Act Section 307(d).

Finally, before EPA moves forward with this proposal, we call upon the agency to explain to the public why plain physical and operational changes that would qualify for any or all of EPA's exemptions are not in fact physical or operational changes. Because the current proposal is so deficient in this regard, EPA must provide this identification and explanation through a public rulemaking notice in the Federal Register subject to opportunity for public comment.

We ask that EPA explain why the following at a minimum are not physical changes or changes in the method of operation: (1) each of the changes or activities undertaken by defendants in NSR enforcement matters that EPA has prosecuted since 1977, including matters that EPA has settled and pending NSR enforcement cases and investigations; (2) each of the changes or activities that has warranted issuance of NSR permits for major modifications since 1977; (3) representative changes or activities for each of the industrial source categories covered by major NSR provisions that would have had significant emissions increases but for adoption of emissions limitations through minor permits or other mechanisms; (4) all activities identified in this administrative record that EPA or any other party is claiming not to represent a physical change or change in the method of operations; and (5) other representative changes or activities for each of the industrial source categories covered by major NSR provisions that would cause actual increases in emissions above the significance thresholds but that one or more of EPA's

⁵⁶ Because the other two exemptions identified by EPA are even more egregious than the two discussed above, the Sandow project easily would have qualified for those exemptions too. *See* 67 Fed.

proposed exemptions would consider not to be physical or operational changes. We ask further that EPA explain the attributes of these activities, and the basis for EPA's reasoning, that lead the agency to declare these changes not to be physical changes or changes in the method of operation.

B. The Proposed Rule's New Applicability Thresholds Already Have Been Held Unlawful.

The applicability thresholds established by the proposed rule would directly contravene binding judicial interpretations of the Clean Air Act's "modification" definition.

In *Alabama Power*, the D.C. Circuit held that the Clean Air Act does not limit the definition of "modification" to "physical changes exceeding a certain magnitude."⁵⁷ Notwithstanding that holding, EPA proposes to exclude any physical activity that did not exceed a certain magnitude, expressed as (1) the activity's cost in relation to the facility, (2) the activity's cost in relation to the unit, or (3) whether the activity causes an increase in the capacity of a process unit.

In *WEPCO*, the Seventh Circuit held that Congress did not intend to require that physical activity work a basic or fundamental change in a facility before it would qualify as a "physical change."⁵⁸ In that court's view, defining "physical change" as an alteration in the design or nature of the facility "would open vistas of indefinite immunity from the provisions of NSPS and PSD."⁵⁹ In the face of that holding, EPA has proposed a rule that would ensure that an activity would not be treated as a "physical change" as long as it did not work a fundamental change in – or a change in the design or nature of – the facility. In the proposed rule, fundamental change, or change in design or nature, is expressed as (1) an alteration in the basic design parameters of the unit, (2) the construction of a new process unit, (3) the replacement of an entire process unit, (4)

Reg. at 80,304-05.

⁵⁷ *Alabama Power*, 636 F.2d at 400.

⁵⁸ *WEPCO*, 893 F.2d at 908-09.

⁵⁹ *Id.* at 909.

an increase in maximum achievable hourly emissions rate, (5) the emission of a regulated pollutant not previously emitted, and (6) an increase in the capacity of a process unit.⁶⁰

As EPA itself notes in its brief filed in the *SIGECO* case, the Seventh Circuit in *WEPCO* found physical activity to be a “physical change,” and thus a modification, even though it constituted a “like-kind” replacement.⁶¹ In direct contravention of that holding, and the plain language of the Act, EPA now proposes to exclude like-kind replacements from the definition of “modification.”

C. Neither the *De Minimis* Doctrine Nor the Administrative Necessity Doctrine Authorizes EPA to Create the Proposed Exclusions.

EPA does not have legal authority to create the proposed exemptions because they deviate from the statute’s plain language. The CAA’s plain language and the purposes behind the NSR program prohibit the Agency from incorporating the proposed exemptions into its NSR regulations. The Agency may not rely on any residual *de minimis* authority because it has not, and cannot, demonstrate that the burdens of defining “modification” to include anything less than what is covered under the proposed exemptions would yield a gain of trivial or no value, or lead to absurd or futile results so as to permit the exemptions. To the extent available, EPA may only invoke – and already has invoked – *de minimis* authority in creating “significant” emissions thresholds for NSR modifications. Even if EPA has additional *de minimis* authority for deviations from the term “any physical change in, or change in the method of operation of,” EPA has not shown that its proposed rule would meet the rigorous requirements of the *de minimis* and “administrative necessity” doctrines. For these reasons, the Agency’s proposed rule is unlawful, arbitrary, and capricious, and may not be adopted.

⁶⁰ In his deposition in EPA’s enforcement case against Duke Energy, former EPA Assistant Administrator for Air, Noise and Radiation David Hawkins testified, “I am not aware of any statement, either oral or written in the Carter administration that said that an activity was exempt because it did not expand the plant’s original capacity.” Deposition of David G. Hawkins on January 31, 2003 in *U.S. v. Duke Energy Corp.*, Civil Action No. 00-1262 (M.D.N.C.), at 127 lns. 9-12.

⁶¹ Pl.’s Opposition to Def.’s Motion for Summary Judgment on Fair Notice at 14-15 (citing *WEPCO*, 893 F.2d at 917).

1. The Legal Foundations for Use of *De Minimis* and Administrative Necessity Authority

It is well established that “categorical exemptions from the clear commands of a regulatory statute, though sometimes permitted, are not favored.”⁶² This is because an Agency may not exercise revisory power inconsistent with the clear intent of Congress.⁶³

These broad principles are not absolute, but situations in which an Agency may create categorical exemptions from plain statutory commands are strictly circumscribed.⁶⁴ “The ability is not an ability to depart from the terms of the statute but rather as a tool to be used for implementing the legislative design.”⁶⁵ One situation when such a deviation is permitted is through an agency’s *de minimis* exemption authority, which is only available “when the burdens of regulation yield a gain of trivial or no value.”⁶⁶ The implied authority is not available for situations where the regulatory function does provide benefits, but the Agency concludes that the acknowledged benefits are exceeded by the costs: “For such situations any implied authority to make cost-benefit decisions must be based not on a general doctrine, but on a fair reading of the specific statute, its aims and legislative history.”⁶⁷

“Administrative Necessity” is another doctrine that can provide an agency the authority to deviate from a regulatory statute’s commands. This doctrine is based on the principal that “an agency official required ‘to do an impossibility’ should be relieved of this sanction.”⁶⁸

2. The Act’s Legislative Design Does Not Permit Adoption of the Proposed Exemptions From The Statute’s Definition of “Modification” Under a *De Minimis* Justification.

⁶² *Alabama Power*, 636 F.2d at 358 (citing *FPC v. Texaco Inc.*, 417 U.S. 380, 400 (1974); *NRDC v. Costle*, 568 F.2d 1369, 1377 (D.C. Cir. 1977); *American Steel Institute v. EPA*, 568 F.2d 284, 307 (3d Cir. 1977)); *Environmental Defense Fund v. EPA*, 636 F.2d 1267, 1283 (D.C. Cir. 1980).

⁶³ *See id.*

⁶⁴ *See id.*

⁶⁵ *Alabama Power*, 636 F.2d at 360; *Public Citizen v. Young*, 636 F.2d 1108, 1113 (D.C. Cir 1987).

⁶⁶ *Alabama Power*, 636 F.2d at 360.

⁶⁷ *Id.* at 361.

⁶⁸ *Id.* at 359 (quoting *NRDC v. Train*, 510 F.2d 692, 713 (D.C. Cir. 1974)).

a. The Act’s Plain Language Makes any *De Minimis* Authority for the Proposed Exemption From the Statute’s Definition of “Modification” Unavailable.

EPA’s proposed exemptions are categorical exemptions from the clear commands of the Clean Air Act.⁶⁹ The law does not view such exemptions favorably.⁷⁰ In fact, the proposed exemptions are such a drastic deviation from Congress’s clear, unambiguous language that it is enough for a court to deny, categorically, EPA’s *de minimis* authority to create them.

A *de minimis* exemption cannot stand if it is contrary to the express terms of the statute.⁷¹ While it is established doctrine that unless Congress has been extraordinarily rigid, there is a likely basis for an implication of *de minimis* authority when the burdens of regulation yield trivial or no value;⁷² or when following the plain meaning of the statute would lead to absurd or futile results;⁷³ in several cases, courts have found that express contrary statutory language is enough to preclude an exemption. This is because following the seminal *Chevron* case, deference to the agency’s interpretation of a statute is only due when the language is ambiguous.⁷⁴

For example, in *Alabama Power*, the court struck down the EPA’s expansion of an Air Quality Review (AQR) exemption. Under the statute’s dictates, the exemption only applied to existing sources that would emit under 50 tons of certain pollutants per year after undergoing Best Available Control Technology (BACT) review. The EPA expanded this 50-ton exemption to apply to new sources and additionally exempted from BACT review— not simply AQR review

⁶⁹ See Section I, *supra*.

⁷⁰ *Id.* at 358.

⁷¹ *Environmental Defense Fund v. EPA*, 82 F.3d 451, 466 (D.C. Cir. 1992) (amended by *Environmental Defense Fund v. EPA*, 92 F.3d 1209 (D.C. Cir. 1996) (citing *Public Citizen v. Young*, 831 F.2d 1108, 1122 (D.C. Cir. 1987)). See *Natural Resources Defense Council v. EPA*, 966 F.2d 1292, 1306 (9th Cir. 1992) (holding that once EPA determined that construction sites were subject to regulation under the water Quality Act of 1987, the agency was not free to create exemptions from permitting requirements for such activity); *United States v. Alcan Aluminum Corp.*, 990 F.2d 711, 720 (2d Cir. 1993) (finding no *de minimis* authority in Comprehensive Environmental Response, Compensation and Liability Act of 1980 for liability from even minimal amounts of hazardous substances because the statute drew no distinction based on quantity).

⁷² *Alabama Power*, 636 F.2d at 360.

⁷³ *Environmental Defense Fund v. EPA*, 82 F.3d at 466 (citing *State of Ohio v. EPA*, 997 F.2d 1520, 1535 (D.C. Cir. 1993)).

⁷⁴ See *Chevron U.S.A., Inc., v. Natural Resources Defense Council*, 467 U.S. 837, 843 n.9 (1984).

– these allegedly *de minimis* sources. The court, after looking at the statutory language, concluded that “Congress in section 165(b) permitted a narrow exemption—for modifications, and from air quality review only; this provision provides no basis for the EPA to exercise ‘revisory power’ to exclude new as well as modifications and to extend the exemption to BACT review in addition to air quality review.”⁷⁵

Similarly, with the proposed exemptions, the CAA clearly and plainly defines “modification” to mean “any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted.”⁷⁶ The proposed exemptions contradict this definition because they eliminate any meaning for the term “any,” and by exempting all physical or operational changes that qualify for one of the four vast categorical exemptions. EPA’s proposal further contradicts the broad sweep of the terms “physical change” and “change in the method of operation,” excluding activities from these understandings, such as the replacement or alteration of equipment pieces, that courts have found to fit the “plain terms” of the “physical change” provision. The CAA’s clear, unambiguous statutory language does not vest EPA with such authority.

In *ASARCO Co. v Sierra Club*,⁷⁷ petitioner challenged the Agency’s incorporation of the bubble concept into NSPS’s Section 111’s definition of “stationary source.” While the statute defined stationary source as “any building, structure, facility or installation, which emits or may emit any air pollutant,”⁷⁸ EPA limited this definition to “any . . . combination of . . . facilities.”⁷⁹ The D.C. Circuit categorically struck down this definition: “The regulations plainly indicate that

⁷⁵ *Alabama Power*, 636 F.2d at 360-361.

⁷⁶ 42 U.S.C. § 7411(a)(4).

⁷⁷ 578 F.2d 319 (D.C. Cir. 1978).

⁷⁸ *Id.* at 326 (citing 42 U.S.C. § 7411(a)(3)).

⁷⁹ *Id.* (citing 40 C.F.R. § 60.2 (d)(1976)(superceded)).

EPA has attempted to change the basic unit to which NSPSs apply. . . . The Agency has no authority to rewrite the statute in this fashion.”⁸⁰

Likewise, with EPA’s proposed exemptions, the Agency is attempting to change the definition of the basic unit for NSR applicability, which, according to the plain statutory language, is “any physical change in, or change in the method of operation of.” As in *ASARCO*, EPA has no authority to rewrite the statute in this fashion.

Prior judicial interpretations of “modification” support this narrow reading of the NSR modification provision. In 1978, EPA limited the definition of modifications to only include “major modifications,” that is, increases in the potential emission rate of any regulated air pollutant by over 100 tpy or 250 tpy, depending on what type of source the facility was.⁸¹ The *Alabama Power* court rejected this approach, finding that it had no reasonable basis, and that “the term ‘modification’ is nowhere limited to physical changes exceeding a certain magnitude. . . . We are constrained here to follow the clear language.”⁸²

Furthermore, in the *WEPCO* decision, the Seventh Circuit affirmed that to the extent an exemption from a modification exists, a narrow interpretation of the statute’s “modification” language is required:

The Supreme Court reported in *Chevron* that Senator Muskie, one of the principal supporters of the Clean Air Act, remarked: ‘A source . . . is subject to all the nonattainment requirements as a modified source if it makes *any physical change* which increases the amount of any air pollutant. . . .’ *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 853 (1984) (quoting 123 Cong. Rec. 26847 (1977))⁸³

The court went on to note that other courts, including the D.C. Circuit in *Alabama Power*, had reached the conclusion that in the NSR modification context the term “‘any physical change’

⁸⁰ *Id.* at 326-327.

⁸¹ 43 Fed. Reg. 26, 388, 26,396 (June 19, 1978).

⁸² 636 F.3d at 400.

⁸³ 893 F.2d. at 908 (emphasis in *WEPCO*).

means precisely that.”⁸⁴ The court refused to adopt the expansive interpretation proposed by WEPCO because it “would open vistas of indefinite immunity from the provisions of NSPS and PSD.”⁸⁵

Finally, it should be noted that NSR’s statutory language is more rigid than statutes in cases where courts have granted the Agency authority to promulgate *de minimis* exemptions. For example, in *Ober v. Whitman*,⁸⁶ the Ninth Circuit found that the Agency had discretion to incorporate *de minimis* exemptions under a Federal Implementation Plan pursuant to the nonattainment provisions of the Clean Air Act, where the statute required that such plans include “reasonably” available control measures to bring an area within national standards unless “impracticable.”⁸⁷ Here, the court found that this language gave considerable discretion to the agency. This stands quite apart from NSR’s statutory definition of modification, which provides no similar qualifying language implying discretion.

Thus, following the plain language of the Clean Air Act, the EPA has no *de minimis* authority for the proposed exemptions. They amount to a drastic deviation from Congress’s clear unambiguous express language and are therefore unlawful, arbitrary, and capricious and should not be promulgated in final form.

b. EPA Lacks *De Minimis* Authority For the Proposed Exemptions Because Such Exemptions Undercut the Purposes of the NSR Program.

Even if the Act’s language is, in and of itself, insufficient to bar the EPA from incorporating the proposed RMRR exemptions into NSR’s statutory “modification” definition, the fact that the exemptions undermine the program’s purposes supplies adequate grounds.

⁸⁴ *Id.* (citing *National-Southwire Aluminum Co. v. EPA*, 838 F.2d 835 (6th Cir.)); *Alabama Power*, 636 F.2d at 400; *ASARCO v. EPA*, 578 F.2d 319, 322 (D.C.Cir. 1978); *United States v. Naragansett Co.*, 571 F. Supp. 688, 694-95 (D.R.I. 1983)).

⁸⁵ 893 F.2d at 909-10.

⁸⁶ 243 F.3d 1190, 1195 (9th Cir. 2001).

⁸⁷ *Id.*

The proposed rule directly subverts the purposes of NSR. The relevant purposes of the Clean Air Act are “to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population.”⁸⁸ The chief purposes of the NSR provisions are to help decrease air pollution levels below public-health-based National Ambient Air Quality Standards (NAAQS).⁸⁹

The NSR modification provisions were intended by Congress to be consistent with – and to advance – these purposes. While the statute grandfathered existing sources from NSR in order to minimize the economic disruption from retrofitting older facilities, existing sources undergoing emission-increasing changes must install pollution control technologies (and conduct air quality review in attainment areas, and obtain offsets in nonattainment areas). As the D.C. Circuit found in *Alabama Power*:

The statutory scheme intends to “grandfather” existing industries; but the provisions concerning modifications indicate that this is not to constitute a perpetual immunity from all standards under the PSD program. If these plants increase pollution, they will generally need a permit.⁹⁰

The Seventh Circuit articulated a like understanding of congressional intent in *WEPCO*:

Members of the House recognized that “building control technology into new plants at time of construction will plainly be less costly then [sic] requiring retrofit when pollution control ceilings are reached.” H.R.Rep. No. 294, 95th Cong., 1st Sess. 185, *reprinted in* 1977 U.S. Code Cong. & Admin. News at 1264. *But Congress did not permanently exempt existing plants from these requirements; section 7411(a)(2) provides that existing plants that have been modified are subject to the Clean Air Act programs at issue here.*⁹¹

⁸⁸ 42 U.S.C. § 7401(b)(1).

⁸⁹ *See, generally*, 42 U.S.C. § 7502(c). *See also id.* § 7470 (a purpose of the PSD program is “to protect public health and welfare from any actual or potential adverse effect which in the Administrator's judgment may reasonably be anticipate [sic] to occur from air pollution or from exposures to pollutants in other media, which pollutants originate as emissions to the ambient air)[sic], notwithstanding attainment and maintenance of all national ambient air quality standards”); *Hawaiian Elec. Co. v EPA*, 723 F.2d 1440, 1446-1447 (9th Cir. 1984) (stating “the ultimate purpose of the PSD program is to maintain air quality better than NAAQS.”); *Alabama Power*, 636 F.2d at 362 (finding “the emphatic goal of the PSD provisions is to prevent those [PSD and NAAQS] thresholds from being exceeded” and that the chief means to prevent such significant deterioration is preconstruction permitting under NSR).

⁹⁰ 636 F.2d at 400.

⁹¹ 893 F.2d at 909 (emphasis added).

In fact, beyond balancing the goals of cleaner air for the nation with reduced disruption for older facilities, the modification trigger was, in the Seventh Circuit’s eyes, a means of “forcing” investment in clean-up technologies:

Congress intended to stimulate the advancement of pollution control technology. *See, e.g.*, S.Rep. No. 91-1196, 91st Cong., 2d Sess. 17 (1970) (“Standards of performance should provide an incentive for industries to work toward constant improvement in techniques for preventing and controlling emissions from stationary sources. . . .”). The development of emissions control systems is not furthered if operators could, without exposure to the standards of the 1977 Amendments, increase production (and pollution) through the extensive replacement of deteriorated generating systems.⁹²

Under the proposed exemptions, on the other hand, changes that significantly increase emissions would be exempt from NSR requirements. The technology-forcing purposes of the statute will be frustrated, not furthered, by the exemptions, because sources would be able to be rebuilt, piecemeal, and increase pollution for an indefinite period of time without ever having to install pollution control technologies. Additionally, many of these changes will not fall within the proposal’s purported safeguards. One proposed safeguard only limits increases in hourly emission rates, but does not limit total emissions or protect NAAQS or PSD increments. Other safeguards only limit the most drastic “process unit” changes. It is clear that due to the massive emissions increases that are allowed to result from the proposed rule, this exemption does not in any way comport with the ambient air quality protection purposes of the statute’s NSR provisions.

Therefore, because the proposed RMRR exemption undermines NSR’s purposes of protecting ambient air quality by allowing modifications that result in significant emission increases, the exemption is impermissible, and should not be promulgated in final form.

c. EPA Has Not Shown, and Cannot Show, That Regulation Absent its Exemptions Would Yield a Gain of Trivial or no

⁹² *Id.* at 909.

**Value, or Lead to Absurd or Futile Results so as to Permit
the Proposed Exemptions.**

Even if the language and purposes of the provisions do not preclude EPA from incorporating the proposed exemptions, EPA has not shown that it has implicit or residual *de minimis* authority. The Agency has never demonstrated how regulating modifications – absent the proposed exemptions – yields a gain of trivial or no value, or leads to absurd or futile results, so as to permit the exemptions. Instead, the Agency suggests that it is relying on the fact that it has adopted other *de minimis* “modification” exemptions and that regulating activities qualifying for the proposed exemptions would not be worth the cost. Both of these provide inadequate *de minimis* justification for the proposed exemptions.

In order for a *de minimis* exemption to be available, the agency must show that the “the burdens of regulation yield a gain of trivial or no value[.]”⁹³ or that following the plain meaning of the statute would lead to absurd or futile results.⁹⁴ The implied authority is not available under a statute in situations where the regulatory function does provide benefits, but the Agency concludes that the acknowledged benefits are exceeded by the costs.⁹⁵

In line with these principles, in *Natural Resources Defense Council v. EPA*,⁹⁶ the Ninth Circuit held that once EPA determined that construction sites were subject to regulation under the Water Quality Act of 1987, the agency was not free to create exemptions of construction sites smaller than five acres from permitting requirements for such activity. In determining this, the court found EPA’s *de minimis* rationale inapplicable because there was insufficient data to show that exempting sites less than five acres would yield trivial or no value.⁹⁷

Like the exemption in the *NRDC* water-quality case, EPA has not demonstrated how the burdens of regulating the changes proposed for exemption would yield a gain of trivial or no

⁹³ *Alabama Power*, 636 F.2d at 360.

⁹⁴ *Environmental Defense Fund v. EPA*, 82 F.3d at 466 (citing *State of Ohio v. EPA*, 997 F.2d 1520, 1535 (D.C. Cir. 1993)).

⁹⁵ *Id.* at 361.

⁹⁶ 966 F.2d 1292, 1306 (9th Cir. 1992).

value. Nor has the agency demonstrated that following the statute's plain meaning would lead to absurd or futile results. In fact, the agency admits that its current case-by-case approach for regulating modifications, in which smaller modifications are not considered routine, does have value:

The case-specific approach works well in many respects. For example, it is a flexible tool that accommodates the broad range of industries and the diversity of activities that are potentially subject to the NSR program.⁹⁸

Instead, in this rulemaking, the Agency seeks to rest on other exemptions it has adopted from the NSR statutory definition of modification:

We have recognized that Congress did not intend to make every activity at a source subject to the major NSR program. As a result, we have previously adopted nine exclusions from what may constitute a "physical or operational change." One of these is an exclusion for routine maintenance, repair, and replacement. Today's rulemaking proposes two provisions that will improve and help carry out the purposes of this exclusion.⁹⁹

This rationale is not enough. *Alabama Power* expressly prohibited such a generalized determination when it struck down the *de minimis* level EPA attempted to incorporate into both the BACT and modification regulations: "[j]ust as for the applicability of NSR to modifications, the *de minimis* exemption must be designed with the specific administrative burdens and regulatory context in mind."¹⁰⁰

Instead of making the required *de minimis* showing, the Agency has implicitly determined that it has *de minimis* authority to promulgate the RMRR exemption because the costs of regulating smaller, less expensive modifications exceed the benefits. For example it states,

There has been some debate over the years as to the case-by-case approach and the types of activities that qualify as RMRR under our current case-by-case approach. The case-specific approach works well in many respects. For example, it is a flexible tool that accommodates the broad range of industries and the

⁹⁷ *Id.*

⁹⁸ 67 Fed. Reg. at 80,293.

⁹⁹ 67 Fed. Reg. at 80,296.

¹⁰⁰ 636 F.2d at 404.

diversity of activities that are potentially subject to the NSR program. However, the case-by-case approach has certain drawbacks. Unless an owner or operator seeks an applicability determination from his or her reviewing authority or from EPA, it can be difficult for the owner or operator to know with certainty whether a particular activity constitutes RMRR. Applicability determinations can be costly and time consuming for reviewing authorities and industry alike.¹⁰¹

Further, this justification becomes apparent in light of the fact that the safe-harbors' thresholds are based on the costs of the modification. This is precisely the inappropriate use of the *de minimis* doctrine warned of in *Alabama Power*: the Agency must show that any given regulation does not provide benefits. It cannot craft an exemption based on the fact that it concludes the benefits of regulation are exceeded by the costs.

The Agency has never demonstrated how subjecting any smaller modification—less than what it is now defining as RMRR – yields a gain of trivial or no value, or leads to absurd or futile results, so as to permit the exemption. The Agency suggestions that it is relying on the fact that it has incorporated other *de minimis* exemptions for “modifications,” and that subjecting smaller modifications would not be worth the cost, are impermissible for the RMRR exemption. The proposal, therefore, should never be promulgated in final form.

In the *SIGECO* case, EPA has acknowledged that its authority to exempt activity from the “modification” definition is bounded by its authority to exempt *de minimis* emissions increases from the PSD requirements. But as *SIGECO* has pointed out in a brief filed in that case after EPA published this proposed rule:

The proposed regulations go well beyond the extraordinarily limited reading of EPA's authority advanced in the Government's pleadings in this case. EPA has proposed four possible approaches to what is “routine,” **none** of which can fairly be described as *de minimis* or narrow.¹⁰²

¹⁰¹ 67 Fed. Reg. 80,293-94.

¹⁰² Southern Indiana Gas and Electric Company's Notice of Supplemental Authority on Fair Notice and Routine Maintenance, filed on January 8, 2003 in *U.S. v. SIGECO*, Civil Action No. IP99-1692-C-M/F (S.D.In.), at 2 (emphasis in original) (SIGECO Supplemental Filing).

SIGECO went on in its brief to demonstrate that neither of the two primary exclusion options in the proposed rule falls within the bounds of EPA's *de minimis* authority:

In this *Federal Register* notice, EPA proposes a rule that would categorically exempt activities at a source as "routine" if they cost less than an annual allowance. Although the amount of such an allowance is not specified, the discussion of this proposed routine allowance contemplates projects costing hundreds of thousands of dollars per year. *See* 67 Fed. Reg. 80,295. And EPA referenced a figure of 5% of the replacement cost of a unit, which is contained in an IRS publication and used in the NSPS regulations, as a possible approach. 67 Fed. Reg. 80,298. This cost could easily reach into the millions of dollars, and is much larger than the 1991 and 1992 SIGECO projects, and could exceed the 1997 projects as well. Clearly, such a rule extends to much more than a narrow class of *de minimis* projects. . . . EPA proposes exempting any equipment replacement activity that involves use of functionally similar or "like-kind" equipment, subject to a cost limitation to prevent the replacement of an entire process unit, such as a boiler. 67 Fed. Reg. 80,296. No figure is proposed, but the EPA references 50% of the facility replacement cost as a potential limit. 67 Fed. Reg. 80,301. Again, this is well in excess of what EPA could do if the Government's position in this case were correct [*i.e.*, if EPA's ability to exclude activity from the "modification" definition were bounded within the agency's *de minimis* authority].¹⁰³

d. EPA Cannot Rely on the Theory That Congress Intended to Allow the Proposed Exemptions.

The argument the Agency is left with—that there was some sort of congressional intent to allow the proposed exemptions – is belied by the context in which Congress incorporated the "modification" definition for NSR, the different purposes underlying the NSPS and NSR programs, and the Agency's past determinations that such an interpretation of Congressional intent is inappropriate.

Implicit in the Agency's justification for the proposed exceptions is the implied congressional intent argument that it cited to in 1992: that because the NSPS rules had agency-created exemptions, Congress must have intended a similar exemption to apply in the NSR context. This argument fails to provide any support for the proposed exemptions. Congress had

¹⁰³ *Id.* at 2-4. *See infra*, Section III.C.5.

different purposes in mind when it adopted the NSR program compared to the NSPS program:

NSPS – unlike NSR – is not oriented towards protecting ambient air quality. This precise difference led EPA to conclude that there must be more of a legal basis for the Agency to promulgate exemptions to the NSR program than their existence in the NSPS program:

The PSD review is a tool for air quality management and comprehensive consideration of increases of any pollutant regulated under the Act. The NSPS exemption is inconsistent with this approach. . . . The fact that both programs use the definition of modification contained in section 111 of the Act is not, in itself, sufficient to prove that Congress intended the NSPS exemptions then in effect would automatically be [sic] incorporated into PSD. . . . Apparently the only legislative history on the subject is a remark that Congress intended to conform the meaning of “modification” for PSD purposes to “other parts of the act [(1233 Cong. Rec. H11957)]. Given the distinct differences between the NSR regulatory processes promulgated in response to the 1977 amendments and the preexisting NSPS regulations defining “modification,” it seems clear that Congress desired to conform the usage of that term only in the broad sense.¹⁰⁴

This approach is consistent with past court interpretations of the congressional intent for other NSR terms. In *Alabama Power*, the court allowed EPA to expand its definition of “source” to include a combination of sources, notwithstanding the *ASARCO* decision that such a grouping was impermissible, “due to differences in the purposes and structure of the two programs.”¹⁰⁵

The argument that congressional intent supports the proposal is belied by the context in which Congress adopted the NSPS “modification” definition for NSR, the different purposes underlying NSR and NSPS, and the Agency’s past determinations that such an interpretation of congressional intent is inappropriate.

e. **To the Extent EPA has any *De Minimis* Authority, the Agency May Only Invoke – and Already Has Invoked – Its *De Minimis* Authority in Creating “Significant” Emissions Thresholds.**

¹⁰⁴ Memorandum from Gerald A. Emison, Director, Office of Air Quality and Planning, U.S. EPA, to Director, Air Management Divisions, Regions I, III, V, and IX[;] Director, Air and Waste Management Division Region II[;] Director, Air Pesticides, and Toxic Management Division Region IV and VI[;] [and] Director, Air and Toxics Division Regions VII, VIII, and X, at 3 (July 7, 1986).

¹⁰⁵ *Alabama Power*, 636 F.2d at 398.

To the extent that any *de minimis* exemption authority is available under the statutory NSR definition of “modification,” EPA already invoked that authority when it created the significance thresholds for emissions increase purposes. Any additional authority cannot be justified.

When the D.C. Circuit, in *Alabama Power*, held that the definition of “modification” [was] nowhere limited to physical changes exceeding a certain magnitude[.],”¹⁰⁶ the court instead limited any *de minimis* modification exceptions to those based on the magnitude of the *pollution increases*:

Implementation of the statute’s definition of “modification” will undoubtedly prove inconvenient and costly to affected industries; but the clear language of the statute unavoidably imposes these costs except for *de minimis* increases. . . . If these plants increase pollution, they will generally need a permit. Exceptions to this rule will occur when *increases* are *de minimis*, and when the increases are offset by contemporaneous decreases of pollutants, as we discuss below. The two exceptions we believe, will allow for improvements of plants, technological changes, and replacement of depreciated capital stock without completely disabling administrative regulatory burden.¹⁰⁷

The court believed available *de minimis* authority to be limited to *de minimis* emissions impacts, either by allowing *de minimis* increases or no increases due to offsetting, contemporaneous emissions decreases.

In response, EPA promulgated its 1980 regulations, which included *de minimis* significance emissions levels below which NSR would not be triggered.¹⁰⁸ The agency adopted those significance thresholds pursuant to notice-and-comment rulemaking only after evaluating the air quality impacts of those thresholds. EPA once again incorporated the RMRR exemption.

EPA has failed to provide any justification for why additional *de minimis* authority is needed. The agency is now proposing to adopt exemptions based on the magnitude of the

¹⁰⁶ 636 F.3d at 400.

¹⁰⁷ *Id.* at 402 (emphasis added).

¹⁰⁸ 45 Fed. Reg. 52,677, 52, 699 (Aug. 7, 1980).

changes, not the size of the pollution increases. The agency has provided no justification for going beyond the court's instructions to limit *de minimis* exceptions to trivial increases in pollution – with the significance thresholds already accounting for these *de minimis* levels. The agency is justifying these proposed exemptions by saying that “[t]he changes are intended to provide greater regulatory certainty without sacrificing the current level of environmental protection and benefit derived from the program. We believe that these changes will facilitate the safe, efficient, and reliable operation of affected facilities.”¹⁰⁹

Such a rationale is reminiscent of the argument the Agency used in justifying its bubble concept under NSPS in *ASARCO*, when it said that it was promulgating it in order to give industry flexibility in making modifications. In rejecting this justification, the court said that the record did not show why such flexibility was needed and “[u]nder provisions of the regulations not challenged in this litigation, the operator of an existing facility can make alterations as he wished in the facility without becoming subject to the NSPS as long as the level of emissions from the altered facility does not increase. . . . The record does not indicate why more flexibility is necessary or even appropriate.”¹¹⁰ Likewise, under the NSR program, regulatory certainty is already provided to modifying sources under the program because operators can make any changes that they wish, provided that they do not increase pollution beyond the already generous significance level thresholds.

EPA's proposal rests on an implicit assertion that the agency possesses *de minimis* exemption authority that may ignore entirely the fact that the exempted changes will cause significant, that is greater than *de minimis*, emissions increases. This view runs afoul of a core holding in the *Alabama Power* decision and, indeed, contradicts the *de minimis* doctrine itself,

¹⁰⁹ 67 Fed. Reg. at 80,295.

¹¹⁰ *ASARCO, Inc. v. Sierra Club*, 578 F.2d at 329.

which requires exercise of such authority to advance, and not frustrate, the objectives of the statutory program.¹¹¹

In addition, EPA fails even to suggest that its proposal conforms to the *Alabama Power* decision and *de minimis* doctrine requirement that permissible exemptions cause no more than *de minimis* increases in pollution. Any such suggestion, or any attempt to finalize the proposal on the basis of such suggestions, would be unlawful, arbitrary and capricious, and an abuse of discretion for several reasons.

First, as demonstrated elsewhere in these comments, EPA's proposal would exempt enormous uncontrolled emissions increases that cannot be defended as *de minimis* under any stretch of the imagination.¹¹² Second, EPA has already established *de minimis* significance emissions thresholds in the NSR rules, and EPA's proposed exemptions by design would allow every exempted activity to cause significant emissions increases that exceed these thresholds. Third, EPA adopted the existing *de minimis* significance thresholds only following earlier review, analysis, and showings that EPA has not undertaken with this proposal.

Finally, if EPA decides to invoke and rely upon a claim of *de minimis* authority to adopt any portion of the proposal or an outgrowth of it, the agency must propose a new rulemaking to subject its analysis and findings to public scrutiny and opportunity for comment. An agency must establish an administrative record, subject to notice and comment rulemaking and judicial review, justifying claims of trivial or no value or administrative burden pursuant to the *de minimis* doctrine. The agency bears the burden of making the required showings.¹¹³ Because agencies are empowered to act only pursuant to delegations from Congress, in the form of statutory instructions such as the statutory modification definition, an agency may only contradict a

¹¹¹ See *Alabama Power*, 636 F.2d at 360 ("The ability. . . to exempt *de minimis* situations from a statutory command is not an ability to depart from the statute, but rather a tool to be used in implementing the legislative design.")

¹¹² See *supra*, Section III.A. *Alabama Power*, 636 F.2d at 360 (categorical exemptions like the *de minimis* doctrine available "to overlook circumstances that in context may fairly be considered *de minimis*.")

Congressional delegation (under the permission of the judicially-created *de minimis* doctrine) through an exercise of the agency's legislative rulemaking authority.

3. Even if EPA Has Additional *De Minimis* Authority for Deviations From the Terms “Any Physical Change” or “Any Change in the Method of Operation,” EPA Has Not Shown and Cannot Show in the Administrative Record That Its Proposed Exemptions Would Meet the Rigorous Requirements of This Doctrine.

Assuming arguendo, that EPA has *de minimis* authority for its proposed exemptions, EPA has failed to satisfy the doctrine's rigorous requirements with administrative record support.

The D.C. Circuit in *Alabama Power* explained the high burden that accompanies reliance on the *de minimis* doctrine: “Determinations of when matters are truly *de minimis* naturally will turn on the assessment of particular circumstances, and the agency will bear the burden of making the required showing.”¹¹⁴ The EPA has not met these requirements. It has yet to provide a plausible explanation for how its exemptions would result in only trivial emissions increases. Nor is there any data to which the agency can cite to support this conclusion. To the contrary, as demonstrated elsewhere in these comments, nothing could be farther from the truth, as it is certain that the exemptions will increase emissions significantly and cause and contribute to NAAQS and increment exceedances.

Significant increases in emissions are not just the likely result. Significant emissions increases are the guaranteed, inexorable result of the very structure of EPA's proposed exemptions, since exempted activities do not reach the second part of the modification definition and therefore may cause emissions increases of any amount without ever being considered modifications. By design, activities that EPA excludes from coverage as physical changes or changes in the method of operation are allowed to cause uncontrolled, unreviewed increases in emissions on the order of hundreds, thousands, or tens of thousands of tons annually. EPA's

¹¹³ See *id.* at 360.

¹¹⁴ *Id.* at 362.

proposed categorical exemptions cannot stand where the Agency cannot demonstrate that the exempted modifications will truly result in *de minimis* emissions increases.

4. EPA Has no Legal Authority to Rely On the “Administrative Necessity” Doctrine as Justification for Its Proposed Exemptions.

To the extent that EPA is seeking authority for its exemptions under the “administrative necessity” doctrine, the EPA has not met its burden of showing that it is applicable to avoid the Clean Air Act’s statutory command that NSR program apply to any physical change or change in the method of operation.

When an agency seeks approval of a prospective exemption of certain categories based upon the agency’s prediction of the difficulties of undertaking regulation, the agency’s burden is especially heavy to demonstrate the existence of impossibility.¹¹⁵ Before such actions are permissible, there must be no other approaches that the statute authorizes to alleviate feasibility.¹¹⁶

In *Environmental Defense Fund v. EPA*,¹¹⁷ the D.C. Circuit rejected an EPA regulatory exemption to the Toxic Substance Control Act. The Act, in part, required the manufacture, procession, distribution and use of PCBs only in an enclosed manner, and prohibited the manufacture of PCBs two years after the effective date of the Act.¹¹⁸ EPA’s exemption to these requirements was for PCB concentrations less than 50 ppm. The Court rejected this exemption under an “administrative necessity” rationale, however, because the agency made no showing that it could not carry out its statutory commands for concentrations of PCBs less than 50 ppm.¹¹⁹

In this proposal, the agency attempts to justify its exemptions under what might be seen as an administrative necessity argument, saying the exemptions would relieve “reviewing

¹¹⁵ See *Alabama Power*, 636 F.2d at 359.

¹¹⁶ *Id.* at 360.

¹¹⁷ 636 F.2d 1267 (D.C. Cir. 1980).

¹¹⁸ *Id.* at 1272.

¹¹⁹ *Id.* at 1283.

authorities who could better focus resources on activities outside these RMRR categories.”¹²⁰

This explanation provides insufficient legal authority to deviate from the statute’s requirements, however. The agency does not even state that it is seeking relief from the statutory charge.

Rather, it simply states that its new approach would be better. The agency has not shown that after a good faith effort the agency could not perform its statutory charge.¹²¹ In fact, such an argument would be completely undermined by the fact that the EPA has kept its case-by-case approach in place for sources that do not fit within the exemptions’ safe-harbors. Furthermore, the agency has not made any showing that it cannot carry out its statutory charge.

Nor can the Agency demonstrate that the proposed exemption is narrowly drawn to meet any burdens that the EPA will have in enforcing the statutory scheme. In *Public Citizen v. FTC*,¹²² the D.C. Circuit refused to allow an exemption for advertisements on certain “utilitarian products” from the statutory commands of the Comprehensive Smokeless Tobacco Health Education Act, which required warnings on advertising for smokeless tobacco products. While recognizing that in the abstract the Commission might have practical problems associated with putting health warnings on items such as “golf balls,” and cuspidors, the court rejected the “administrative necessity” rationale for the exemption because it was not narrowly drawn:

Whatever merits this observation has in the abstract, we do not see the earthly connection it has in the broad exception that the commission has hacked out of the Act[,] . . . exempting T-shirts, beach blankets, and other items. . . .

Likewise, EPA’s broad proposed exemptions – allowing changes that will significantly increase emissions – cannot be shown in any way to be narrowly tailored to meet any abstract impossibility faced by the Agency in regulating any physical or operational changes. This is insufficient grounds for the agency to invoke “administrative necessity” exemption authority.

¹²⁰ 67 Fed. Reg. at 80,296.

¹²¹ *Alabama Power*, 636 F.2d at 359.

¹²² 869 F.2d 1541 (D.C. Cir 1989).

To the extent that this rulemaking is based on Agency predictions of the inability to adhere to the statutory command, it is only appropriate if there is no other mechanism provided by the statute to provide flexibility.¹²³ As demonstrated above, however, the agency has utilized the flexibility mechanisms authorized in the *Alabama Power* decision by promulgating *de minimis* emissions thresholds.

The EPA has failed to demonstrate that it has authority to rely on the “administrative necessity” doctrine to promulgate the proposed exemptions.

5. The *De Minimis* Doctrine and Industry Arguments

EPA’s administrative record contains various arguments by industry representatives and attorneys attempting to muster legal and policy justifications for EPA’s new proposed loopholes. These attempts fail. The following section of these comments examines some of these industry arguments.

The Washington, D.C. corporate law firm, Van Ness Feldman, has submitted a memorandum to EPA dated November 26, 2001 that purports to offer legal justification for the agency’s adoption of a “safe harbor cost threshold,” whose conceptual features bear an uncanny resemblance to the proposal’s cost allowance loophole.¹²⁴ This startling appearance of an industry lobbying memo dated November 2001, some 13 months before the publication of the proposed rulemaking, merely reaffirms what is apparent throughout the proposal and the inter-agency review materials accompanying this rulemaking: (1) EPA’s proposal is a gift to industry that is an outgrowth of industry lobbying and that weakens industry’s obligation to adopt protective pollution control measures; (2) the proposal follows the roadmap drafted by industry attorneys, including industry attorneys in pending NSR enforcement cases; and (3) as amplified

¹²³ *Alabama Power*, 636 F.2d at 360.

¹²⁴ “Legal Justification for the Adoption of a Rational Safe Harbor,” transmitted by Stephen C. Fotis, Esq., Van Ness Feldman, to William Harnett, U.S. EPA, OAQPS, November 27, 2001 (noting in transmittal letter that “[t]his paper is being submitted in response to the request made by the Agency during an October conference call with industry representatives on the possible adoption of a safe harbor cost test for the power generation sector.”) (“Van Ness Feldman memo”).

upon elsewhere in these comments, EPA's proposal rests upon incongruous "legal" interpretations and policy deviations that are more consistent with industry arguments than the government's own legal arguments in these enforcement cases.

The industry memorandum begins by noting that "[t]he suggestion has been made that the adoption of a rational safe harbor cost threshold for the NSR program is precluded because EPA's action is governed by the '*de minimis*' exemption doctrine." Indeed. This view has not only been expressed -- but consistently adhered to -- by EPA itself, along with the Department of Justice, before and after publication of the instant proposal.

Prior to the proposal, in papers filed in the various utility enforcement cases, EPA has confirmed that its authority to promulgate exemptions from the NSR "modification" definition is constrained by the *Alabama Power de minimis* doctrine.¹²⁵ Following EPA's publication of this proposal, utility company defense attorneys rushed into court arguing that the proposal represented EPA's abandonment of the legal and policy positions that its authority to promulgate exemptions from the NSR modification definition was limited to its *de minimis* authority:

[I]t is apparent from EPA's statements in the Federal Register that, contrary to the Government's position in this case, EPA has the authority to broadly exempt projects from NSR as "routine." The proposed regulations go beyond the extraordinarily limited reading of EPA's authority advanced in the Government's pleadings in this case. EPA has proposed four possible approaches to what is "routine," *none* of which can fairly be described as *de minimis* or narrow. Indeed, *nowhere* in this *Federal Register* document does EPA refer to *Alabama Power*, describe the "routine" provision as an exercise of *de minimis* authority, or discuss any limitation on its ability to interpret the "routine" provision.¹²⁶

The Department of Justice and EPA filed a response to SIGECO's notice of supplemental authority, reaffirming EPA's view (set forth in earlier briefs in this case and others) that its authority to promulgate exemptions from the NSR "modification" definition is constrained by the

¹²⁵ See, e.g., Pl.'s Opposition to Def.'s Motion for Summary Judgment on Fair Notice, Civil Action No. IP99-1692-C-M/S, at 7-9.

¹²⁶ See SIGECO's Notice of Supplemental Authority on Fair Notice and Routine Maintenance, Civil Action No. IP99-1692-C-M/S (Jan. 8, 2003), at 1-2 (emphases in original).

Alabama Power de minimis doctrine, and noting that “EPA’s position is not affected by the recently published rulemaking proposal.”¹²⁷ Thus, whatever comfort SIGECO’s attorneys had hoped to gain from the proposal, or whatever hope the authors of the Van Ness Feldman memo hold out about the breadth of EPA’s authority to create expansive exemptions from the modification definition, it is clear that EPA lacks statutory authority to craft exemptions from the modification definition beyond that conferred by the *Alabama Power de minimis* doctrine.

This poses a dilemma to the authors of the industry memo, SIGECO’s defense attorneys, and the proponents of EPA’s proposal, but for altogether different reasons. For the industry memo authors, the *de minimis* doctrine -- and its narrowing of EPA exemption authority to an extremely limited sphere -- precludes EPA’s adoption of the very expansive, rule-swallowing exemption interpretation undergirding the memo’s “safe harbor cost threshold” -- and all of the proposal’s exemptions.

The industry memo devotes its energy to arguing that EPA’s modification exemption authority is not limited to the exercise of *de minimis* authority due to a basic, inescapable but unstated truth: industry cannot get away with escaping cleanup obligations for the vast range of significant pollution increases that it desires if EPA’s exemption authority is so limited. In other words, the industry memo’s safe harbor cost threshold -- and EPA’s proposed exemptions in turn -- cannot be defended as exercises of EPA’s *de minimis* authority and therefore are unlawful.

Ironically, the defense attorneys for SIGECO make this point perhaps best with respect to EPA’s proposal:

The proposed regulations go beyond the extraordinarily limited reading of EPA’s authority advanced in the Government’s pleadings in this case. EPA has proposed four possible approaches to what is “routine,” *none* of which can fairly be described as *de minimis* or narrow. . . .

. . . EPA proposes a rule that would categorically exempt activities at a source as “routine” if they cost less than an annual

¹²⁷ See Pl.’s Response to Def.’s Notice of Supplemental Authority on Fair Notice and Routine Maintenance, Civil Action No. IP99-1692-C-M/S (Jan. 13, 2003), at 1.

allowance. Although the amount of such an allowance is not specified, the discussion of this proposed routine allowance contemplates projects costing hundreds of thousands of dollars per year. *See* 67 Fed. Reg. 80,295. And EPA referenced a figure of 5% of the replacement cost of a unit, which is contained in an IRS publication and used in the NSPS regulation, as a possible approach. 67 Fed. Reg. 80,298. This cost could easily reach into the millions of dollars, and is much larger than the 1991 and 1992 SIGECO projects, and could exceed the 1997 project as well. Clearly such a rule extends to much more than a narrow class of *de minimis* projects. . . .

For example, EPA proposes exempting any equipment replacement activity that involves use of functionally similar or “like-kind” equipment, subject to a cost limitation to prevent the replacement of an entire process unit, such as a boiler. 67 Fed. Reg. 80,296. No figure is proposed, but the EPA references 50% of the facility replacement cost as a potential limit. 67 Fed. Reg. 80,301. Again, this is well in excess of what EPA could do if the Government’s position in this case were correct [that EPA’s ability to adopt exemptions from the modification definition is limited by the *de minimis* doctrine].¹²⁸

The dilemma facing SIGECO and its defense attorneys is even more acute, however. The company stands accused of violating the Act’s NSR modification provisions and avoiding pollution controls that would have significantly reduced harmful air pollution and protected public health. And the company’s defense relies upon a series of untenable legal interpretations that have been categorically rejected by every EPA administration starting with the Reagan administration (including the current administration), EPA’s Environmental Appeals Board, and numerous federal courts. The government does not believe the company’s modifications to be routine maintenance. And, in prosecuting the case, EPA and the Justice Department are stating the obvious, that EPA lacks authority under the statute to adopt exemptions beyond the *de minimis* doctrine, certainly not the expansive, harmful, rule-swallowing interpretation advanced by SIGECO’s attorneys. The government’s response to SIGECO’s supplemental filing reaffirms this limited statutory authority.

¹²⁸ SIGECO Supplemental Filing at 2-4.

Finally, from EPA's perspective, there is a dilemma entirely of the administration's own creation, when it forced EPA to take comment on the sweeping, harmful exemptions in this proposal. EPA and the Justice Department, in their response to SIGECO's supplemental filing, take pains to emphasize that "the agency is merely soliciting public comment on *possible* changes to regulations," even going so far as to highlight that "[c]ounsel for the United States have consulted with EPA management regarding SIGECO's 'Supplemental Notice' and have confirmed that the United States' briefs currently before this Court accurately represent EPA's views, and that EPA's position is not affected by the recently published rulemaking proposal."¹²⁹ But adoption of the proposal would represent a total reversal of course from the administration's legal, policy and enforcement posture in the pending enforcement cases; it would represent embrace of the discredited, consistently rejected, and extremely harmful attempts by industry defendants – the utility industry in particular – to render the NSR modification protections meaningless; and it would represent abandonment and repudiation of the longstanding, consistently held legal interpretation that any exemptions to the modification definition must be very narrow and are limited by the *de minimis* doctrine.

From the perspective of the Clean Air Act, responsible public policy, and protection of air quality and the public's health, however, there is no dilemma posed by the proposal and the government's ongoing enforcement cases. For there is a simple, unifying conclusion that reconciles the two: EPA's proposal violates the Clean Air Act and is irresponsible public policy, in the same way and for essentially the same reasons that the defendants' conduct is unlawful and harmful. The enforcement cases, in turn, are upholding the protective purposes of the NSR program and are fully consistent with the Clean Air Act. The proposal and the utility industry defenses rest on the same abrogation of the Clean Air Act's modification definition and its public health protections. EPA should vigorously enforce the Clean Air Act and abandon this illegal, harmful proposal.

¹²⁹ See EPA Response to SIGECO Supplemental Filing, at 1.

* * *

The industry memo claims to find support for its argument that EPA is not limited by the *de minimis* exemption doctrine in the observation that EPA did not originally justify its existing regulatory definition of physical change or change in the method of operation on the basis of the *de minimis* exemption doctrine.¹³⁰ There is no legal support or significance to be drawn from this observation however. First and most obviously, EPA offered no legal justification for its adoption of this definition, as the very passages cited by the industry memo demonstrate.¹³¹ The excerpt quoted by the industry memo, in which it purports to find legal justification, is nothing more than conclusory description of what EPA's rule was accomplishing.¹³² It certainly does not represent statutory analysis or legal justification.

Second, EPA's final rule preambles often fail to provide express legal justification or explanation for the agency's actions. Lamentable as this may be, it is not uncommon, and perusal of the remainder of the 1980 rule addressed by the industry memo reveals this to be the case for other portions of the rule as well.

These arguments in the industry memo fail to provide any legal support for the argument that EPA's authority to create exemptions from the modification definition is not constrained by the *de minimis* exemption doctrine.

D. The Proposed Rule Unlawfully Merges the NSR Program With the NSPS Program.

EPA proposes to incorporate key elements of the NSPS program into the exclusions from the NSR definition of "major modification" with both its annual maintenance allowance and equipment replacement proposals. In its annual cost allowance exemption, EPA proposes to use an increase in the maximum achievable hourly emission rate, rather than aggregate emission

¹³⁰ Van Ness Feldman memo at 3-4.

¹³¹ *Id.* at 3. See 45 Fed. Reg. 52676, 52693 (Aug. 7, 1980). The same conclusion is true with respect to EPA's adoption of the NSPS provisions cited in the industry memo. Van Ness Feldman memo at 4.

¹³² *Id.* at 3.

levels, as a “safeguard” against abuse of that approach.¹³³ The maximum hourly emission rate, while central to the NSPS definition of modification, is a concept heretofore unknown in the NSR program.

In order to calculate an annual maintenance allowance, EPA is also proposing to use the IRS AAGRAP, or similar industry manuals or databases, to establish a specified annual maintenance, repair and replacement percentage on an industry-specific basis.¹³⁴ Although the IRS stopped using AAGRAP almost 20 years ago, it continues to be used in the NSPS program to establish an industry-specific annual allowance for the purpose of determining whether an investment to improve the production rate of a facility constitutes a capital investment. In its proposed equipment replacement exemption, EPA is considering incorporation of the NSPS reconstruction provision into NSR by allowing the replacement of identical or functionally equivalent equipment to escape NSR protections so long as the project cost does not exceed 50 percent of the fixed capital cost that would be required to construct a comparable entirely new unit.¹³⁵

The merger of the NSPS and NSR programs, as reflected in these proposed changes in the NSR definition, is fundamentally flawed. As reflected in the statutory scheme, and recognized repeatedly by Congress, the courts, and EPA itself, these programs are designed to achieve fundamentally different purposes in the nation's air pollution control strategy. While both programs are concerned with balancing environmental protection and economic growth, they strike this balance in significantly different ways.

The NSPS program, introduced in the 1970 amendments to the Clean Air Act, grew out of Congressional concern that the state planning process then in effect “was insufficient by itself to achieve the goal of protecting and *improving* air quality.”¹³⁶ NSPS was primarily concerned

¹³³ 67 Fed. Reg. at 80,299.

¹³⁴ *Id.* at 80,298.

¹³⁵ *Id.* at 80,301.

¹³⁶ *ASARCO v. EPA*, 578 F.2d at 327 (emphasis in original).

with implementing a uniform technological baseline that would not only spur the development of new pollution control technology, but would also set a national floor for permissible control technology. As stated in the 1970 House debates:

The purpose of this new authority is to prevent the occurrence anywhere in the United States of significant new air pollution problems arising from [new stationary] sources either because they generate extrahazardous pollutants or because they are large-scale polluters. . . . At present emissions standards for stationary sources are established exclusively by the States. . . . The promulgation of Federal emission standards for new sources in the aforementioned categories will preclude efforts on the part of the States to compete with each other in trying to attract new plants and facilities without assuring adequate control of extrahazardous or large-scale emissions therefrom.¹³⁷

Representative Vanik explained further:

A steel mill, operating anywhere in Ohio, or the Nation, should be required to make the same kind of effort to control the pollution emission of an oxygen steel furnace. A steel mill creates pollution in certain ways wherever it is located. The procedures to control this form of pollution are likely to be substantially alike. If we would insist on uniform approaches for pollution control of this industry – wherever the plants are located – the competitive benefits of a dirty plant would be eliminated. . . . There would be no profit in pollution. There would be no production cost advantage to the dirty producer. When the profit is eliminated in pollution by uniform high standards in air quality and pollution control, the battle will be won.¹³⁸

By 1977, however, states had made little headway in the battle for clean air. Congress recognized that the existing NSPS program was not sufficient either to clean the air in the most polluted areas of the country, or to keep the air clean in areas that currently complied with ambient air quality standards. In addition to strengthening the NSPS program, Congress determined that “some mechanism [was] needed to assure that before new and expanded facilities are permitted, a State demonstrate that these facilities can be accommodated within its overall

¹³⁷ 91 Cong. House Debates 1970, 19202, 19209 (Representative Jarman).

¹³⁸ *Id.* at 19218. *See also Nat’l Asphalt Pavement Ass’n v. Train*, 539 F.2d 775, 783 (D.C. Cir. 1976) (discussing 1970 legislative history).

plan to provide for attainment of air quality standards.”¹³⁹ Accordingly, Congress adopted the NSR program.¹⁴⁰

At the heart of NSR is a preconstruction review and permitting program that was rejected as part of NSPS in 1970 because it was viewed as “overly elaborate and would impose a heavy and unnecessary burden on both the Government and industry.”¹⁴¹ Among other things, the preconstruction permit requires a case-by-case determination of BACT (or LAER if the source is locating in a nonattainment area) rather than the automatic application of NSPS, and a demonstration that emissions from the source will not cause or contribute to the deterioration of air quality.

In addition, Congress chose to place much greater emphasis on public health and impacts on air quality, and less emphasis on economic feasibility, in designing the NSR program. For example, in the Conference Committee Report for the 1977 Amendments, in a discussion of the LAER requirement for the NSR program, the Committee stated that “[i]n determining whether an emission rate is achievable, cost will have to be taken into account, but cost factors in the nonattainment context will have somewhat less weight than in determining new source performance standards under section 111. Of course, health considerations are of primary importance.”¹⁴²

The NSR program, by its terms, does not apply to sources in operation or under construction when the program was created in 1977. Congress did not intend to create a perpetual exemption from NSR for existing sources, however. To prevent this result, Congress defined construction for the purposes of NSR to include modifications, as that term is defined in

¹³⁹ S. Rep. No 95-127, *55 (May 10, 1977).

¹⁴⁰ 42 U.S.C. §§ 7470-7479 (Prevention of Significant Deterioration); 7501-7515 (nonattainment areas).

¹⁴¹ 91 Cong. Senate Debates 1970, at 42490 (letter from Secretary of Health, Education and Welfare).

¹⁴² 95 Cong. Conf. Report H. Rept. 564, 175 (Aug. 3, 1977). *See also* House Rep. No. 95-294, *214-15.

the NSPS program, CAA § 111(a)(4).¹⁴³ Although Congress incorporated the statutory NSPS definition of modification into the NSR program, EPA appropriately adopted different definitions of modification in order to comply with the different statutory purposes of the two programs. Under NSPS, EPA measures "increases [in] the amount of any air pollutant" for the purpose of determining whether a modification has occurred in terms of hourly emission rate increases in order to be consistent with the program's technology-based purpose.¹⁴⁴ Under the NSR definition of modification, emissions increases are measured in terms of total annual emissions in order to be consistent with the NSR program's air quality-based purpose.¹⁴⁵

Courts have long recognized the different purposes and requirements of the NSR and NSPS programs, and have rejected attempts to import provisions and rationales from one program to the other. In *Alabama Power*, the D.C. Circuit upheld EPA's application of the "bubble concept" to calculate emission increases in NSR, after having rejected its use in the NSPS program.¹⁴⁶ As the Court explained: "EPA has latitude to adopt definitions of the component terms of 'source' that are different in scope from those that may be employed for NSPS and other clean air programs, due to differences in the purpose and structure of the two programs."¹⁴⁷

In *WEPCO*, the Seventh Circuit observed that by 1977 the NSPS program, with its focus on hourly rates of emissions, had resulted in "only varying degrees of success in controlling pollution in different parts of the country."¹⁴⁸ Consequently, Congress added the PSD program, "concerned with increases in total annual emissions" from major sources of pollution rather than its hourly rate of emissions, and ensuring that sources "in relatively unpolluted areas would not

¹⁴³ 42 U.S.C. §§ 7479(2)(C); 7501(4). See *Alabama Power*, 636 F.2d at 400.

¹⁴⁴ 40 C.F.R. § 60.14(a), (b).

¹⁴⁵ *Id.* § 51.165(v), (vi). See 57 Fed. Reg. 32314 (July 21, 1992) (Emissions increase component of modification definition differs under NSPS and NSR, reflecting distinct purposes of the two programs).

¹⁴⁶ 636 F.2d 323 (D.C. Cir. 1979). See *ASARCO v. EPA*, 578 F.2d 319 (D.C. Cir. 1978).

¹⁴⁷ 636 F.2d at 397-98. See also *Potomac Elec. Power Co. v. EPA*, 650 F.2d 509, 518 (4th Cir. 1981) (upholding EPA's different construction of the definition of "stationary source" based on "a significant difference between the PSD and NSPS programs," noting the emphasis in PSD on new emissions and the emphasis in NSPS on technology "without regard to the effect the emissions...will have on overall air quality").

¹⁴⁸ 893 F.2d at 904.

allow a decline of air quality”¹⁴⁹ Likewise, the Ninth Circuit has, on at least two occasions, rejected attempts to import provisions and rationales from one program to the other. As stated in *Citizens for Clean Air v. EPA*:

While the NSPS program and the PSD are both interrelated parts of a comprehensive federal legislative effort to protect and enhance this national’s air quality, the *two programs play different roles in achieving that broad general goal*. . . . The focus of the NSPS program . . . is upon the “affected facility” component in a stationary source, i.e. the particular apparatus to which a standard is applied. The NSPS program is therefore equipment oriented. On the other hand, the PSD program covers the whole stationary source, and focuses on where the plant will be located and its potential effect on its environs. The PSD program is therefore site oriented.¹⁵⁰

The NSPS and NSR programs were designed by Congress to achieve fundamentally different purposes in the nation’s air pollution control strategy, as the foregoing discussion demonstrates. Proposals to incorporate provisions of the NSPS program into the NSR program must be evaluated within this statutory and legal framework.

1. Applicability Safeguards, Including Any Activity That Results in an Increase in Maximum Achievable Hourly Emissions

EPA acknowledges that its proposed annual maintenance, repair and replacement allowance approach to the RMRR exemption carries the risk of exempting from NSR “activities that can be undertaken at a facility that we believe should not be included within the maintenance, repair and replacement allowance because, due to their very nature, they may significantly alter the design of the source or they may result in significantly greater emissions.”¹⁵¹ Accordingly, it has proposed three “safeguards” intended to prevent this from occurring. The first two safeguards would bar owners or operators from using the annual allowance to add a new process unit or to replace an entire process unit. The third safeguard would bar use of the annual

¹⁴⁹

Id.

¹⁵⁰ 959 F.2d 839, 849 (9th Cir. 1992) (emphasis added) (quoting *Northern Plains Res. Council v. EPA*, 645 F.2d 1349, 1355-56 (9th Cir. 1981)). See also *In re: Tennessee Valley Authority*, 9 E.A.D. 357, 385 (EAB 2000) (“Although the NSPS program is focused on technology requirements for source categories, the NSR requirements focus on the location of the source and its potential effect on the environment.”).

allowance to exclude “any activity that results in an increase in [the] maximum achievable hourly emissions rate of a regulated NSR pollutant at the stationary source or in the emission of any regulated NSR pollutant not previously emitted.”¹⁵¹ EPA seeks comment “on the appropriateness and adequacy of these proposed safeguards or any additional safeguards that may be appropriate.”

It goes without saying that the construction of a new process unit or the replacement of an entire process unit should not under any circumstances be viewed as a non-physical change, as that term is used within the context of the NSR program. That these activities must be singled out as “safeguards” highlights the major weakness of the grossly over-inclusive annual allowance exemption and why it should be rejected. As an initial point, major physical changes can be made to a facility, resulting in significant emissions increases, without constituting a complete process unit replacement. Moreover, simply stating that the annual allowance cannot be used to shield the replacement of an entire process unit from NSR does nothing to prevent this from occurring on a piecemeal basis over several years. In short, these two safeguards do nothing to address the fundamental flaw of the annual allowance exemption.

EPA is properly concerned about the potential for the exemption to shield from NSR activities that may result in significantly greater emissions and the need to safeguard against this. Focusing on maximum achievable hourly emission rates rather than actual emissions, however, does not provide an adequate safeguard.

The emissions rate safeguard proposed here is similar to the emissions increase threshold used to determine whether a physical change constitutes a modification under NSPS. Yet it is the manner in which the two programs define “emissions increase” that forms a fundamental distinction between the two programs. As the Seventh Circuit has observed:

To determine whether a physical change constitutes a modification for purposes of NSPS, the EPA must determine whether the change increases the facility's *hourly rate* of emission. . . . For PSD purposes, current EPA regulations

¹⁵¹ 67 Fed. Reg. at 80,299.

¹⁵² 67 Fed. Reg. at 80,299.

provide that an increase in the *total amount* of emissions activates the modification provisions of the regulations.¹⁵³

Likewise, in the preamble to the WEPCO rule, EPA pointed to the difference in how the emissions increase is measured as the primary distinguishing characteristic between the two programs: “[The] two step test for determining whether activities at an existing facility constitute a modification subject to new source requirements . . . [branches apart at the emissions increase step,] reflecting the fundamental distinction between the technology-based provisions of NSPS and the air quality based provisions of NSR.”¹⁵⁴

Because of NSR's focus on a source's location and its potential effect on air quality and the environment, the source's hours of operation and overall annual emissions are key factors in determining whether NSR is triggered. Under the proposed annual allowance exemption, however, a physical change to a source can result in an increase in hours of operation or an increase in production, and accordingly a significant increase in emissions, and still escape NSR. The proposed maximum hourly emissions rate safeguard will do nothing to prevent this from occurring.

EPA's proposal to incorporate a maximum achievable hourly emissions rate test for measuring emissions increase is in direct conflict with the statutory purpose of NSR. To be effective and consistent with the purposes of the program, recognizing that we oppose this loophole categorically, any safeguard to a proposed annual allowance exemption in NSR would have to be based on increases in total annual emissions and not maximum achievable hourly emissions rates.

2. Reliance on AAGRAP or Similar Industry Manuals or Databases to Justify an Exemption from the Permitting Requirements

EPA proposes to incorporate a second NSPS concept into its annual allowance exemption. Namely, EPA has identified “the IRS AAGRAP, engineering reference manuals, and

¹⁵³ *WEPCO*, 893 F.2d at 905 (cites omitted, emphasis in original).

¹⁵⁴ 57 Fed. Reg. 32,314 (July 21, 1992).

actual industry data available to EPA” as sources useful for establishing an annual allowance percentage. It believes AAGRAP may be of particular value in this regard, noting its use in the NSPS program for over 20 years, and solicits comment “on the extent to which the AAGRAP, or some derivative of the AAGRAP, may appropriately be employed if we determine that a safe harbor based on replacement cost is preferable.”¹⁵⁵ As explained elsewhere in these comments, any allowance-based exemption from NSR is unlawful and should be rejected. The proposal to use AAGRAP in the exemption to NSR further demonstrates this point. The history of the IRS AAGRAP, and its use in the NSPS program, is particularly instructive in this regard.

EPA's initial NSPS regulations exempted from the definition of modification “an increase in production rate, if such increase does not exceed the operating design capacity of the affected facility.”¹⁵⁶ When "operating design capacity" proved to be an elusive concept, EPA proposed to amend its regulations to use "capital expenditure" rather than "operating design capacity" as the limiting criterion for the production rate increase exemption.¹⁵⁷ After further adverse comments on the uncertainty surrounding the definition of "capital expenditure," EPA chose to adopt the IRS guidelines applying to property subject to depreciation to further clarify the meaning of "capital expenditure":

an expenditure for a physical or operational change to an existing facility which exceeds the product of the applicable "annual asset guideline repair allowance percentage" specified in the latest addition of Internal Revenue Service (IRS) Publication 534 and the existing facility's basis, as defined by section 1012 of the Internal Revenue Code.¹⁵⁸

¹⁵⁵ 67 Fed. Reg. at 80,298.

¹⁵⁶ 36 Fed. Reg. 24,876, 24,877 (Dec. 23, 1971).

¹⁵⁷ See 39 Fed. Reg. 36,946, 36,948 (Oct. 15, 1974) (“The proposed exemption implicitly defines 'design operating capacity' as that production rate which can be accomplished without making major capital expenditures on the stationary source containing the existing facility.”).

¹⁵⁸ 40 Fed. Reg. 58,416, 58,418 (Dec. 16, 1975) (codified at 40 C.F.R. § 60.2).

At the time, EPA saw its definition of capital expenditure as a way of providing “precise guidance... involv[ing] concepts and information which are available to all owners and operators and with which they are familiar.”¹⁵⁹

The IRS subsequently adopted a different method of depreciation. The last version of AAGRAP was published in December 1984. The IRS stopped using AAGRAP after this point because its repair allowance percentages no longer applied to property subject to the new depreciation rules.¹⁶⁰ Nevertheless, EPA continues to use the December 1984 version as “the latest addition” for the purpose of deciding whether a production rate increase has resulted from a capital expenditure and is therefore subject to NSPS.¹⁶¹

Given the fact that AAGRAP was abandoned by the IRS almost 20 years ago, it no longer serves the purpose for which it was intended when it was incorporated into the NSPS program -- to provide “concepts and information which are available to all owners and operators and with which they are familiar.” Moreover, since the manual has not been updated since 1984, it is a particularly inappropriate source to serve as the basis for setting industry-specific annual maintenance, repair and replacement allowance percentages. Consequently, it should not be relied on to any extent should EPA be determined to pursue a safe harbor based on replacement cost; such reliance would be arbitrary and capricious.

More fundamentally, using AAGRAP, or similar reference manuals or industry data, to establish an industry-wide maintenance, repair and replacement allowance in the NSR program is inconsistent with the clear statutory purposes of the program. As noted previously, NSPS focuses on uniform technological standards applied on an industry-wide basis. While AAGRAP may be well-suited to the “one size fits all” approach of NSPS, it bears no similar relationship to NSR's

¹⁵⁹ 40 Fed. Reg. at 58,416.

¹⁶⁰ See Applicability Determination Letter from Bill Vatauvuk, Office of Air Quality Planning and Standards, to Walt Stevenson (November 10, 1988).

¹⁶¹ See Applicability Determination Letter from John Seitz, Director, Office of Air Quality Planning and Standards, to William M. Guerry, Jr. (April 7, 1998).

source-specific case-by-case approach focused on protecting air quality in specific areas. In fact, AAGRAP directly conflicts with this NSR approach and its objectives.

Finally, EPA's proposed use of AAGRAP in the NSR program goes well beyond its use in the NSPS program. Namely, EPA proposes to apply the annual repair allowance percentage derived from AAGRAP to the *replacement cost* of a source to determine whether physical changes to a source that result in significant emissions increases will be exempt from NSR.¹⁶² By contrast, AAGRAP is applied to a source's *investment cost* to determine whether changes resulting in a production and emissions rate increase will be exempt from NSPS.¹⁶³

The capital expenditure test is intended to provide a limited exemption from NSPS for production rate increases to accommodate normal fluctuations in the business cycle. As EPA has observed, “[w]here the economic realities of the case are that increased production and, hence, emissions, are due to normal fluctuations in the business cycle rather than a considered decision to invest in substantial capital improvements, the NSPS do not apply.”¹⁶⁴ EPA has limited the scope of this exemption by applying AAGRAP to the original basis of a source rather than the adjusted basis or replacement cost.¹⁶⁵

In addition to using a facility's investment cost to limit the scope of the production rate increase exemption, EPA has observed that reliance on a source's original basis is consistent with the overall purpose of the NSPS modification regulations.

The effect of using original basis is that the greater the age of an affected facility, the more likely it is that a given investment resulting in increased production will be deemed a capital expenditure and trigger NSPS. This is consistent with Congress' intent in adopting new source performance standards. Older facilities are more likely to use outdated equipment which does not reduce pollution to the extent more current technology does. Congress included modified sources within the new source

¹⁶² 67 Fed. Reg. at 80,298.

¹⁶³ See Guerry Applicability Determination Letter, *supra*.

¹⁶⁴ Clay Memo.

¹⁶⁵ *Id.*

performance standards of section 111 to ensure the use of new technology on such sources.¹⁶⁶

This rationale applies with even greater force to NSR and its air quality impact focus. Yet, not only is EPA proposing to incorporate AAGRAP into the NSR program, it would expand its use to exempt sources from NSR well beyond its use in NSPS by applying the repair allowance percentage to a source's replacement cost. This, too, is arbitrary and capricious. The proposal should be rejected outright.

a. EPA's AAGRAP Formulation Grossly Overstates Actual Utility Experience by Many Orders of Magnitude.

As set forth in detail above, there is no support in the language, structure or history of the Clean Air Act, nor in judicial interpretations of the law, to justify or support the creation of blanket, categorical exclusions for activities (physical or operational changes) based solely on cost.¹⁶⁷ Indeed, if this proposal is finalized, it will directly contravene Congress's intention that older facilities will eventually adopt into the more stringent pollution control requirements imposed by the statute on new sources, or alternatively, that owners of these sources will make the economic judgment to replacement with cleaner new sources.

The proposal is arbitrarily vague in its details concerning the actual percentages of replacement cost to be used in each industry for the purposes of developing facility-specific RMRR annual allowances. For example, the proposed rule text at sections 51.165(A)(1)(xlili), 51.166(B)(53), 52.21(B)(55), 52.24(f)(25), and Appendix S to part 51 contains a Table 1 that lists various industry sectors, but includes only blank spaces for the "industry sector percentages" to be used to calculate the annual allowance amounts for each facility. This is arbitrary and capricious. It is therefore possible only to speculate about what percentages EPA might ultimately adopt for each industrial category. The full impact of the proposed rule on air quality,

¹⁶⁶ *Id.*

¹⁶⁷ *WEPCO*, 893 F.2d at 912. While cost is one of the several factors considered by the *WEPCO* court in its case-specific assessment of whether a power plant project qualifies as "routine" maintenance,

from a practical perspective, depends heavily on the percentages ultimately selected by EPA and promulgated in a final rule. But commenters cannot reasonably anticipate or project what those percentages will be, given the limited level of detail provided by EPA in the preamble and in the proposed rule text itself. Accordingly, the public has been denied the opportunity to comment on EPA's proposal required by the Clean Air Act and the Administrative Procedure Act.

What we *can* discern from the proposal is that EPA's preferred approach is to use the IRS AAGRAP as the source of specific percentages of replacement costs purportedly representative of "routine" activities. EPA states that AAGRAP for various industries ranges from 0.5 percent to 20 percent of "invested cost."¹⁶⁸ EPA provides in the preamble text examples for the aerospace industry (7.5 percent), electric utility steam generation for the production of electricity for sale (5 percent),¹⁶⁹ and cement plants (3 percent).¹⁷⁰ But EPA arbitrarily proposes to apply the AAGRAP figures to the replacement cost for the source.¹⁷¹

While the NSPS regulations reference IRS Publication 534 as the source of the percentages,¹⁷² looking for the specific percentages for a particular industry in the latest edition of IRS publication 534 will yield no information at all, as the IRS has not relied on these repair percentages in over 20 years. The Agency also notes, however, that it "may or may not . . . make some adjustments" to the percentages, or that it might rely on other sources, including the North American Electric Reliability Council Generating Availability Data System (NERC/GADS)

repair, or replacement, no court has ever stated that it would be appropriate for cost to be the sole factor in this analysis.

¹⁶⁸ *Id.* at 80,298/2. "Invested cost" means the original cost basis in the unit, unadjusted for inflation or for depreciation. *See* 40 C.F.R. § 60.2; I.R.C. § 1012.

¹⁶⁹ The AAGRAP dates from a time period before industrial steam generators were permitted to sell excess electricity to the grid. For that reason, there are two AAGRAP values associated with utility steam generation in the IRS materials. Examination of IRS Rev. Proc. 83-85, 1983-1 C.B. 745, Sec. 3 shows that the AAGRAP for electric utility steam generation for production of electricity for sale, Class 49.13, is 5 percent of the original cost basis of the asset (not the current asset replacement cost). By contrast, the AAGRAP for industrial steam generation (used to produce electricity to support industrial processes only), Class 00.4, is 2.5 percent of the original cost basis of the asset (not the current asset replacement cost).

¹⁷⁰ *Id.*

¹⁷¹ *Id.* at 80,308/1-2 (proposed § 51.165(v)(C)(1)(xlili)); 80,309/2 (proposed § 51.166(b)(53)); 80,310/3 (proposed Appendix S to Part 51, II.A.210; 80,312/1 (proposed § 52.21(b)(55)); and 80,313/2 (proposed § 52.24(f)(25)).

database¹⁷³ or unspecified “standard industry reference manuals.”¹⁷⁴ This lack of specificity and indeterminacy is a thoroughly arbitrary and capricious basis for a rule proposal and for providing opportunity for comment to the public.

EPA’s proposal to use the AAGRAP as the source of the allowance percentages is technically problematic¹⁷⁵ for several reasons. First, the Class Life Asset Depreciation Range (CLADR) system, of which the AAGRAP is a part, is no longer in use even for tax purposes, having been replaced in the early 1980s by the accelerated depreciation system. Only assets that have been under the same ownership since before the 1981 promulgation of the IRS accelerated depreciation system can still elect to use the old CLADR system including the AAGRAP.¹⁷⁶

Although it is true that in very broadest principle, the AAGRAP concept was intended to address, for tax purposes, the same issue EPA claims to be grappling with here – *i.e.* distinguishing between repairs that prolong life and repairs that are more routine in nature – there are many more differences than similarities between how the IRS used the AAGRAP system and how EPA proposes to use it here.

In the old IRS CLADR system, a taxpayer could elect a repair allowance percentage (“rpa”), allowing it to deduct as repair costs those improvement costs incurred each year up to the amount determined as the product of the rpa and the original cost basis of the asset. EPA however, proposes to use the fair market value (or replacement cost) of the entire source as the multiplicand, thus significantly inflating the resulting value in two ways: by using replacement cost instead of original cost basis, and by using the entire source rather than the specific component.

¹⁷² See 40 C.F.R. § 60.2.

¹⁷³ MSB Energy Associates reviewed this database for us and found no publicly available information related to maintenance repair and replacement costs.

¹⁷⁴ *Id.* at 80,298/2, 80,294/2.

¹⁷⁵ We discuss elsewhere that creation of any cost-based exemption from NSR is not legally justifiable.

This not only grossly inflates the allowance amount, but it also divorces the concept from its original basis in tax policy in two ways. The percentages were originally paired with the cost basis of the asset¹⁷⁷ in an attempt to quantify the kinds of costs that were indeed “routine” – frequent, small in scope, non-capital expenditures incurred in order to keep equipment operational over the course of the expected life of the asset – not major life-extension projects aimed at keeping the asset functioning beyond its “useful life.”¹⁷⁸ In addition, these percentages were based on (and in the tax regulation specifically tied to) the concept of an acceptable time period for depreciation of the asset, which, for the electric steam generating industry was defined as a range of between 22.5 and 33.5 years.¹⁷⁹ In other words, assets older than 33.5 years were fully depreciated, and not (in theory) continuing to use the AAGRAP. Yet EPA now seeks to use these percentages as the underpinning of an effort to allow perpetual life extensions for plants put into service well before 1977.

3. Incorporating the NSPS Reconstruction Threshold Into the Equipment Replacement Approach

EPA is also proposing to borrow a central NSPS concept for its proposed equipment replacement exemption. Under the equipment replacement proposal, replacement of existing equipment with identical or functionally equivalent equipment will be exempt, so long as the cost of the replacement does not exceed a fixed cost threshold. The NSPS reconstruction provision, which triggers NSPS whenever the cost of a project exceeds 50 percent of the cost required to build a comparable new facility, is cited as a model of how EPA anticipates structuring this exemption. EPA solicits comment “on an equipment replacement cost approach based on the

¹⁷⁶ For that reason, looking in the “latest edition of Internal Revenue Service (IRS) Publication 534” for the percentages, as directed in 40 C.F.R. § 60.2 (the NSPS rules), and suggested by the Agency, 67 Fed. Reg. 80294/2, 80298/2, yields no information related to AAGRAP percentages.

¹⁷⁷ Again, this is the “unadjusted basis,” or historic cost basis, *i.e.*, the original cost of the asset to the taxpayer, without regard to intervening depreciation. While EPA apparently considered applying AAGRAP as IRS intended, see 67 Fed. Reg. 80,297/2, the Agency rejected it for reasons varying from the unavailability of original cost data for older sources (an extremely unconvincing argument, as this information is necessarily kept on file for tax purposes), to alleged inequities between types of facilities and industries (which are also, it would seem, reflected in the different AAGRAP themselves).

¹⁷⁸ See *WEPCO*, 893 F.2d at 912.

NSPS program to determine whether identical or functionally equivalent replacement activities constitute RMRR without regard to other considerations,” and “whether the capital replacement percentage should be 50 percent or another lesser percentage.”¹⁸⁰

An existing facility becomes subject to NSPS when it undergoes either “modification” or “reconstruction.” “Reconstruction” is defined by regulation in part as “the replacement of components of an existing facility to such an extent that: (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility.”¹⁸¹ Unlike the modification provisions, which require both a physical or operational change and an increase in the maximum hourly emissions rate to trigger NSPS, the reconstruction provision triggers NSPS once the cost threshold is crossed without regard to the impact on emissions. When the reconstruction provision was first proposed, EPA explained:

When a facility is completely replaced with a newly constructed facility, that facility is subject to standards of performance. The purpose of this proposed provision is to discourage the perpetuation of a facility, instead of replacing it at the end of its useful life with a newly constructed affected facility.¹⁸²

“Reconstruction,” in the proposal, was to be determined by the Administrator, “on a case-by-case basis,” considering “technical and economic parameters in determining whether a substantial portion of a facility [had] been replaced.”¹⁸³ In the final promulgation of the provision, EPA chose a 50 percent replacement cost threshold for “reconstruction” rather than the proposed case-by-case determination, and responded to concerns “that the Agency is attempting to delete the emission increase requirement from the definition of modification,” clarifying that “[t]he Agency’s actual intent is to prevent circumvention of the law.”¹⁸⁴ Indeed, “the purpose of the

¹⁷⁹ IRS Rev. Proc. 83-85, 1983-1 C.B. 745 Class 49.13.

¹⁸⁰ 67 Fed. Reg. at 80,301.

¹⁸¹ 40 C.F.R. § 60.15(b).

¹⁸² 39 Fed. Reg. 36,946, 39,948 (Oct. 15, 1974).

¹⁸³ *Id.*

¹⁸⁴ 40 Fed. Reg. 58,417 (Dec. 16, 1975).

reconstruction provision is to recognize that replacement of many of the components of a facility can be substantially equivalent to totally replacing it at the end of its useful life with a newly constructed affected facility.”¹⁸⁵ The reconstruction provision was intended to draw a clear line between “modified” and “new” facilities, the former not subject to NSPS unless there has been an emission rate increase. “‘Reconstructed’ facilities, like new facilities, are subject to NSPS regardless of whether emissions from the plant of which they are part increase.”¹⁸⁶

EPA's proposal to use the NSPS reconstruction provision's replacement cost threshold concept to determine whether equipment replacement qualifies as RMRR turns the purpose of the reconstruction provision on its head. Whereas the impact on emissions is the determinative factor of whether NSPS is triggered until the cost of a plant refurbishment or life-extension project exceeds the reconstruction threshold, in which case NSPS automatically applies, this proposal would allow a source to avoid NSR altogether so long as the cost of the plant refurbishment or life extension project does not reach the threshold, regardless of the impact the change may have on emissions. Moreover, since equipment replacement would not constitute a “physical change” and therefore would not be considered a modification until it crossed the cost threshold, EPA would still allow a project to qualify as RMRR once it crossed the threshold, and avoid NSR, under the case-by-case test.¹⁸⁷ In short, this proposal would foster the very circumvention of the law that EPA was striving to prevent when it adopted the NSPS reconstruction provision.

The only constraint on this cost-based equipment replacement provision would be that the replacement equipment “must not change the basic design parameters of the affected process unit,” which for electric steam generating units “would mean maximum heat input and fuel consumption specifications.”¹⁸⁸ As discussed above, the NSPS and NSR programs use different measures of emissions increases designed to reflect the objectives of each program -- a maximum

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Id.

¹⁸⁶ *ASARCO Inc. v. EPA*, 578 F.2d at 325.

¹⁸⁷ 67 Fed. Reg. at 80,293-94.

¹⁸⁸ *Id.* at 80,301.

hourly emissions rate increase for the technologically-based NSPS program and a net yearly emissions increase for the ambient air quality-based NSR program. As in other areas of the proposed rule, this distinction has significant consequences for EPA's proposed changes. While maintaining a unit's basic design parameters might provide something of a safeguard in the NSPS context, it offers no safeguard to ensure that the statutory purpose of the NSR program will not be subverted. Under this proposal, the replacement of “identical or functionally equivalent” equipment can easily result in considerable yearly emissions increases by allowing older plants to run for longer periods of time without changing “the basic design parameters of the affected process unit.”¹⁸⁹ Indeed, this perverse result is exemplified by utility abuses that EPA is currently prosecuting as NSR violations. As the number of hours a plant can operate is irrelevant under the NSPS program, this is a concern that is unique to NSR and makes the proposed equipment replacement provision especially inappropriate under any circumstances, and particularly with a cost threshold borrowed from the NSPS reconstruction provision.

When EPA added the reconstruction provision to the NSPS program, it provided a clear justification for the provision and why it is consistent with the statutory language and the statutory purpose of the NSPS program – to draw a bright line for measuring when physical changes to a facility are so extensive that they should no longer be considered modifications and instead be treated as the equivalent of the construction of a new facility, and to prevent facilities from using exemptions to the NSPS modification provision to circumvent the law. EPA now proposes to borrow this concept from NSPS but to use it for an entirely different purpose in the NSR program – to expand the scope of physical or operational changes that can be made to a facility without triggering NSR, regardless of significant emissions increases that may result from the changes. Yet EPA fails to offer any justification for why this proposal is consistent with the statutory language and purpose of the NSR program, other than to point to its use in the NSPS program, albeit for a different purpose. In fact, EPA's proposed equipment replacement approach

Id.

to RMRR, while modeled after the NSPS reconstruction provision, conflicts with the purposes of that provision and bears no rational relationship to the statutory definition of modification. For these reasons, EPA's proposal is arbitrary and capricious, and the entire concept should be rejected.

There is no legal basis for industry-wide cost-based exemptions to the modification provisions of NSR. Should EPA decide to pursue this course, however, under no circumstances should the cost threshold come close to approaching the 50 percent reconstruction threshold in the NSPS program. In addition to excluding equipment replacement that change the basic design parameters of the process unit, the provision should also exclude any equipment replacement that results in an increase of total annual emissions.

IV. The Proposed Rule Would Exempt Activity That is Not Routine.

In the preamble to the rulemaking proposal, EPA declares that “the proposed changes provide a future category of activities that would be considered to be routine maintenance, repair and replacement (RMRR) under the NSR program.”¹⁹⁰ EPA fails to present any basis for the conclusion that the exclusions are rationally related to the concept of routineness. In fact, it is impossible to escape the conclusion that the exclusions would cover a wide range of activity that cannot be considered routine under any reasonable definition of the word.

“Routine” is defined as “habitual, ordinary, typical.”¹⁹¹ Other synonyms are “customary,” “regular,” and “everyday.”¹⁹² EPA stated in its *SIGECO* brief that

When interpreting this term, its dictionary meaning (habitual, regular, ordinary) and the objectives of the Clean Air Act are important guides. *See WEPCO*, 893 F.2d at 908 (interpreting the term “modification” in harmony with the Clean Air Act’s objectives). In particular, the term’s scope is constrained by EPA’s limited authority to create exemptions from the Clean Air

¹⁹⁰ 67 Fed. Reg. at 80,290/2. *See also id.* at 80,293/3 (“Today, we are proposing two categories of activities that will in the future be considered RMRR activities: activities within an annual maintenance, repair and replacement allowance and replacements that meet our equipment replacement provision criteria.”).

¹⁹¹ Random House Webster’s Unabridged Dictionary, 2d Ed. (1998).

¹⁹² *Id.*

Act requirements, a central holding in *Alabama Power Company v. Costle*, 636 F.2d 323 (D.C. Cir. 1980).¹⁹³

Later in the brief, EPA expressly acknowledged that the routine maintenance “exemption is narrow, in keeping with its status as a de minimis exemption.”¹⁹⁴ In response to SIGECO’s claim that EPA had embraced the losing argument in *WEPCO*, *i.e.*, that physical activity was routine as long as it was either “a like-kind replacement or standard industry practice,” the agency wrote that:

EPA’s authority to adopt the defendant’s interpretation is highly doubtful. As discussed earlier, EPA has extremely limited authority to exempt activities from the definition of “modification” under the Clean Air Act. The agency’s authority is limited to circumstances of administrative necessity (which EPA has never claimed) and circumstances having a “de minimis” or “trivial” impact on emissions. *Alabama Power*, 636 F.2d at 358-61.¹⁹⁵

The district court agreed with EPA’s statutory interpretation and held further that:

Giving the routine maintenance exemption a broad reading could postpone the application of NSR to many facilities, and would flout the Congressional intent evidenced by its broad definition of modification.¹⁹⁶

In the enforcement case against TVA, EPA takes the position that the “once-in-a-lifetime” projects undertaken at TVA’s coal-fired power plants could not be encompassed within any statutorily permissible construction of the regulatory term, “routine maintenance, repair and replacement.”¹⁹⁷ EPA bases that conclusion in part on the strict limits that the “exceedingly broad” statutory definition of “modification” places on the agency’s authority to exclude emissions-increasing activity. The following excerpt is a section of EPA’s brief to the 11th Circuit in the TVA case:

The EAB properly considered the statutory and regulatory backdrop of the routine activity exception in adopting EPA’s traditionally narrow

¹⁹³ Pl.’s Opposition to Def.’s Motion for Summary Judgment on Fair Notice at 7-8.

¹⁹⁴ *Id.* at 28.

¹⁹⁵ *Id.* at 28-29.

¹⁹⁶ *U.S. v. SIGECO*, 2003 WL 367901, at *13.

¹⁹⁷ Brief for Respondent EPA in *TVA v. EPA*, Case No. 02-1231-E (11th Cir.), at 5.

interpretation. *Final Order* at 48. EPA's narrow construction of the routine activity exception stems from two basic premises. First, Congress established an exceedingly broad definition of the term "modification" that triggers the requirements of the NSPS and NSR programs. EPA's narrow interpretation of the routine activity exception most effectively implements the objectives of the Clean Air Act. Second, the routine activity exception is a regulatory exception and, therefore, must be narrowly construed.

The starting point for analysis of the routine activity exception is the statutory definition of the term "modification":

The term "modification" means *any* physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted.

42 U.S.C. § 7411(a)(4) (emphasis added). EPA's regulations generally track the statute. *E.g.*, 40 C.F.R. § 52.21(b)(2)(i) ("major modification" defined as "*any* physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase" (emphasis added)).

But for the claimed applicability of the routine activity exception, the question of whether TVA's projects constituted physical changes was not seriously contested before the EAB, and Petitioners have not contested here the EAB's finding that all of TVA's projects constituted physical changes.[] *Final Order* at 43-44. This is not surprising. *See, e.g., WEPCO*, 893 F.2d at 908 ("courts considering the modification provisions of NSPS and PSD have assumed that 'any physical change' means precisely that"); *Alabama Power Co. v. Costle*, 636 F.2d 323, 400 (D.C. Cir. 1979) (term "modification" not limited to physical changes exceeding a certain magnitude). The definition of physical or operational change is so broad in fact that EPA has declared that, standing alone, it would encompass the repair or replacement of a single leaky pipe. *WEPCO*, 893 F.2d at 905; 57 Fed. Reg. at 32,316.

In addition to recognizing the unusually broad sweep of the statute, the EAB also appropriately relied on the general rule of construction that exceptions to generally applicable regulations should be construed narrowly. *Id.* at 47 (citing *O'Neal v. Barrow County*, 980 F.2d 674, 677 (11th Cir. 1993)); *see also Auer v. Robbins*, 519 U.S. 452, 462-63 (1997) (recognizing general rule of construction for regulations). The maxim is particularly apt where the regulatory exception is applied to a statute of sweeping scope, as is the case here. *See O'Neal*, 980 F.2d at 677. Indeed, in the NSR context specifically, EPA's authority to limit the coverage of the statute is narrow. *Alabama Power Co. v. Costle*, 636 F.2d 323, 355-61 (D.C. Cir. 1979) (EPA has the authority to exempt *only* those activities when the benefits of regulation are trivial (or "*de minimis*")

or when regulation would be administratively impossible). EPA has consistently applied this principle to its interpretation of the routine activity exception. *See also National-Southwire Aluminum Co. v. EPA*, 838 F.2d 835, 840 (6th Cir. 1988) (apply "*de minimis* exception" to installation of pollution control system).[]

The EAB also relied upon the objectives and structure of the Act. *Final Order* at 46-47. A major goal of the CAA was to create a program that was technology-forcing and that increased the use of air pollution control technology over time. "The Clean Air Amendments were enacted to 'speed up, expand, and intensify the war against air pollution in the United States with a view to assuring that the air we breathe throughout the Nation is wholesome once again.'" *WEPCO*, 893 F.2d at 909 (quoting H.R. Rep. No. 91-1146, at 1, *reprinted in* 1970 U.S.C.C.A.N. at 5356). In view of the economic and practical difficulties of retrofitting older, existing plants with modern pollution control devices, Congress provided for a limited "grandfathering" of existing sources, including the TVA facilities at issue here, exempting them from the duty to *immediately* modernize pollution control, as was required for new facilities. *See* H.R. Rep. No. 95-294, at 185, *reprinted in* 1977 U.S.C.C.A.N. 1077, 1264.

The EAB, however, properly rejected TVA's broad interpretation of the routine activity exception, which the EAB found would effectively lead to the *permanent* "grandfathering" of TVA's units. *Final Order* at 50. This is not what Congress intended. *Alabama Power*, 636 F.2d at 400 ("The statutory scheme intends to 'grandfather' existing industries; but the provisions concerning modifications indicate that this is not to constitute a perpetual immunity from all standards under the PSD program. If these plants increase pollution, they will generally need a permit.").[] Thus, only in the most limited circumstances should electric generating plants be permitted to avoid, by invoking the routine activity exception, the requirement to install pollution controls. *See WEPCO*, 893 F.2d at 909 ("The purpose of the modification rule is to ensure that pollution control measures are undertaken when they can be most effective, at the time of new or modified construction.").²⁰¹

By TVA employees' own accounts, the projects undertaken at its plants were not routine.

For instance, referring to the Allen Unit #3 project, a former TVA plant manager testified that the project was not routine because "the money spent on this one project alone exceeded my annual

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Id. at 63-67 (emphasis in original).

budget.”²⁰² The annual budget to which the witness referred was the annual maintenance budget, which TVA distinguished from capital projects as follows:

In general, projects which add new tangible assets or leave existing tangible assets in better condition for profitable service than when new are given a capital classification (e.g., increase capacity, efficiency, or useful life). Projects which only restore tangible assets to a former serviceable condition are maintenance.²⁰³

The work the former employee referred to, which cost \$10.78 million, included the replacement of a re-heater that required a 12-week outage, all of which the employee testified were *not routine*. Taking into account this testimony and the cost of this one project alone, EPA’s reasoning in support of an annual maintenance allowance directly contradicts the intent of the exemption. Specifically, a project of this magnitude would automatically be deemed routine by virtue of the fact that it did not exceed a certain percentage of the replacement cost of the facility, when, by all accounts, the project was most certainly not routine.

As stated by the EAB, “we do not believe that Congress in the statute or EPA in its underlying regulations excluded such carefully planned, massive rebuilding efforts from the requirements to obtain a permit and put on appropriate pollution controls.”²⁰⁴ “[T]o conclude that these activities are within [the scope of the RMRR exception] would stretch the exception beyond reason.”²⁰⁵

The menu of exclusions offered in the proposed rule would do exactly what the EAB warned against. Namely, it would allow facilities to entirely rebuild themselves piece-by-piece without ever triggering NSR. Assuming that EPA adopted a 20% maintenance percentage, a TVA power plant could be completely rebuilt in just five stages – or *one* stage under the five-year allowance contemplated by the proposal. The same holds true for the equipment replacement provision because permitting authorities would be stripped of any authority to oversee equipment

²⁰² EAB TVA Order at 113.

²⁰³ *Id.* at *102-03 (quoting TVA Capitalization Policy).

²⁰⁴ EAB TVA Order at *116.

replacements, placing discretion in the regulated community, and resulting in permanent exemptions through piecemeal replacement of equipment. A blanket exclusion based on a monetary threshold or a blanket equipment replacement allowance (as well as the other two suggested exemptions) is dangerous for air quality and contravenes the intent of the modification provision of the Clean Air Act.

Notwithstanding EPA's acknowledgement in *TVA* and *SIGECO* – and the court's holding in the latter case – that EPA's "extremely limited authority to exempt activities from the definition of 'modification'" necessitates a narrow reading of the "routine maintenance" exclusion,²⁰⁶ the agency now proposes to deem broad swaths of emissions-increasing activity "routine," and thus exempt from the NSR requirements. Perhaps most striking is the fact, demonstrated by the analysis in Table A, that the proposed exclusions would exempt the very emissions-increasing activities that EPA is simultaneously telling the 11th Circuit *may not* be deemed "routine" under any permissible reading of the Clean Air Act.²⁰⁷ Table A shows that the physical changes undertaken at TVA's facilities represent between 0.20 and 6.15 percent of today's facility replacement costs. By comparison, the proposed "annual cost allowance" exemption would allow activities whose annual costs are up to 20 percent of the replacement cost to be completely exempted from NSR, no matter what their emissions impacts.²⁰⁸ EPA also suggests allowing polluting activities to be exempt if their costs are less than the annual cost

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Id.

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Pl.'s Opposition to Def.'s Motion for Summary Judgment on Fair Notice at 28-29.

²⁰⁷

See Brief for Respondent EPA in *TVA v. EPA*, Case No. 02-1231-E (11th Cir.), at 5 ("TVA's argument that under EPA's regulations its 'life-extension' projects are mere 'routine maintenance, repair, or replacement,' and thus forever exempt from the Act's pre-construction permitting and pollution control requirements, is antithetical to the purposes of the CAA and would inappropriately 'open vistas of indefinite immunity from the provisions of [the CAA]'. *Wisconsin Electric Power Co. v. Reilly*, 893 F.2d 901, 909 (7th Cir. 1990)."); *id.* at 6 ("The industry has long known that EPA and the courts interpret very narrowly the exception from the Act's preconstruction permitting requirements that is provided for activities that are mere 'routine maintenance, repair, or replacement.' Moreover, the documents in the record and the evidence adduced at the administrative hearing amply demonstrate that the projects undertaken by TVA – major capital improvements that are undertaken only once or twice in the lifetime of any particular unit in the industry and that substantially extend the life of and the emissions from the unit – cannot possibly be considered 'routine maintenance, repair, or replacement.'").

allowance added up over 5 years or longer. EPA’s proposal to exempt activities whose exemption both the agency and a district court have recently acknowledged to be impermissible under the Clean Air Act is arbitrary, capricious, and otherwise not in accordance with law.

V. EPA Fails to Justify the Proposed Rule.

A. EPA Fails to Justify the Proposed Rule in Terms That Are Consistent With the Purposes of the NSR Provisions.

In the section of the proposed rule’s preamble entitled, “Legal Basis for Recommended Approaches,” EPA states that the “rulemaking proposes two provisions that will improve and help carry out the purposes of [the] exclusion” for ‘routine maintenance, repair, and replacement.’”²⁰⁹ Nowhere in the preamble, however, does EPA explain how the proposed rule would help carry out the purposes of the “routine maintenance” exclusion. In fact, EPA does not even attempt to enunciate any of the purposes of the exclusion.

In a section of the preamble entitled, “Why Is Specification of Categories of RMRR Activities Appropriate?” EPA claims that establishing the proposed new exclusions from the definition of “modification” is consistent with the central purpose of the Clean Air Act.²¹⁰ As it happens, only two of the beneficial effects that EPA ascribes to the proposed new exclusions even arguably contribute, albeit indirectly, to reducing air pollution. The claimed beneficial effects indirectly related to reducing air pollution are (1) enabling reviewing authorities to focus resources on activities outside the exclusions, and (2) removing disincentives to improving the efficiency of air pollution sources.

Enabling reviewing authorities to focus resources on activities outside the exclusions only contributes to reducing air pollution if the activities covered by the exclusions do not significantly increase air pollution. As described above, however, the proposed exclusions would

²⁰⁸ The TVA projects listed in Table A were all found to have resulted in significant net emissions increases. *In re Tennessee Valley Authority*, 9 EAD 357, 451 (2000).

²⁰⁹ 67 Fed. Reg. at 80,296/2.

indeed cause significant annual emissions increases by allowing many activities that increase air pollution by very substantial amounts to completely escape review. Because the proposed rule would make it impossible for reviewing authorities to do anything about those increases, it actually significantly slows progress in reducing air pollution. Moreover, EPA's rationale is especially disingenuous and arbitrary in light of the forceful condemnation of this proposal by the state air quality officials, and their call for the proposal to be rescinded.

EPA has provided no meaningful data or analysis whatsoever to support its claim that the proposed rule would remove disincentives to improving the efficiency of air pollution sources.²¹¹ Even if EPA could show that the proposed rule would have that effect, the agency would still need to show that the resulting reductions in air pollution would outweigh the colossal air pollution increases that, as these comments demonstrate above, the proposed rule would allow.

Even if EPA could demonstrate that the proposed rule would lead to an increase in source efficiency so widespread and dramatic as to swamp the air pollution increases resulting directly from the exclusions, the agency still would not be able to show that the new exclusions promote, or even are consistent with, the purposes of the NSR provisions to which they apply. The first four purposes of the PSD provisions are (1) to protect public health and welfare from any potential adverse effect that EPA believes may reasonably be anticipated to result from air pollution notwithstanding attainment of the NAAQS; (2) to enhance air quality in areas of special

²¹⁰ *Id.* at 80,293/2. The first purpose of the Clean Air Act is “to protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population.” 42 U.S.C. § 7401(b)(1)).

²¹¹ See Section V.F. of these comments. Appendix A to the Regulatory Impact Analysis underlying the proposal represents an attempt to quantify the emissions improvements associated with heat rate or efficiency improvements alone, if refurbishment of existing power plants were allowed without the application of pollution controls. The Office of Fossil Energy of the Department of Energy used its National Energy Modeling System (NEMS) to analyze the impact of various levels of power plant refurbishments on emissions. The modeling is fundamentally flawed, however, because there is no empirical basis for the assumed level of improvements included in the modeling. Heat rate improvements of 5, 10, and 15 percent are suggested but not supported. Availability factor improvements of 2 and 5 percentage points also are asserted with no supporting documentation. In contrast to these unsupported assertions, a 1986 report by the Electric Power Research Institute suggests that *if cost were no object*, improvements in heat rate of about 400 BTUs per kWh (or about 4 percent) might be available. But cost is

natural, recreational, scenic, or historic value; (3) to ensure that economic growth will occur in a manner consistent with the preservation of existing air resources; and (4) to ensure that emissions from any source in any state do not interfere with any other state's plan for preventing significant deterioration of air quality.²¹² These purposes reveal that Congress enacted the PSD provisions out of concern for air quality in each state, in each air shed within each state, and in each "special" area within each air shed. The PSD provisions exist, in other words, to guard against air quality deteriorations in individual states and in the individual areas comprising a state.

Even if improvements in the efficiency of air pollution sources led to an aggregate reduction in the nation's air pollution, the air quality in any individual area easily could get worse. So even if EPA's proposed new exclusions led to an increase in source efficiency so widespread and dramatic as to swamp the collateral air pollution increases, the exclusions would do nothing to ensure that the nationwide improvement in air quality did not come at the expense of degraded air quality in individual states and localities. The proposed exclusions are thus inconsistent with the purpose of the NSR provisions. Therefore, the reasons EPA offers for proposing the new exclusions fail to justify them in terms consistent with the portion of the Act to which they apply. This failure renders the proposed rule arbitrary, capricious, and otherwise not in accordance with law.

B. EPA has Failed to Collect and Analyze Data Relevant to the Conclusions Reached in the Proposed Rulemaking.

Throughout the text of the proposed rule, EPA has altogether failed to recognize data pertaining to the accomplishments of the NSR program and the ongoing enforcement cases. In addition, the Regulatory Impact Analysis performed by EPA in 2002 and submitted to the Office of Management and Budget in November of 2002 for purposes of determining the costs and benefits of the program lacks any analysis of the benefits obtained through NSR as it now stands,

always a consideration in making capital investments in plants, and so it is quite unlikely that anything close to a 4 percent improvement would ever be achieved in practice.

²¹² 42 U.S.C. § 7470(1)-(4).

including the health benefits derived from the enforcement of the NSR requirements as they now stand. Furthermore, the Agency has proffered no data to support its conclusions, but bases its decisions to broaden the exemption for RMRR – an exemption that has been determined to have been exploited by industry – on anecdotal evidence that cannot be traced or evaluated.

The burdens, costs and benefits assessed by EPA in its August 2002 Information Collection Request for the Establishment of a Definition of Routine Maintenance, Repair, and Replacement for the New Source Review Program, pertain solely to burdens, costs and benefits to regulated sources. As the following passage illustrates, EPA highlights only the expenses and burdens placed on sources subject to the program:

[I]t is not a surprise that the Agency has amassed *anecdotal evidence* that there have been cases in which the uncertainty about the exemption for routine activities has resulted in expensive delays or even the cancellation of projects that would have been *beneficial to the welfare of the industry and to the economy in general*.²¹³

With respect to expected benefits, the Agency focuses only on “savings to sources” resulting from the proposed exemptions, but does not make any mention of emissions reductions achieved through the current definition. And, while EPA invites the public to provide data on the level of savings for covered sources with respect to “the extent to which sources are able to avoid major NSR determination requests and major NSR permitting because of the RMR&R program,” it does not seek comment on expected emission reductions, or health benefits (or costs), thus skewing the ultimate analysis and rendering any conclusion arbitrary and capricious.

In a rulemaking of this magnitude, the Agency has the authority and an obligation to conduct a thorough review of both the economic and emissions aspects of NSR through a systematic collection of data from the regulated industry. Indeed, only EPA has the authority to compel industry to answer questions that would allow the public to evaluate the merits of

²¹³ Office of Air and Radiation, Office of Air Quality Planning and Standards, Innovative Strategies and Economics Group, *Information Collection Request for the Establishment of a Definition of Routine*

arguments for expanding the exemption for RMRR. Such information collection provides a foundation of data against which the various public policy choices before EPA can be fairly evaluated. Instead, the Agency seems determined to rely on self-selected anecdotes and unsupported assumptions from industry about program costs and burdens²¹⁴ without any basis to determine the veracity of these claims or their impact on air quality and public health.

That the Agency has been woefully deficient in collecting and maintaining data necessary to the proper enforcement of the program was an issue of central concern to the National Academy of Public Administration (NAPA) in its 20-month study on the NSR program.²¹⁵

Specifically, NAPA identified as “[o]ne of the most striking aspects of the Panel’s research on NSR” the “lack of key data on the program, especially as applied to existing facilities.”²¹⁶ NAPA chastised EPA for the failure to maintain this data, stating that: “air agencies, Congress, and the public must rely mostly on anecdotal reports about NSR’s economic and environmental impacts. As found by NAPA, EPA has never collected comparable, accurate, and complete data on the most basic aspects of the NSR program,” including “[e]nvironmental effects, [m]arket impacts and economic costs; [h]ow it is implemented by state and local agencies; [h]ow many facilities it may cover; [w]hether it has promoted markets for cleaner technologies; [w]hat actions require an application for an NSR permit; [h]ow regulated facilities can comply with NSR; [h]ow many facilities used netting; and [h]ow many facilities obtained

Maintenance, Repair, and Replacement for the New Source Review Program (Aug. 2002) at 5 (emphasis added).

²¹⁴ Throughout the proposal, EPA makes qualitative assessments about the proposal that prove that the conclusions reached by the Agency have no basis in fact or law, or were reached after failing to consider relevant facts. For instance, EPA contends the rule as proposed will assure “safe, efficient, and reliable operation of the plant,” 67 Fed. Reg. at 80,295, will “provide more certainty both to source owners and operators who could better plan activities at their facilities,” *id.* at 80,293, and repeatedly criticizes the “narrow RMRR exclusion” as one that owners and operators “would not respond to” and that is “not expected to achieve significant reductions in historic emissions levels, and might even lead to area wide emissions increases.” *Id.* at 80,302.

²¹⁵ See National Academy of Public Administration, *A Breath of Fresh Air: Reviving the New Source Review Program, Summary Report* (Apr. 2003) (hereinafter “NAPA Report”) (attached as Exhibit D); see also NAPA, *A Breath of Fresh Air: Reviving the New Source Review Program* (Apr. 2003), available at <http://www.napawash.org/Pubs/Fresh%20Air%20Full%20Report.pdf>. We hereby incorporate these reports by reference into EPA’s administrative record.

synthetic minor permits.”²¹⁷ NAPA found “this lack of crucial information most troubling,” citing that the program is operated with “no consistently collected and reported information on the basic functioning of the NSR program and therefore virtually no accountability by regulated facilities.”²¹⁸ In reaching this conclusion, NAPA cited EPA’s own assessment of its program – echoed in the proposed rulemaking – in a “recent in-depth review” of NSR. As stated by EPA:

The main difficulty is the lack of complete data in permit files across Regions and States to make these kinds of [technology] evaluations. An important difficulty is the lack of a permitting database that contains all [Best Available Control Technology] determinations with adequate descriptions.

The reliance on anecdotal information to base conclusions that will broaden exemptions to a program already replete with loopholes that have allowed “many owners of existing facilities” to extend “operating lives of . . . major polluting sources, while avoiding the costs of complying with NSR,”²¹⁹ constitutes an arbitrary and capricious exercise of administrative authority.

C. EPA Fails to Consider the Full Purpose and Intent of the NSR Program.

According to EPA, “the establishment of categories of activities as RMRR is consistent with the central purpose of the CAA, ‘to protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population.’”²²⁰ A close examination of statements made by EPA throughout the proposal, however, proves that the agency regards the promotion of “the productive capacity of [the Nation’s] population” as its only mandate, completely eschewing its obligation to protect air quality and public health.

This interpretation of the statute, and the subsequent assumption that it possesses the authority to broaden an exemption never intended under the law, contradicts the clear and

²¹⁶ NAPA Report at 27.

²¹⁷ *Id.*

²¹⁸ *Id.* at 27-28.

²¹⁹ *Id.* at 23.

unequivocal primary purpose of the statute to protect air quality and public health. As cited by NAPA in its report to Congress and EPA on the NSR program:

First, and foremost, protection of the public health remains the paramount purpose and value under the Act. Considerations of costs, energy, and technology is expressly authorized or required in many sections of the bill, but the overriding commitment of the 1977 Act (just as the 1970 legislation) is to the protection of public health.²²¹

In addition to adopting a skewed interpretation of the CAA that favors convenience to industry over the health and welfare of the public, EPA fails to address several other relevant factors pertaining to the scope and accomplishments of NSR that are critical to the ultimate issue of whether EPA has the legal authority to broaden the very narrow exemption for RMRR currently permitted. For example:

- EPA fails to mention that it is legally restricted from expanding the already tenuous exemptions for RMRR, nor does it explain how the proposed rule will not indefinitely grandfather existing sources from the reach of the program. In *Alabama Power*, for instance, the U.S. Court of Appeals for the D.C. Circuit struck down an attempt by EPA to restrict the scope of the NSR program as applied to PSD areas. In so doing, the D.C. Circuit held that “[t]he statutory scheme intends to ‘grandfather’ existing industries; but the provisions concerning modifications indicate that this is not to constitute perpetual immunity from all standards under the PSD program.”²²² The Seventh Circuit’s decision in *WEPCO*, reaffirmed *Alabama Power*, concluding that “[t]he development of emission control systems is not furthered if operators could, without exposure to the standards of the 1977 Amendments, increase production (and pollution) through the extensive replacement of deteriorated generating systems.”²²³
- EPA fails to reference the ongoing enforcement actions, or how the positions it adopts in the proposal, will undermine the arguments put forward by the Department of Justice. Such arguments have been upheld by the courts.²²⁴ The failure to

²²⁰ 67 Fed. Reg. 80,290, 80,293 (citing CAA § 101).

²²¹ NAPA Report at 11 (quoting Rep. Paul Rogers, House conferee).

²²² NAPA Report at 12 (quoting *Alabama Power*).

²²³ *WEPCO*, 893 F.2d 901, 910 (7th Cir. 1990); see also NAPA Report at 12.

²²⁴ See, e.g., EAB TVA Order; SIGECO Order on Mot. for Summ. J. on the Applicable Legal Test for Routine Maintenance and on the Thirteen Affirmative Defenses; see discussion *infra* Part II.B. EIP was unable to obtain the legal briefs submitted by the Department of Justice on behalf of EPA in the pending

reconcile these contradictory positions was even recognized by one of the defendants in the enforcement cases.²²⁵

- In the proposal, EPA contends that other Clean Air Act programs “illustrate the relative limits of the major NSR program as a tool for achieving significant emissions reductions” and that these other programs “achieve emissions reductions that far exceed those attributable to the major NSR program and dwarf any possible emissions consequences attributable to future promulgation of a rule based on today’s proposal.”²²⁶ These statements were made after EPA admitted that it does “not have adequate information to predict with confidence which modeled scenario is most likely to occur if the options under consideration are adopted.”²²⁷ EPA’s statements are telling of its belief that the NSR provisions are inconsequential. Contrary to this belief, however, emission reductions achieved through prosecution of the NSR cases in addition to settlement of NSR actions prove that NSR represents an important tool for reducing emissions. One need only look to the NAPA Report to see how critical NSR has been to protecting air quality. According to NAPA, and contrary to EPA’s statements,
 - NSR represents “an essential tool for reducing air pollution from factories and power plants, thus protecting public health”,²²⁸
 - While recognizing that NSR is “not the only element of the [CAA] intended to improve air quality,” the panel found that “NSR is especially important for reducing air pollution from large industrial facilities” and was responsible for preventing additional pollution “equivalent to about four percent of the nation’s total air emissions of criteria pollutants” between 1997 and 1999;²²⁹

enforcement cases, despite filing a timely Freedom of Information Act request. EIP therefore petitions the Agency to submit to the rulemaking docket (Docket A-2002-4) all legal briefs submitted in the enforcement actions brought against the utilities, in compliance with restrictions for confidential business information. The FOIA request submitted by EIP to the Agency, and the letter acknowledging receipt of the request, are attached.

²²⁵

This very point was made by the SIGECO in a brief submitted after the publication of the proposed rule. In that brief, SIGECO wrote that no where in the proposed rule did EPA “describe the ‘routine’ provision as an exercise of *de minimis* authority, or discuss any limitations on its ability to interpret the ‘routine’ provision.”

²²⁶

67 Fed. Reg. at 80,304.

²²⁷

Id. (referring to analyses of various exemption scenarios which showed both “modest relative increases” and “modest relative decreases” for nitrogen oxide emissions and “essentially the same” emissions for sulfur dioxide emissions).

²²⁸

NAPA Report at 1.

²²⁹

Id. at 13.

- “although EPA observed that NSR is ‘not designed to play the primary role in reducing emissions from existing sources,’ the Panel’s discussions with state regulators make clear that NSR has become more important as states encounter increased difficulty in reducing overall air emissions to meet air quality standards.”²³⁰
- Other than its rather vague reliance on the noncontrolling preamble to the statute, the agency has provided no legal justification for a proposal that contradicts years of accepted agency policy as well as the legal positions it has taken in enforcing the program. Neither does it explain how it may now adopt an overly broad interpretation of an exemption created entirely by regulation, which until now it has insisted should be narrow. Unfortunately, this apparent pervasive attitude favoring industry convenience over health and the environment communicates to the regulated community that the Agency does not believe in the regulations it is enforcing – so neither should those regulated entities. It amounts to a transparent attempt to eliminate the program, an action that may only be undertaken by legislating the program out of the law, not by squeezing out the requirements through rulemaking.

Finally, critical to EPA’s burden to consider all the relevant factors leading to its conclusion that the exemptions proposed are necessary and appropriate is at the very least an assessment of the expected effects on emissions, which in turn will determine the public health benefits and costs of the proposed rule. Although data on emission reductions achieved under the existing program are available, EPA has stated that it cannot accurately quantify the effects the proposed rule will have on emissions. Before promulgating a final rule, the agency should provide such a quantitative assessment of the rule.

Throughout the proposed rule, EPA adopts certain assumptions about the behavior of facilities. These assumptions reveal that the agency itself believes the requirements of NSR are too onerous, sending a dangerous message to the regulated community. In no place in the proposal does EPA make reference to the gains accomplished by NSR, the ongoing enforcement actions, settlements reached as a result of those actions, or the potential gains from the investigations now pending. The only justification the agency provides in support of its attempt

²³⁰

Id.

to dismantle the program comes from a single reference to productive capacity made in the preamble to the statute. It states specifically that the data are not complete on the effect of the proposed rule, but that, in any event, whatever gains – or losses – result from the proposed rule will be of no significance. EPA, however, fails to consider that productive capacity must be balanced with the interests of health and welfare, as stated in the preamble: the central purpose of the Act is to “protect and enhance the quality of the Nation’s air resources so as to promote public health and welfare and the productive capacity of its population.”²³¹ EPA’s mandate is to balance these purposes, not to choose to bolster productive capacity at the expense of the nation’s health and welfare.

D. The Laws of Physics and the Aging of the U.S. Coal-Fired Power Plant Fleet

The existing coal-fired power plant fleet is aging. As of 2000, about 36 percent of the fleet was 30 years of age or older, while almost 75 percent of the fleet was older than 20. By 2020 almost 75 percent of the coal-fired power plant fleet will be 40 years old or older.²³²

As industrial equipment, including power plants, ages, its performance markedly deteriorates. Power plant capacity factors and general availability fall off, for example. Statistical analysis of the capacity factors of coal-fired power plants shows that, on average, their output diminishes by about one percentage point per year.²³³

During the first 20-25 years of a coal-fired power plant’s life, the plant experiences low forced outage rates, high availability and relatively minimal necessary operating and maintenance costs. A power plant typically operates at or near its rated capacity at this “mature phase” of its

²³¹ 42 U.S.C. § 7401.

²³² The age distribution analysis is based on in-service dates for the coal-fired power plants as reported in the EPA’s Clean Air Act Browser and in the utility Energy Information Administration Form 767.

²³³ The Clean Air Task Force performed a statistical analysis of the performance of coal-fired power plants as a function of age, based on operating reports for the coal fleet for a number of recent years. The analysis showed a very strong correlation between age and average capacity factor. A linear relationship fit to the data had a confidence level of 87%.

operational life.²³⁴ During this period, some relatively major maintenance projects are necessary to keep the facility operating at high availability levels, but component part replacement is typically not required.

Towards the end of this 20-25 year period, however, various of the major components of a electric generating unit wear out, a condition referred to as “component end of life.” This causes more forced outages, “unless major overhauls or component replacements are instituted.”²³⁵

Table 1, taken from an industry manual on electric utility steam generation, illustrates the typical replacement schedule for major power plant components.

Table 1 Component Replacement Schedule for a Typical High Temperature, High Pressure Boiler		
Typ. Life (Years)	Component Replaced	Cause for Replacement
20	Miscellaneous tubing	Corrosion, erosion, over-heating
25	Attemperator	Fatigue
	Superheater (SH)	Creep
	SH outlet header	Creep fatigue
30	Burners and throats	Overheating, corrosion
	Reheater	Creep
35	Primary economizer	Corrosion
40	Lower furnace	Overheating, corrosion
Note: The actual component life is highly variable depending on the specific design, operation, maintenance and fuel.		

Source: Babcock & Wilcox, *Steam: Its Generation and Use*, 40th ed., 46-4 (1992).

As a result, plant availability “drops dramatically after 25 years” in the absence of major overhauls or major component replacement work.²³⁶ This in turn leads to decisions about how the plant will be dispatched into the grid of EGUs called upon to produce electricity on demand. Whereas, during its prime of life, such a plant might have been utilized as a workhorse or base load facility (operating almost continuously), as it ages it may be used more sporadically, for

²³⁴ Babcock & Wilcox, *Steam, Its Generation and Use*, 40th Ed. 1992 at 46-1.

²³⁵ *Id.*

²³⁶ *Id.* at 46-2.

example, dispatched only in peak periods. The net result will be a decrease in the absolute tonnage of a plant's air emissions as it ages – both because the plant is no longer able to operate at full capacity, because its component parts have aged, and also because it is no longer called on to operate as much of the time.²³⁷

Furthermore, absent a major overhaul or component part replacement program, this decline will continue beyond the 20-25 year mark. As Table 1 illustrates, coal-fired power plants generally need component part replacements or significant refurbishment of several of their major component parts by the age of 40. If such major component replacement projects are not undertaken, older plants are unlikely to be able to perform at more than the 50% level. By age 50, typical availability has fallen into the 30-40% range.²³⁸

If a major component part replacement program does occur, however, the availability to the grid of an older power plant will improve dramatically. Figure 2 illustrates this point.

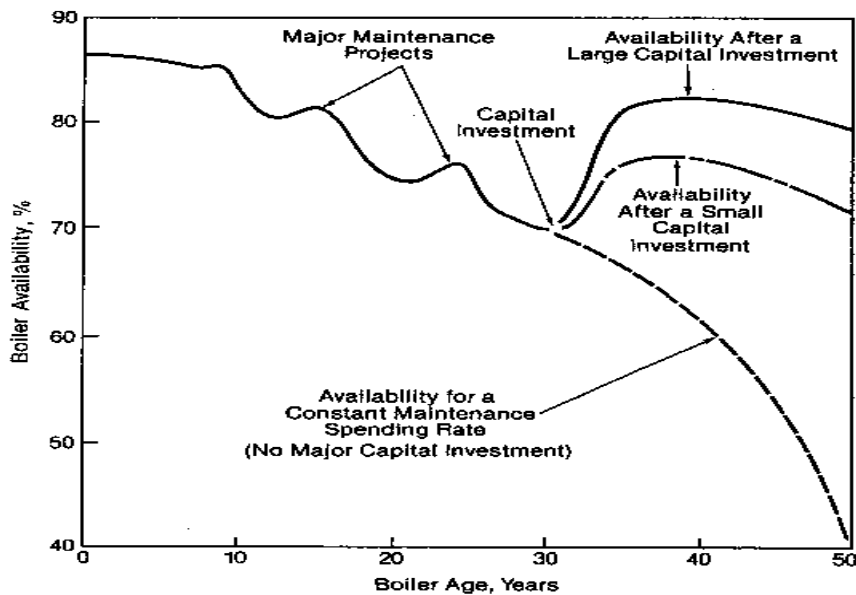


Fig. 2 Typical availability curve for a large, high pressure power boiler with life extension capital expenditures.

²³⁷ Emissions of most major pollutants are a direct function of the amount of coal that is burned. As the plant ages and runs less, less coal is burned, leading to reduced emissions of pollutants.

²³⁸ *Id.* at 46-2, Figure 2; see also prefiled Testimony of Mr. Alan Michael Hekking, *In re: Tennessee Valley Authority*, Docket No. CAA 00-6, at 4-5 (July 7, 2000) (describing one utility company's plan to

Source: Babcock & Wilcox, Steam: Its Generation and Use, 40th ed., 46-2 Figure 2 (1992).

Because of this improved plant availability, the unit can be re-deployed as a base load unit, and run almost constantly. This will result in significantly increased emissions – over the levels occurring immediately prior to the refurbishment project, or even within the last five years prior to the project – both because the unit is now capable of turning more coal into electricity than it was before the modification, and because the unit is now called on to do so more often than before the modification.²³⁹

Congress understood this, as described above, when it crafted the New Source Review program, requiring that older units be subject to the emissions controls requirements of the Act at the point when such major refurbishments became necessary.²⁴⁰

The EPA RMRR proposal, as set forth above, would allow major component part replacement and significant, non-routine maintenance projects to be undertaken, and these projects would completely escape NSR. The proposal creates a power plant immortality provision – a result directly contrary to the scheme developed by Congress and illustrated in the structure and language of the Act.

E. Additional Analysis of EPA’s Claimed Legal Basis for Recommended Exemptions

In what is perhaps the most extraordinary sentence of the entire 26,000-word rulemaking proposal – the most harmful, unfounded, and controversial ever to be issued under the Clean Air Act – EPA offers the following 21 words as its legal justification:

We have recognized that Congress did not intend to make every activity at a source subject to the major NSR program.²⁴¹

refurbish its aging coal-fired fleet, and noting that absent such activities, the vast majority of the older plants would have been shut down by 2000).

²³⁹ In the same way as decreased operation led directly to lower coal use and less pollution as discussed in the previous footnote, improved plant performance after refurbishment leads directly to more coal being burned. More coal burned is directly related to more pollutants being emitted.

²⁴⁰ See, e.g., *WEPCO*, 893 F.2d at 908-910 (citing case law and legislative history supporting the holding that major parts replacement programs not meant to be excluded from NSR review); *Alabama Power*, 635 F.2d at 400 (grandfathering of existing industry under statute’s modification requirements not intended to constitute a perpetual immunity from all standards under the PSD program).

²⁴¹ 67 Fed. Reg. at 80,296/2.

This surely ranks as one of the top *non sequiturs* of all time among the annals of EPA pronouncements; it provides no legal basis for EPA's proposals. The modification definition makes plain what activities Congress made subject to the major NSR program: "any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted." The program does not cover activities that are not physical changes or changes in the method of operation. More important, the program does not cover activities that do not increase emissions significantly (*e.g.*, by over 40 tons per year).

But EPA can gain no support for its proposal from these facts because the agency proposes to exempt physical changes and changes in the method of operation that increase emissions significantly – in direct contradiction of the plain statutory language and protective purposes of the NSR program. Indeed, *every* activity that EPA proposes to exempt would be allowed to increase pollution significantly, without regard to air quality, public health, visibility, national parks or the environment. Accordingly, EPA's statement above is a *non sequitur* of immense proportions.

Even on its own terms, however, the statement provides no legal basis for the agency's proposal. First, we note that this statement and the section in which it appears does not identify a single word of the Clean Air Act to support EPA's detailed, complex and harmful proposed exemptions.²⁴² Second, since the statement invokes Congressional intent, we note that the proposal fails to identify or discuss any particular statement of that intent.²⁴³ Certainly EPA does

²⁴² *Id.* The proposal's 25 pages in the Federal Register cover scores of approaches, tests, sub-tests, definitions, and proposals to codify industry manuals, for example, none of which is linked to any provision of the statute.

²⁴³ Indeed, parsed carefully, the statement does not even claim to be talking about Congressional intent directly; instead, the statement relies on what EPA has "recognized." *Id.* As discussed in the text above, the modification definition itself is the best indication of what activities Congress intended to subject to the major NSR program. But to the extent that legislative history is additionally instructive, it supports the legal position sets forth in these comments that EPA's proposals are unlawful rather than providing any support for their lawfulness. See *WEPCO*, 893 F.2d at 908-909.

not identify any legislative history to support the exemption of the vast range of significant pollution-increasing activities reflected in the proposal. Third, the proposal does not comply with the Act's requirement that the proposal provide the "major legal interpretations" underlying the proposed rule.²⁴⁴ Finally, of course, EPA's proposals are unlawful and arbitrary and capricious as detailed throughout these comments, for reasons rooted in the plain language of the statute, its legislative history, its purposes, relevant case law, EPA's own interpretations of the statute, and EPA's enforcement practices.

F. So-Called "Efficiency Improvements" That Increase Pollution Significantly Should be Well-Controlled to Protect Public Health; EPA Provides no Policy Justification for Exempting These Pollution Increases From Cleanup Measures.

The proposal invokes "efficiency" frequently as a concept that would be promoted by EPA's adoption of these exemptions, suggesting that the proposal is justified on that basis.²⁴⁵ As used in this manner, however, "efficiency" is a seriously misleading label that EPA is employing generally to mask *higher pollution levels* that would be allowed to result and escape clean up as a result of the proposed loopholes. EPA is using the expression here, and frequently does so elsewhere under this administration, as code for the following concept: an improved emissions *rate* of pollution per unit of fuel, raw material or output (*e.g.*, lbs/MBtu of SO₂, pounds of NO_x per widget). Under existing NSR rules, a facility modification that decreases its pollution *rate* (*i.e.*, becomes more efficient), does not require pollution controls so long as total pollution *levels* decrease, are maintained, or even increase by no more than specified levels (*e.g.*, 40 tons per year). This is so, of course, because NSR requires pollution control measures only for activities that *increase pollution levels* above generous threshold levels like 40 tons per year.

In stark contrast, EPA here proposes to weaken the NSR rules to the point of meaninglessness, in order to allow *higher pollution levels* (that may or may not result from improved emission rates) to escape clean-up measures, under the guise of "efficiency." Cloaking

²⁴⁴ 42 U.S.C. § 7607(b)(3)(C).

this agenda in the garb of efficiency is not only objectionable,²⁴⁶ it also contradicts numerous prior EPA stances and court decisions on this very issue:

Virtually every modernization or upgrade project at an existing industrial facility which reduces inputs and lowers unit costs has the concurrent effect of lowering an emissions rate per unit of fuel, raw material or output. Nevertheless, it is clear that these major capital investments in industrial equipment are the very types of projects that Congress intended to address in the new source modification provisions. . . . Adopting a policy that automatically excludes from NSR any project that, while lowering operating costs or improving performance, coincidentally lowers a unit's emissions rate, would improperly exclude almost all modifications to existing emissions units, including those that are likely to increase utilization and therefore result in overall higher levels of emissions.²⁴⁷

Second, [Puerto Rican Cement Company] argues that [EPA's position] . . . would significantly discourage the Company, and others like it, from installing more efficient machinery that, at any production level, emits significantly less pollution. But we cannot agree. EPA has simply taken account of, and given controlling weight to, a different consideration: the fact that a firm's decision to introduce new, more efficient machinery may lead the firm to decide to *increase the level of production*, with the result that, despite the new machinery, overall emissions will increase. Indeed, EPA points out that a firm introducing such machinery can escape [NSR] review simply by promising that it will ensure its actual emissions do not in fact increase (that is, by promising that it will not run the machinery at such a rate as to create an actual increase in emissions levels).²⁴⁸

Moreover, virtually any major capital improvement project at an existing source is designed in part to increase efficiency of production, and this will in turn almost always have the collateral effect of reducing emissions per unit of production, even though it may provide an economic incentive to increase total production, with the net result that actual emissions of air pollution to the atmosphere could increase significantly. There is nothing in the statutory terms or structure or in EPA's regulations which suggests that such major changes should be accorded exempt status under the NSR program. To the contrary, major capital investments in industrial equipment, where they

²⁴⁵ See, e.g., 67 Fed. Reg. at 80,293-80,294.

²⁴⁶ It is objectionable, of course, because efficiency improvements that yield the expected, added benefit of reduced overall pollution levels is what EPA should be promoting.

²⁴⁷ "Pollution Control Projects and New Source Review (NSR) Applicability," Memorandum from John S. Seitz, Director, EPA OAQPS, to EPA Regional Air Directors (July 1, 1994), at 11.

²⁴⁸ *Puerto Rican Cement Co. v. EPA*, 889 F.2d 292, 297-98 (1st Cir. 1989).

could result in an increase in emissions, appear to be precisely the type of change at an existing source that Congress intended should be subject to PSD and nonattainment area NSR permitting. See Prevention of Significant Deterioration and Nonattainment New Source Review; Proposed Rule, 61 Fed. Reg. 38250, 38262 (July 23, 1996) (“NSR Reform” proposed rulemaking). See also Puerto Rican Cement Co. v. EPA, 889 F.2d 292, 297-98 (1st Cir. 1989) (modification of emissions unit that decreases emissions per unit of output, but may result in sufficient production increase such that actual emissions will increase, is subject to PSD).²⁴⁹

The argument that only changes that increase a unit’s emissions rate can trigger the NSR modification provisions has been rejected by two courts of appeals. As noted, see *supra* note 1, in Puerto Rican Cement, the First Circuit rejected a claim that modifications to a cement kiln, which made production more efficient and decreased the hourly emissions rate but could increase the plant’s utilization rate, such that actual emissions to the atmosphere might increase, were exempt from PSD. The company argued that the project fell under the PSD regulatory exclusion for changes that result in an “increase in the hours of operation or in the production rate.” See 889 F.2d at 298. Similarly, in WEPCO, where the company was making “like-kind” replacements of components to restore the original design capacity of the plant, there was no increase in emissions per unit of output; rather, for PSD purposes, the emissions increase was attributable to increased utilization. The Seventh Circuit rejected the company’s reliance on the exclusion for increased hours of operation/rates of production. See 893 F.2d at 916 n. 11.²⁵⁰

For these same reasons, which EPA and federal courts have reaffirmed time and time again, EPA should continue to refuse to exempt from NSR protections significant increases in harmful air pollution that result from marginal improvements in emissions rates, that occur with no increase in emissions per unit of output or that restore the original design capacity of a unit or plant. The obvious point in all these cases is that the air is getting dirtier by significant amounts, pollution loadings are increasing to surrounding communities, and the statutory purposes of the NSR program call for responsible pollution control measures to mitigate or offset these harmful pollution increases.

²⁴⁹ Detroit Edison Applicability Determination, at 5-6, n.1, Enclosure to Letter from Francis X. Lyons, EPA Regional Administrator, to Henry Nickel, Counsel for the Detroit Edison Company (May 23, 2000).

G. White House OMB Interference to Make a Dirty Proposal Appear Less Dirty.

The administrative record for this proposal shows that White House OMB officials imposed edits at the 11th hour to make the proposal's wholesale exemptions and dramatically weakened rule changes appear more environmental. It is apparent why completely unsubstantiated claims of environmental benefit appear in this proposal – an OMB official wrote them in by hand on EPA's draft proposal shortly before the proposal was signed.²⁵¹ Other attempted edits demonstrate a pervasive attitude geared toward suggesting that exempting industry from Clean Air Act health protections will do environmental good and subjecting industry to these protections will do harm. Before examining these instances, we examine the passages in the final proposal that were rewritten by OMB.

EPA's proposal posits an example of a power plant confronting three compliance alternatives when it wishes to undertake physical or operational changes that will significantly increase emissions.²⁵² The proposal examines the three alternatives and, as edited by OMB, concludes that:

a narrow RMRR exclusion that is clearly established is not expected to achieve significant reductions in historic emissions levels, and *might even lead to area wide emissions increases*.²⁵³

To “support” this conclusion, the preamble states:

a narrow RMRR exclusion of this type would not allow in many cases the replacement of equipment with equipment that improves process efficiency. This would cause owners or operators to forego replacements that would improve air quality because they would allow greater efficiency.²⁵⁴

²⁵⁰ *Id.* at 12, n.9.

²⁵¹ See A-2002-4, II-F-28, November 14, 2002 fax from Art Fraas, White House OMB, OIRA, to Bill Harnett, EPA (attaching edits on EPA draft proposal) (“OMB Edits”). Available online at http://cascade.epa.gov/RightSite/dk_public_collection_detail.htm?ObjectType=dk_docket_collection&cid=OAR-2002-0068&ShowList=items&Action=view.

²⁵² 67 Fed. Reg. at 80302/1.

²⁵³ *Id.* at 80302/2 (emphasis added).

²⁵⁴ *Id.*

As explained elsewhere in this section, it is absolutely false to claim that equipment replacement that improves process efficiency will improve air quality, *unless* those efficiency improvements decrease total pollution loadings. As EPA is well aware, efficiency improvements or any other physical changes that do not increase emissions significantly need not install state-of-the-art controls or undergo NSR permitting.²⁵⁵ Nothing in EPA’s proposal or administrative record contains evidence demonstrating the proposed exemptions would decrease – rather than increase – actual air pollution levels, in the name of process efficiency or anything else.²⁵⁶ These reasons and arguments are an unsubstantiated and arbitrary basis on which to propose adoption of any of the proposal’s exemptions.

Finally, returning to EPA’s three compliance alternatives above, EPA declines to focus its critical gaze on a *fourth* “compliance alternative” embodied by this proposal rulemaking: adoption of one or more loopholes designed to allow all manner of physical or operational changes to increase pollution significantly and avoid control altogether, while *also* avoiding the need to take emission limitations that would safeguard air quality by preventing significant emissions increases. EPA, of course, fails to explain or justify how this would “improve air quality” because, quite simply, it would not. This fourth “compliance” alternative, the one created by EPA’s proposal, would allow facilities to take advantage of one of several expansive exemptions that would allow them to extend the life of their dirty, grandfathered facility, increase

²⁵⁵ See, e.g., Letter from EPA Regional Administrator Francis X. Lyons, Letter to Counsel for Detroit Edison Company Henry Nickel (May 23, 2000) (“As you know, nonroutine changes of any type, purpose, or magnitude at an electric utility steam generating unit – ranging from projects to increase production efficiency to even the complete replacement of entire major components – are excluded from PSD coverage as long as they do not significantly increase emissions from the source. Thus, Detroit Edison has been free to proceed at any time with the Dense Pack project without first obtaining a PSD permit as long as it adheres to its stated intention to not increase emissions as a result of the project. Indeed, EPA encourages the company to proceed with the project on this basis, since it appears to both reduce emissions per unit of output and not increase actual air pollution.”)

²⁵⁶ In particular, we reject EPA’s claim that a narrow exclusion “might even lead to area wide emissions increases.” The rulemaking record provides no empirical evidence for this claim. Indeed, the claim is contradicted by EPA’s longstanding views (see, e.g., passages cited in the previous section); the very structure of the NSR provisions; the recent history of the NSR enforcement cases; and the continuing air pollution problems posed by grandfathered power plants that have undertaken so-called “life-extension” projects – improving their process efficiency yet increasing emissions dramatically as a result.

pollution by massive amounts (as numerous power plant defendants have done) and avoid pollution control measures, emissions limitations, or pollution offsetting measures in the form of netting. None of the 3 other compliance options posited by EPA would allow the enormity of the emissions increases associated with the 4th option, which is easily the worst option with respect to air quality. The more pressing and vexing question to be put to EPA is why it would propose a 4th “compliance” approach whose outcome for air quality and public health would be far worse than the other three and in contravention of the Clean Air Act as well.

Insertions by the White House OMB two weeks before the proposal was signed were responsible for the two indented passages quoted above. The administrative record contains a document with handwritten edits from an OMB official introducing these unsubstantiated claims into EPA’s draft. In similar formulations, the edits rest on bald assertions of environmental harm caused by the current NSR protections, and environmental benefit expected from the proposal’s sweeping exemptions.

Taking these two passages in order, we quote the passages from EPA’s draft, underlining the handwritten additions from the OMB official and using strike-through to identify his text eliminations:

a narrow RMRR exclusion that is clearly established is not expected to achieve significant reductions in historic emissions levels, and might even lead to emissions increases because most facilities would take steps to avoid the strict limitations imposed by an NSR permit, even when replacements would be found under this narrow exclusion to be non-routine-, and facilities would forego projects that would increase capacity or energy efficiency even when such projects would not increase and might even decrease emissions.²⁵⁷

EPA’s final proposal includes this first OMB addition but not the second. The second proposal passage quoted above was also affected in a key way that altered EPA’s previous draft:

a narrow RMRR exclusion might forbid replacement of any equipment if the replacement improves process efficiency. This however would

²⁵⁷

OMB Edits at 78.

likely cause owners or operators to forego replacements that would improve air quality because they would allow greater efficiency.²⁵⁸

Finally, in another passage in the EPA draft proposal, the OMB official makes an edit that does not appear in EPA's final proposal but nonetheless shows the obvious directional bias of the White House OMB. By way of explanation, this passage follows what becomes the following passage in the final proposal: "Our current view, however, is that if the rules clearly establish a narrow RMRR exclusion and set out to require permits for replacement of larger components or the replacement of components with more efficient ones, owners or operators will comply with these rules but will find ways to make the replacements without having to obtain permits and install state-of-the-art controls." This passage follows in the earlier EPA draft:

As discussed below, these companies will likely avoid having to make such reductions through one of several ways plainly permissible under NSR, and will forego activities that may have environmental benefits.²⁵⁹

There is no document support in the administrative record for the emissions claims made by this White House official. The record reveals no empirical data or analysis to substantiate these claims that either accompanied the edits or that were supplied later by OMB. The most that

²⁵⁸ *Id.*

²⁵⁹ *Id.* at 75. To be clear, the chief "permissible" avoidance mechanism to which EPA refers, whereby facilities will "find ways to make the replacements without having to obtain permits and install state-of-the-art controls" is through "netting" -- a regulatory loophole that prompted this stinging criticism from the National Academy of Public Administration:

This loophole for netting has allowed many grandfathered facilities to avoid NSR altogether and to continue emitting large amounts of pollution. Netting also gives grandfathered facilities a perverse incentive to continue polluting at the same high levels as prior to adoption of NSR, so they can use their high emissions levels as an offset when they make changes or rebuild.

. . . .

[T]he Panel recommends that EPA should limit the use of netting as much as administratively possible and that Congress should direct EPA to eliminate the use of netting as a mechanism for avoiding compliance with NSR.

NAPA Report at 24, 38. As EPA knows, state and local air quality officials and environmental and public health organizations have also strongly urged EPA to restrict netting to the greatest extent possible.

EPA has offered in the past, as discussed elsewhere in these comments, are self-serving anecdotal industry complaints.

These objectionable OMB edits provide strong evidence -- echoed in the Department of Energy interference discussed elsewhere in these comments and the anti-environmental policy choices apparent throughout the proposal -- of the White House's direct involvement in eliminating core Clean Air Act safeguards that have protected the American public from the harmful effects of industrial air pollution for a quarter century. We believe that this proposal represents the most harmful and unlawful air pollution initiative ever undertaken by the federal government. It would legalize polluting activities just as destructive to public health as those that are being prosecuted today in enforcement actions against the country's dirtiest coal-fired power plants and oil refineries. Accordingly, it is all the more disturbing that this campaign to weaken the Clean Air Act and allow big polluters to pollute even more is being actively advanced by senior political officials in the Bush administration. We object in the strongest possible terms. The Administrator, on behalf of the public, should fight this campaign, uphold the Clean Air Act, and rescind this dirty air proposal. Administrator Whitman, we urge you to withdraw this seriously misguided proposal that will allow thousands of industrial facilities to dramatically increase air pollution without long-standing Clean Air Act safeguards and place millions of Americans at risk from the harmful effects of industrial air pollution.

H. Enforcement of NSR Requirements

The NSR enforcement actions filed against major electric utilities are an effort to end a flagrant abuse of the Clean Air Act "grandfather clause" provisions relating to existing pollution sources. As mentioned above, Congress in the 1970 Clean Air Act did include a grandfather clause that exempted existing stationary pollution sources from the duty to meet modern emission performance standards. However, Congress did not intend to extend a permanent, blanket

However, EPA's recent weakening changes to its final NSR rules expand the loophole even further as a mechanism for avoiding NSR pollution controls.

exemption to existing sources. Thus, Congress provided that when an existing source was “modified” it would become subject to new source requirements. Moreover, Congress defined “modification” extremely broadly, including in the term “any physical change or change in method of operation” that increases emissions. Congress adopted an expansive definition of the term to prevent sources from evading new performance standards with piecemeal changes.

EPA regulations narrow the Act’s modification definition somewhat by including an exemption for “routine maintenance, repair, and replacement.” It is this exemption the defendant companies claim shield their plants from NSR. However, the challenged projects cannot be called routine, as a matter of law, logic, good policy, or history. Public information documents an industry capital investment strategy, starting in the 1980s, to upgrade existing plants to run longer and harder rather than letting them retire and be replaced by new capacity. For instance, one of the challenged projects involved removing existing 700 horsepower fans (the “lungs” of a power plant) and replacing them with new 900 horsepower fans. If this is routine replacement, then so is taking the original 350 horsepower engine out of your car and “replacing” it with a 450 horsepower engine.

And, at the Tennessee Valley Authority (TVA) Allen Plant, a \$10.78 million unit refurbishment project was undertaken at Unit 3 in 1992. TVA did not seek a permit for the project, which was undertaken without being subject to any NSR analysis. TVA’s plant managers and engineers have testified that although the company asserted this was a routine maintenance and repair project, in reality this project was neither “routine,” nor was it “maintenance,” nor was it simple “repair.”²⁶⁰

The Allen Unit 3 project involved cutting a hole 25 feet high in the boiler wall, at a location 10 stories off the ground. The project required huge cranes, construction of special monorail and trolley systems to transport the equipment and personnel in and around the site, and

²⁶⁰ *In re Tennessee Valley Authority*, 9 EAD 357, (2000).

a work force of dozens of additional non-permanent staff.²⁶¹ The EPA Environmental Appeals Board found that this project was the only one of its kind undertaken in the 33 years in which the plant had been operating.²⁶² The EAB also found that this project caused significant net emissions increases of both SO₂ and NO_x.²⁶³ But, as documented herein, the cost of this massive project at Allen Unit 3 was only 3.24 percent of today's replacement cost for the unit; and 1.08 percent of today's replacement cost for the source.²⁶⁴ Under the proposed RMRR rules changes, therefore, this project would not be considered a "physical change" and therefore would simply have been excluded from NSR review entirely.

If this is "routine repair," then so is completely reconstructing and redecorating the interior of a 1930's-era apartment building.

In essence, the industry decided to sell more electricity by building new capacity into their existing machines rather than building entirely new units. This practice has both kept pollution at unreasonably high levels and has functioned as a barrier to entry into the market—keeping many new clean, efficient units from being built.

While the industry is now labeling these projects as "routine maintenance," utility equipment vendors as well as utility company personnel appearing as witnesses in the enforcement cases and in public utility commission rate cases have described these projects as going beyond maintenance and providing capacity that otherwise would have to be created by building new units.²⁶⁵ Indeed, in a recent filing with the Department of Energy, American Electric Power Co. explicitly referred to some of the challenged projects as not including "routine maintenance" activities.

²⁶¹ *In re TVA*, CAA Docket No. 00-6, item R6A-45, EPA Ex. 279 at 17 (Prefiled testimony of Alan Michael Hekking); item R6-108 at 240-242 (cross-examination of witness Hekking).

²⁶² *In re TVA*, 9 EAD at 482 (Appendix A).

²⁶³ *Id.* at 451.

²⁶⁴ *See infra*, Table A.

²⁶⁵ *See In re TVA*, Docket No. CAA 00-6, item R6A-45, EPA Exh. 279 at 3, 5, 18-19 (Prefiled Testimony of Alan M. Hekking).

Industry's claim today is that any rebuild project, regardless of scope is "routine" as long as the rebuilt plant's maximum production capacity is no greater than the plant's original maximum design capacity. This reminds us of the fabled "one-hundred-year-old" axe: it's only had two new heads and four new handles over its life.

The industry's interpretation would read the "modification" provision out of the Act, creating a permanent grandfather exemption for all the capacity that existed prior to 1970. And when the industry litigated their interpretation over a decade ago, they lost. The utility industry in the 1980's challenged a Reagan-era EPA ruling that rebuilding a deteriorated plant to "restore" original capacity could not fit within the routine maintenance exemption. In 1990, the 7th Circuit rejected industry claims that original design capacity should define the boundary for the "routine" exemption.²⁶⁶ In *WEPCO*, the court flatly rejected industry's interpretation as one that would confer indefinite immunity from new source standards, contrary to Congress' intent.

When the *WEPCO* court upheld EPA, the industry prevailed on the Office of Management and Budget (OMB) to kill a broader examination of industry practices initiated by EPA. Industry also lobbied Congress following the court ruling to amend the law to create broad new exemptions for utility modification projects. When they did not get new statutory exemptions, industry lobbied the Bush Administration for regulatory exemptions. In 1992, the Bush Administration amended the NSR rules to give the utility industry a more generous formula for calculating whether an emission increase had occurred. But the rule did not change the definition of routine maintenance. After the 1992 rule had been in place for a few years, EPA again launched an investigation to determine why so few NSR applications had been filed. The industry again sought intervention by OMB, using the Paperwork Reduction Act as a pretext. While this effort delayed EPA's investigation for a time, this time OMB ultimately rejected the industry's Paperwork Act claims.

²⁶⁶ *WEPCO*, 893 F.2d at 901.

The industry complains that EPA has not published a detailed reference book listing exactly which projects are “routine maintenance” and which are not. But EPA has explained in numerous communications with utilities and other industries, that determining the correct classification of many projects is a highly fact-specific undertaking. These letters are similar to the opinion letters that the IRS uses to answer fact-dependent tax questions.

The utility industry implies that EPA has not given them fair notice of their NSR obligations. The opposite is true. It has been EPA’s practice for 30 years to issue “applicability determination” letters to resolve questions about whether a specific project would trigger NSR. Industry officials have known from the beginning of their rebuild programs that these types of projects could trigger NSR but they did not seek determinations from EPA for any of the challenged projects.

Minutes of a 1984 industry discussion shed some light on the industry’s thinking. The minutes report a consensus that companies should --

- identify their projects as “upgraded maintenance programs;”
- “downplay the life extension aspects of these projects (and extended retirement dates) by referring to them as plant restoration (reliability/ availability improvement) projects;”
- deal with the air regulatory issues “at the state and local level and not elevate [them] to the status of a national environmental issue.” (*i.e.*, don’t ask EPA because you won’t like the answer).²⁶⁷

As a final argument to inspire fear in the public, the industry has claimed that they now cannot make needed repairs for fear of triggering additional enforcement actions. There is no merit to this claim. EPA’s NSR rules for utilities provide generous “baseline” emission formulas (the maximum polluting hour in the past five years and the average of the two maximum polluting years of the previous five years). A company that commits to not exceed these generous limits can carry out any maintenance or other project it wishes, routine or otherwise,

²⁶⁷ EPRI, *Proceedings: Fossil Plant Life Extension Conference and Workshop* (1984), at 27-4.

without triggering NSR. Companies who refuse to commit to limit their pollution increases can seek applicability determinations from EPA.

VI. The Proposed Rule Would Have a Devastating Impact on Public Health and the Environment.

Throughout the proposed rule, and in the analysis underlying the rule, EPA adopts assumptions about the behavior of the owners of regulated facilities that send a dangerous message to the regulated community. In no place in the proposal does EPA make reference to the gains accomplished by NSR, the ongoing enforcement actions, settlements reached as a result of those actions, or the potential gains from the investigations now pending.²⁶⁸ The only justification the Agency provides in support of its attempt to dismantle the program comes from a single reference to productive capacity made in the preamble to the statute. It states specifically that the data are not complete on the effect of the proposed rule, but that, in any event, whatever gains – or losses – result from the proposed rule will be of no significance. EPA, however, fails to consider that productive capacity must be balanced with the interests of health and welfare, as stated in the preamble: the central purpose of the CAA is to “protect and enhance the quality of the Nation’s air resources so as to promote public health and welfare and the productive capacity of its population.”²⁶⁹ EPA’s mandate is to balance these purposes, not to choose to bolster productive capacity at the expense of the nation’s health and welfare.

Other than its rather vague reliance on the noncontrolling preamble to the statute, the Agency has provided no legal justification for a proposal that contradicts years of accepted agency policy as well as the legal positions it has taken in enforcing the program. Neither does it explain how it may now adopt an overly broad interpretation of an exemption created entirely by regulation, which until now it has insisted should be narrow. Unfortunately, this apparent pervasive attitude favoring industry convenience over health and the environment communicates to the regulated community that the Agency does not believe in the regulations it is enforcing – so

²⁶⁸ Indeed the analysis underlying the proposal assumes these benefits do not exist.

neither should those regulated entities. It amounts to a transparent attempt to eliminate the program, an action that may only be undertaken by legislating the program out of the law, not by squeezing out the requirements through rulemaking.

Indeed, the NAPA *Fresh Air* report recently found (contrary to statements made by EPA in the proposal), that while NSR is “not the only element of the Clean Air Act intended to improve air quality,” the program is nevertheless viewed by state and local agencies with sub-standard air quality as “an essential tool to improve and maintain air quality.”²⁷⁰ As stated by NAPA, “contrary to Congressional intent – many large, highly polluting facilities have continued to operate and have expanded their production (and pollution) over the past 25 years without upgrading to cleaner technologies.”²⁷¹ NAPA endorses the broad definition of modification (not to be confused with the broad interpretation of RMRR urged by the agency in the instant proposal) that the courts have upheld, which should have, according to NAPA, required all facilities in existence in 1977, to have installed up-to-date pollution controls. As stated by NAPA: “the broad language Congress used in creating the NSR program in 1977 – making NSR applicable to any physical change in a major stationary source – clearly demonstrates that Congress intended to impose meaningful regulatory requirements on existing sources and thus reduce their emissions by ensuring they would upgrade their equipment to install cleaner technologies when making other changes.”²⁷² More importantly, the NAPA report points out that “[f]irst, and foremost, protection of the public health remains the paramount purpose and value under the Act. Consideration of costs, energy, and technology is expressly authorized or required in many sections of the bill, but the overriding commitment of the 1977 Act (just as the 1970 legislation) is to the protection of public health.”²⁷³

²⁶⁹ 42 U.S.C. § 7401.

²⁷⁰ NAPA Summary Report at 13.

²⁷¹ *Id.* at 2.

²⁷² *Id.* at 10.

²⁷³ *Id.* 11 (quoting explanatory statement of House Conferee Representative Paul Rogers).

The preamble to the proposed rule states that the changes are not intended to “sacrific[e] the current level of environmental protection and benefit derived from the [NSR] program.”²⁷⁴ The agency includes a quantitative analysis in the proposal which it claims supports its view that “the breadth of the RMRR exclusion would have no practical impact on, let alone be the controlling factor in determining, the emissions reductions that will be achieved in the future under the major NSR program.”²⁷⁵ But the agency’s analysis²⁷⁶ ignores the fact that the laws of physics dictate that plants will age, and the fact that if older plants are indeed refurbished, they will be dispatched far more often and therefore will yield significant air pollution increases.

The quantitative analysis was conducted by EPA using its Integrated Planning Model (IPM), a powerful tool for analyzing the utility industry, and therefore was limited to that industry, although, as EPA notes, the results for electric utilities reflect what might be expected for other industries as well.²⁷⁷

We do not dispute the value of using the IPM for the purpose of comparing the outcome of the proposed rule with a base case that reflects the enforcement of the Clean Air Act without the rule. Unfortunately, however, EPA’s modeling is fundamentally flawed. EPA has compared the expected emissions results from several possible scenarios under the RMRR proposal with a “base case” that does not reflect either the laws of physics or the law of the land as contained in the Clean Air Act.

In defining a base case for the purposes of comparison with the RMRR proposal, EPA assumes that the owners of the nation’s older power plants will avoid major maintenance and refurbishment projects, but at the same time EPA assumes that this lack of major maintenance and refurbishment will have very little impact on the performance of those power plants. These

²⁷⁴ 67 Fed. Reg. at 80,290/2.

²⁷⁵ *Id.* at 80,304/1.

²⁷⁶ This analysis is documented in the record underlying this proposal at EPA, Regulatory Impact Analysis For The Specification Of Categories Of Activities As Routine Maintenance, Repair and Replacement For The New Source Review Program, 34-41 (Appendix B).

²⁷⁷ 67 Fed. Reg. at 80,303/3.

assumptions – especially the assumption with respect to the continued ability of the plants to produce the same electricity output – fly in the face of reality, as described above. The laws of physics and engineering require that these older coal-fired power plants must undergo major renovation or replacement projects by 2020. If and when they do, the laws of physics and the realities of economic dispatch mean that their emissions will increase significantly,²⁷⁸ and the Clean Air Act and current regulations require that in attainment areas, the refurbished plants must meet BACT and in nonattainment areas, LAER standards. But EPA’s base case does not reflect this outcome either. Because EPA’s NSR base case assumptions fail, the entire EPA analysis of the impacts of redefining routine maintenance, per the proposed rule, becomes meaningless.

To rectify the fundamental flaw in the EPA analysis, and to create a more accurate assessment of the actual impact of the proposal, if finalized, we have created what we believe is a much more realistic base case to use. We have assumed that, as coal-fired plants age, they must be refurbished, in order to remain in operation, or alternatively they must be closed down and replaced by new, much cleaner units. In either event, either through major refurbishment that under the current law would trigger the BACT/LAER requirement or through shut down and replacement, the performance of the plants will be improved, and at least BACT emissions levels will be required on the existing fleet of fossil fuel-fired power plants.

By 2020 we expect that about 70-75% of coal-fired capacity will have been refurbished or retired, and BACT applied (or the retired plants will be replaced with plants meeting BACT), under the Act if it is administered under the existing rules, as Congress intended. Within a few more years the fraction of the fossil fuel-fired fleet meeting at least BACT emissions levels will be over 90%. As a result of this refurbishment and corresponding emission reduction, the SO₂

²⁷⁸ See, e.g., Letter from Eliot Spitzer, Attorney General of the State of New York to William Lhota, President Kentucky Power, *et al.*, entitled “Notice of Intent to Sue Pursuant to Clean Air Act § 7604” (September 15, 1999) at 3 (noting that the 1996 refurbishment of unit 2 at the Big Sandy plant, including upgrading the economizer, among other things, increased emissions of NO_x by 2500 tons and SO₂ by more than 18,000 tons in the year following the upgrade). See also prefiled Testimony of Mr. Alan M. Hekking, *In re Tennessee Valley Authority*, No. CAA 00-6 at 3-5 (July 7, 2000).

and NOx emissions from the coal-fired fleet will be sharply reduced. Several analyses previously have been done which reflect this scenario. In one, the U.S. Energy Information Administration in 2000 showed that applying BACT to the entire fossil fuel-fired power plant fleet would result by 2020 in an emissions inventory from the fleet of approximately 1.9 million tons of SO2 and 1.6 million tons of NOx.²⁷⁹ The Clean Air Task Force also performed a study which determined that, because of the natural fall off in power plant performance with age, the expected SO2 emissions in 2020 would be 1.9 to 2.1 million tons, while NOx emissions would be 1.1 to 1.5 million tons. These analyses provide a much more realistic base case than the base case the EPA developed for its comparison.²⁸⁰

When the impact of redefining refurbishment as routine maintenance is assessed by comparison to this more realistic base case, it is found to be quite significant. Comparing the EPA RMRR scenarios with the all-BACT by 2020 base case shows that instead of emissions of 1.9 to 2.1 million tons of SO2 and 1.1 to 1.6 million tons of NOx which should be expected under the current regulations, the RMRR proposal will yield emissions instead of 9.1 million tons of SO2 and 4.4 million tons of NOx. The change in the rules therefore will lead to about 7 million tons more SO2 and about 2.4million tons more NOx emissions each year, from coal-fired power plants alone, than would be the case if the Clean Air Act were implemented under the current rules.

Finalizing the RMRR proposal, therefore, will lead to about 7 million more tons of SO2 emissions, and about 2.4 million tons of additional NOx emissions per year, by the electric utility sector alone, by the year 2020. The health impact of this extra pollution will be extremely

²⁷⁹ United States Energy Information Administration, Analysis of Strategies for Reducing Multiple Emissions from Power Plants: Sulfur Dioxide, Nitrogen Oxides, and Carbon Dioxide, page 60 (December 2000).

²⁸⁰ According to the EPA's base case projections, power plants will emit 9,103,275 tons of SO2 and 4,375,486 tons of NOx in 2020. These numbers, however, do not reflect any application of pollution controls on older units as a result of their modification. See Regulatory Impact Analysis For the Specification of Categories of Activities As Routine Maintenance, Repair, and Replacement for the New Source Review Program (Appendix B), 38, 39 (2002). See also EPA Clean Air Markets Division,

significant. By comparison, work done by the EPA in evaluating the health impacts of various legislative proposals and documented in EPA's "A Comprehensive Approach to Clean Power: Straw Proposal and Supporting analysis for Interagency Discussion" (August 3, 2001), shows that *decreases* of approximately 6 million tons of SO₂ and about 3 million tons of NO_x translate to very significant health benefits. These benefits include a difference in premature mortality of approximately 20,000 per year, a difference in asthma attacks of approximately 400,000 per year, and a difference in work-loss days due to respiratory problems of approximately 3.4 million per year.²⁸¹

But abandoning NSR, per the RMRR proposal, will mean *emissions increases* of 7 million tons of SO₂ emissions and 2.4 million tons of NO_x emissions per year by 2020 as compared with implementation of the current rules. These emissions increases translate into lost health benefits relative to implementing the Act as Congress intended. The public health cost of the proposal will be at least as significant as the loss of those benefits described above.

Furthermore, the economic impact of these lost public health benefits will be very significant. The EPA's accepted monetized economic values for each health endpoint, and associated with the legislative test case,²⁸² provide a very conservative estimate of the economic costs associated with the RMRR proposal. This estimate is conservative both because the RMRR

Computer Runs From the "Integrated Planning Model" (IPM) (A-2002-4) (II-B-1) (containing full suite of NO_x numbers as projected by EPA).

²⁸¹ See EPA modeling of the health benefits associated with various legislative proposals and documented in "A Comprehensive Approach to Clean Power: Straw Proposal and Supporting Analysis for Interagency Discussions, U.S. Environmental Protection Agency (August 3, 2001), provided by EPA to the U.S. House of Representatives Government Reform Committee, at the request of Rep. Henry Waxman, and subsequently made public by the Committee. The proposal known colloquially as Test Case 2 includes a cap on the emissions from the nation's fossil-fuel power plant fleet of approximately 3.3 million tons of SO₂ and 1.25 million tons of NO_x per year. As compared with the all-BACT scenario, this modeled scenario yields more of these pollutants, and therefore has associated health benefits that are not as great as the all-BACT scenario.

²⁸² EPA's standard estimates of the societal costs of each health impact expected can be found in "Technical Addendum: Methodologies for the Benefit Analysis of the Clear Skies Initiative," September 2002. While we do not in any way endorse the use of these cost figures, we utilize them here because these are the monetized values used by the Agency to support its regulatory proposals. Had EPA properly evaluated the RMRR proposal, the Agency likely would have used these figures in evaluating the economic costs associated with it.

proposal will result in more lost benefits (compared with implementing the current NSR rules) than would the legislative test case we are using, and because our analysis is limited to costs associated with the electric utility industry. Using this approach, we can estimate that the total annual economic costs of the health impacts associated with the RMRR proposal approach \$154 billion per year as of 2020 (measured in 1999 dollars).

VII. “Think Enron”: EPA’s Proposed Exemptions Would be More Complex, Unenforceable and Subject to Industry Manipulation and Abuse.

EPA’s proposal would make the NSR program even more complex and ripe for abuse by industry, leaving to company accountants, lawyers and plant operators sweeping exemptions subject to manipulation by accounting gimmicks and lawyerly interpretations, such as the ability to shift or recognize or not recognize costs from any given year to another (or even over many years under the multi-year allowance approach), inviting the same level and range of creative accounting abuses that have come to light with major corporate scandals in recent years – all in an effort to maximize avoidance of BACT and LAER controls and NSR health protections.

The proposed exemptions are unenforceable from the micro-level (*e.g.*, relying upon vague definitions, the shielding of essential cost data and other information from the public as confidential business information, and complex accounting procedures that may be shifted and manipulated at will) to the macro level (*e.g.*, relying upon industry self-determinations of coverage under extremely broad loopholes, a super structure of complex accounting practices that are layered on top of engineering judgments, and failure to require tracking, monitoring or reporting of emissions increases).

At a recent industry conference during an NSR enforcement panel discussion, the director of EPA’s air enforcement division in the Office of Enforcement & Compliance Assurance was asked about this NSR proposal. He responded that if the NSR proposal were to be adopted it would add tremendous complexity in the form of difficult accounting issues to the already present, inherent engineering complexities and judgments and opportunities for “creativity,”

which this EPA official noted had already led to NSR violations in the past. He declared that if this proposal were adopted it would lead to “an additional layer of complexity that is beyond belief.” He suggested that we would see the same types of accounting abuses under the NSR program as with recent corporate accounting scandals and concluded with the warning, “Think Enron.”²⁸³

The most highly developed market system in the world, with sophisticated Wall Street analysis, extensive corporate laws, dedicated Securities and Exchange Commission oversight and regulation, detailed reporting obligations, independent accounting standards, outside auditors, and the built-in pricing and policing function of a stock market – all these checks and balances failed to prevent millions of Americans from losing their jobs and enormous wealth in market holdings as a result of recent corporate accounting scandals..

It defies all logic and responsibility and regard for this recent history for EPA to propose to incorporate opportunities for Enron-style accounting and financial abuses into protection of the American public’s right to breathe clean and healthy air. Virtually none of the marketplace’s checks and balances, incentives and pressures are present under the Clean Air Act or EPA’s proposed regulatory structure to uncover or prevent industry abuses of the cost-based air pollution approaches discussed in the EPA proposal. Members of the public living near these polluting facilities are not equipped with the expertise or information to contest industry’s self-serving presentation and explanation of its own cost data, project planning, and accounting practices. The cost-allowance approaches in the proposal are a guarantee that the public will be denied the opportunities intended by the Clean Air Act to participate in the protection of air quality in their communities.

²⁸³ See “Despite Flexibility Goals, NSR Reforms May Prompt New EPA Enforcement,” Inside EPA (May 2, 2003) (quoting Bruce Buckheit, director of EPA’s air enforcement division, at April 29, 2003 Air & Waste Management Association NSR conference, Crystal City, Virginia). This description of events and paraphrasing of remarks have been supplemented by the contemporaneous notes and recollections of one of the authors of these comments, who was present at the conference as a panelist.

In light of these considerations, adoption of the proposals would be unlawful, arbitrary, and capricious.

VIII. The Proposed Rule Represents a Complete Reversal of the 1994 EPA “Staff Draft.”

In 1994, EPA released a draft rule that defined routine maintenance, repair and replacement. The rule was, in part, a response to industry requests for clarity regarding the definition of “routine.” The draft defined routine maintenance as follows:

- (A) *Routine maintenance, repair and replacement means:* an activity normally performed during regularly scheduled equipment outage involving minor maintenance and repair of minor parts and components or the replacement of minor parts or components with identical or functionally equivalent items.
- (B) Routine maintenance, repair and replacement does not include:
 - (1) An activity that either increases or affects: emissions of any pollutant, the present efficiency, capacity, operating rate, utilization, or fuel adaptability of the source or any emission unit;
 - (2) An activity that substantially extends the useful economic life of the emission unit; or
 - (3) A reconstruction as defined in 40 CFR 60.15.²⁸⁴

In the preamble to the draft rule, EPA stated that in determining whether proposed work at an existing facility was routine, EPA should consider the “nature, extent, purpose, frequency, and cost of the work, as well as other relevant factors, to arrive at a common-sense finding.”

EPA went on to add:

A key provision of the proposed definition is that such routine activities must neither increase nor affect: 1) the emissions of any pollutant, or 2) the present efficiency and capacity, operating rate, utilization, or fuel adaptability of the plant, or of any emissions unit at the plant. In addition, such activities must not substantially extend the useful economic life of the plant or an emission unit and must not include a reconstruction of an emissions unit.

Under today’s proposal, routine activities would generally include the planned or anticipated minor maintenance or repair of parts and components and the replacement of minor parts or components with identical or functionally equivalent items.

²⁸⁴

New Source Review Reform, Preliminary Staff Draft (July 11, 1994).

Since routine activities are usually planned or anticipated in advance and the materials, equipment and resources necessary to carry out routine activities are normally stored at the source or readily available to the source. Costs associated with routine activities should reasonably reflect those costs originally projected during the source's or unit's design phase as necessary to maintain the day-to-day operation of the source. Therefore, activities which are not normally part of a source's operating budget would not usually be considered routine.²⁸⁵

EPA's currently proposed definition of routine maintenance is completely contrary to the definition proposed in 1994. Today's proposal would allow activities to qualify as "routine" without regard to the nature, extent, purpose and frequency of the activity. Likewise, the proposal would clearly allow activities that substantially extend the useful economic life of a plant and that constitute reconstruction of a facility to qualify as "routine".²⁸⁶

Further, today EPA suggests that granting a broad range of activities exemption from NSR under the routine maintenance exemption will actually improve air quality because it will spur energy efficiency and pollution prevention projects. To the contrary, in response to industry comments on its 1994 draft rule EPA stated:

An exclusion of projects that do not increase a source's potential to emit would create an exclusion that could considerably reduce the effectiveness of the NSR program. Almost any modernization that a source undertakes has the incidental effect of lowering emissions. A new emissions unit or modernization generally has fewer emissions than [sic] one built 40 years earlier. Since these types of changes would not likely increase a source's potential to emit, industry would claim this as a pollution prevention project – even though its' pollution prevention aspects are likely to be negligible and actual emissions may increase dramatically due to increased utilization.²⁸⁷

²⁸⁵ *Id.* at 117-118 (emphasis added).

²⁸⁶ "The proposed rules would allow the rebuilding of entire emission units over time without the opportunity to review the emissions and controls associated with those essentially new units." U.S. Environmental Protection Agency Public Hearing on December 31, 2002 Proposal on Federal New Source Review Applicability for Routine Maintenance, Repair, and Replacement Activities – Comments on Behalf of the Texas Commission on Environmental Quality (March 31, 2003).

²⁸⁷ EPA Response to Issues Raised by Industry on Clean Air Act Implementation Reform (May 30, 1995) at 19.

EPA has failed to justify its policy reversal. It has failed to explain why activities, which it explicitly enumerated as *not* routine in 1994, are considered routine under EPA's current proposal. Likewise, EPA has failed to explain why it no longer believes that projects should be well-controlled when they dramatically increase actual emissions and thereby "considerably reduce the effectiveness of the NSR program."

In the end, EPA decided to withdraw the definition of routine maintenance from its 1994 draft rule package in response to industry objections.²⁸⁸

²⁸⁸ When EPA released the draft rules in 1994, listing types of activities that could not be considered routine, UARG objected stating, "[O]ur position is easily summarized: *leave the WEPCO rule alone.*" UARG Recommendations on EPA Response to the *WEPCO* Decision (Feb. 7, 1990), at cover Letter p.2. UARG added:

Changing the rules of the game for utilities at this late date could frustrate their efforts to comply with the numerous requirements imposed on them by the Clean Air Act Amendments of 1990. ...

In short, changes in the WEPCo rule would introduce uncertainty and delay into the process at precisely the worst time. Ultimately, in our view, the only sound decision is not to change the WEPCo rule at all as it currently applies to electric utilities.

Id. at 2-3.

Similarly, the Class of '85 Regulatory Response Group submitted comments on EPA's draft rules stating:

The Class of '85 recommends that EPA not attempt to create a rule at this point that would specify the meaning of routine maintenance, repair and replacement. Particularly since the Seventh Circuit's *WEPCO* decision in 1989, electric utilities have undertaken a very studied approach to activities at their facilities. Most companies now have a fairly good understanding of what should be considered a routine activity. This understanding is based on existing legal opinions, such as in the *WEPCO* case, guidance from EPA on specific situations regarding routine activities, engineering requirements and vendor recommendations, a review of normal industry practice regarding maintenance, repair and replacement, and EPA's general guidance on this issue.

There would be little value, and probably a detriment, resulting from an EPA attempt to create a regulation that would dictate what is to be considered routine across the spectrum of industries subject to the NSR regulations. Consequently, the Class of 85 recommends that the section dealing with routine activities be withdrawn from the Draft.

Comments of the Class of '85 Regulatory Response Group on the New Source Review Reform Preliminary Staff Draft (Sept. 9, 1994), at 5.

IX. EPA Should Reject White House and Energy Department Pressure to Undermine NSR Enforcement and Adopt Unlawful Industry-Scripted Legal Arguments and Exemptions.

Documents that NRDC obtained from EPA in response to a Freedom of Information act Request contain correspondence among high-level government officials. This correspondence demonstrates that political appointees within the White House Council on Environmental Quality, Office of Management and Budget, and Energy Department have been collaborating behind the scenes in this rulemaking to force EPA to fatally undermine its pending enforcement cases against coal-fired power plants; abandon the agency's key legal positions in those cases; embrace the flawed positions advanced by *utility defendants* in those cases; adopt industry-promoted loopholes that would allow millions of tons of higher pollution levels to escape NSR health protections. This proof is found in a series of emails among political appointees at the White House Council on Environmental Quality (CEQ), White House Office of Management and Budget (OMB), Department of Energy (DOE) and a counsel to the political air appointee at EPA.²⁸⁹ The emails show officials outside of EPA commandeering the EPA rulemaking, especially key arguments supplying its purported legal basis, in order to drastically weaken the NSR rules by embracing industry's agenda.

To show how senior DOE officials sought to use this proposed rule to undermine EPA's position in its power plant enforcement cases while parroting identical legal arguments made by lawyers for the electric utility industry, we analyze the following documents below: (1) an October 20, 2002 email from the DOE General Counsel to the group noted above, attaching redline-strikeout edits to an earlier EPA draft of the proposal; notably, the DOE edits eliminate

²⁸⁹ See Docket A-2002-4, October 20, 2002, 4:47 pm email from Lee Otis, General Counsel, DOE, to James Connaughton, Chair, White House Council on Environmental Quality; Paul Noe, Counselor to the Administrator, White House Office of Management and Budget; Arthur Fraas, Office of Information & Regulatory Affairs (OIRA), White House OMB; Amy Farrell, OIRA, White House OMB; cc:ing Larisa Dobriansky, Deputy Assistant Secretary for Policy Analysis, Office of Policy and International Affairs, Department of Energy; David Hill, Deputy General Counsel for Energy Policy, Department of Energy; Douglas Carter, Department of Energy; Bill Wehrum, Counsel to the Assistant Administrator, Office of Air

the EPA-drafted “legal basis” for the proposal entirely; (2) a second October 20, 2002 email from the DOE General Counsel to the same group, 6 hours later that night, attaching a four-page document entitled “Legal Basis for Proposed Approaches” drafted by DOE to supply the legal arguments for EPA’s proposal; and (3) a November 1, 2002 email from EPA to the White House OMB, containing nothing more than 2 bare paragraphs setting forth the exact text that appears in the “Legal Basis for Recommended Approaches” section of EPA’s final proposal.²⁹⁰

A. October 20, 2002, 4:47 pm DOE Email Eliminating EPA Legal Arguments

As noted, an October 20, 2002 email from the DOE General Counsel to the group noted above attaches extensive redline-strikeout edits to an earlier EPA draft of the proposal, and revealingly, eliminates the EPA-drafted “legal basis” for the proposal entirely. We know of no other instance in which the general counsel for another agency – or any non-EPA employee for that matter – has been involved so directly in an EPA rulemaking that they have purported not just to eliminate EPA’s legal analysis, but to substitute her own legal analysis instead. By Congressional delegation of authority, the Clean Air Act confers authority to issue NSR rules only on the EPA administrator and her staff.²⁹¹ The DOE’s abrogation of authority and roles provokes no response (that is apparent in the emails in the docket, at least) from any of the other administration officials on these emails.²⁹²

DOE’s elimination of the original EPA legal arguments for its proposal, read together with the substitute DOE legal arguments, reveal the anti-Clean Air Act, anti-enforcement, industry agenda of the Department of Energy in this rulemaking. Examining the original EPA legal arguments stricken by DOE, we analyze in this section the key elements of those arguments

& Radiation, Environmental Protection Agency; October 20, 2002, 10:57 pm email from L. Otis, DOE, to same recipients, attaching DOD-drafted “Legal Basis for Proposed Approaches” (DOD Legal Arguments).

²⁹⁰ See Docket A-2002-4, November 1, 2002 email from Bill Harnett, EPA Office of Air Quality Planning and Standards, to A. Farrell, OMB, cc:ing A. Fraas, OMB; B. Wehrum, EPA; and L. Hunt, OMB.

²⁹¹ See 42 U.S.C. §§ 7475 & 7503.

²⁹² Indeed, the DOD email and edits eliminating the EPA legal analysis are forwarded without comment by the EPA Counsel to the Assistant Administrator for Air to the EPA manager charged with

to evaluate what EPA understood the legal posture of its proposal to be prior to interference from political appointees outside of EPA. We also analyze the significance of the DOE elimination of EPA's positions in light of the legal arguments substituted by DOE the night of October 20th, in order to reveal the anti-enforcement, dirty air agenda that characterized DOE's agenda and that ends up under-girding the policy choices in EPA's final proposal.

EPA's original legal section would have solicited public comment on two possible alternative legal bases for the proposal.²⁹³ Right away this is at least a more honest, responsible approach than that adopted in the DOE approach or the final proposal's approach, neither of which even solicited public comment. And neither of which mentions EPA's current legal position. The first legal basis that EPA would have sought comment on in the original draft was the agency's longstanding legal position that its authority to interpret the modification provision, and to adopt any exemptions from the definition, is governed by the *Alabama Power de minimis* doctrine: "In the past, EPA has advanced the view that the routine maintenance exclusion is justified on *de minimis* grounds."²⁹⁴ As noted earlier in these comments, EPA has consistently held this position, relied on it to support its enforcement cases, and recently reaffirmed this position with a federal district court in the face of hostile utility industry arguments that EPA had abandoned the position following this NSR proposal.

The second mentioned legal argument was a position never held by EPA, and that contradicts the statutory language and prior court decisions, which might explain why EPA was

carrying out edits to the NSR proposal. See Docket A-2002-4, Item II-F-3, October 21, 2002 email from B. Wehrum, EPA, to B. Harnett, EPA.

²⁹³ See A-2002-4, II-F-3, to October 20, 2002 email from L. Otis, DOD, to J. Connaughton, CEQ, *et al.*, at 22 (DOE Edits to EPA Legal Arguments).

²⁹⁴ *Id.* An earlier draft of EPA's legal arguments, dated August 28, 2002, is even more direct about EPA's legal position: "The scope of this [routine maintenance] provision is, of course, not without limit. EPA has advanced the view that the routine maintenance exemption is justified on *de minimis* grounds and that, under this approach, the exemption should be given a relatively narrow construction. See Brief for Respondents, *TVA v. Whitman*, No. 00-12310-E, Feb. 21, 2001 at 61. See A-2002-4, II-F-17, at 28. A later email makes clear that this text of the EPA legal arguments was eliminated by October 11, 2002, during the interagency review process with DOE and OMB. See A-2002-4, II-F-21, October 11, 2002 email from B. Wehrum, EPA, to A. Fraas, OMB, *et al.*

seeking public comment on the argument. This is the so-called *Chevron* step 2 argument.²⁹⁵ It is the unfounded legal argument being pushed by industry and the Department of Energy.²⁹⁶ It is the argument that the Department of Justice and EPA have rejected in prosecuting their enforcement cases against coal-fired power plants, and in opposing the power plant defendants' arguments that EPA has vast authority to exempt power plants from clean up responsibilities. As noted, the DOE General Counsel struck these arguments and the remainder of EPA's discussion in favor of the legal arguments that she sent with the email discussed next.

B. October 20, 2002, 10:48 pm DOE Email Imposing DOE Legal Arguments

Six hours later that same night, the DOE General Counsel sends an email to the same group noted above, attaching a document that she has authored entitled "Legal Basis for Proposed Approaches."²⁹⁷ Considering this subject, the first thing that leaps out is that no attorney from EPA's Office of General Counsel is included on this email – not the politically appointed EPA General Counsel himself, nor any career attorney in EPA's Office of General Counsel. By contrast, the email is from the General Counsel of the Department of Energy, to the Deputy General Counsel for Energy Policy at DOE, the Counselor to the Administrator for the White House Office of Management and Budget, as well as the Chair of the Counsel on Environmental Quality.

The most striking thing about the arguments and the language in the DOE General Counsel's paper are the extent to which they embrace and echo harmful legal and policy arguments advanced by utility industry defendants and their attorneys in pending NSR enforcement cases, while conflicting with the legal and policy arguments of EPA and the

²⁹⁵ DOE Edits to EPA Legal Arguments, at 22-23.

²⁹⁶ See Van Ness Feldman memo at 4-6; DOD Legal Arguments at 2; October 20, 2002, 4:47 pm email from L. Ottis, DOE, to J. Connaughton, CEQ, *et al.* ("As I mentioned to Bill on the phone, in my cut at the legal basis, I think (having now re-read that portion of WEPCO) that what I have over-reads the sentence in WEPCO, and that I should modify the legal discussion not to rely on it and instead get to Chevron Step 2 a different way.")

²⁹⁷ This topic was eventually included in the proposal as section V, "Legal Basis for Recommended Approaches." See 67 Fed. Reg. at 80,296.

Department of Justice, as well as key court decisions. Below, we identify these DOE/industry positions and contrast them with the EPA/DOJ positions.

1. The “Design” Argument and “Indefinite Vistas of Immunity”

The DOE paper begins by arguing that the massive activities DOE hopes to exempt from NSR protections are not “physical changes” because “they *do not change a source’s original design*, and their function is to *maintain the source in its pre-existing condition* rather than to modify it.”²⁹⁸ This is the industry argument that was rejected over a decade ago in the landmark *WEPCO* court decision and it represents one of the current Hail Mary legal defense of the utility defendants in the enforcement cases.

Compare the italicized language in the DOE memo above with the language from the unsuccessful utility industry brief in the 1990 *WEPCO* case:

Thus, under the plain meaning of the Act a unit should not be deemed "modified" as a result of replacement of equipment with equipment similar to that replaced. As in the case of [the *WEPCO* facility], such like-kind replacement *does not "change or alter" the design or nature of the facility*. Rather, it merely allows the facility to *operate again as it had before* the specific equipment deteriorated.²⁹⁹

The court soundly rejected these positions, concluding that:

What *WEPCO* calls "plain" is anything but plain and takes the definition far beyond the words enacted by Congress. . . .

Nor can we find any support in the relevant case law for the narrow constructions of "modification" and "physical change" offered by *WEPCO*.

Further, to adopt *WEPCO*'s definition of "physical change" would open vistas of indefinite immunity from the provisions of NSPS and [NSR].³⁰⁰

Those same judicial conclusions can be applied with equal force to the DOE arguments.

2. “Anything but Plain”

²⁹⁸ DOE Legal Arguments at 1 (emphases added).

²⁹⁹ *WEPCO*, 893 F.2d at 908 (emphases added).

³⁰⁰ *Id.* at 908-909.

The October 20, 2002 DOE legal paper also originally argued that EPA had discretion to exempt a broad swath of emissions-increasing physical changes from regulation because “[a]s the U.S. Court of Appeals for the Seventh Circuit stated in *Wepco*, the meaning of the phrase ‘any physical change’ is ‘anything but plain.’”³⁰¹ This argument echoes the identical argument made in the November 2001 industry memo discussed above, arguing for a very broad exemption from NSR air quality protections: “[i]n the *WEPCO* case, the Seventh Circuit Court of Appeals characterized the terms [“any physical change or change in the method of operation”] as ‘anything but plain.’”³⁰²

It is conceivable that the DOE General Counsel and the private attorney(s) who authored the industry memo could have read the *WEPCO* court opinion and independently reached the same conclusion that the 7th Circuit read the term “any physical change” to be “anything but plain.” In order for this supposition to be plausible, however, one would have to conclude that the DOE General Counsel and the industry attorney independently arrived at a *100% wrong* reading of a clear passage in the *WEPCO* decision. In discussing the *company’s* tortured reading of the term “physical change,” the 7th Circuit wrote that “[w]hat *WEPCO* calls ‘plain’ is *anything but plain* and takes the definition far beyond the words enacted by Congress.”³⁰³ In other words, both the November 2001 industry memo and the October 2002 DOE legal paper fundamentally mischaracterize this point in the *WEPCO* opinion, since the court was deeming the utility company’s reading of the statute “anything but plain,” not calling the term any physical change “anything but plain.” To the contrary, the 7th Circuit found the utility’s replacement projects and construction activities “under the plain terms of the Act” to constitute a “physical change.”

It would be an extraordinary coincidence for the DOE General Counsel to reach the identical erroneous reading reflected in the industry memo, concerning a passage as clear as the one in the *WEPCO* decision. The far more disturbing likelihood is that the DOE General Counsel

³⁰¹ DOE Legal Arguments at 1.

³⁰² Van Ness Feldman memo at 4.

was parroting the sentence and analysis in *this* industry memo, and unwittingly repeating the memo's erroneous reading. In an email, prior to transmitting an edited version of the DOE legal paper, she acknowledges the error of this reading: "in my cut at the legal basis, I think (having now re-read that portion of WEPCO) that what I have over-reads the sentence in WEPCO, and that I should modify the legal section not to rely on it and instead get to Chevron Step 2 a different way."³⁰⁴

3. Attempt to Broaden EPA Exemption Authority Beyond *De Minimis* Constraints

As discussed earlier, DOE struck EPA's earlier legal arguments entirely, including all reference to the *Alabama Power de minimis* doctrine that EPA has said repeatedly is the only authority it had for its routine maintenance exemption, the doctrine EPA is relying on in its enforcement cases, the doctrine industry opposes for narrowing EPA's exemption authority. In the DOE General Counsel's legal paper, the industry-desired legal argument takes on the starring role – while EPA's *de minimis* argument is nowhere to be found.

It bears recognizing that industry's desired legal argument to create the broadest possible Clean Air Act exemptions are directly at odds with EPA's historic and current legal views, EPA's legal and policy posture in the NSR enforcement cases, and the purposes underlying the Clean Air Act. This explains industry's campaign to challenge and overturn EPA's legal and policy positions – a campaign first begun with their success in lobbying the administration's energy task force to issue a political directive to the Department of Justice to question the legal basis for the pending NSR enforcement cases against coal-fired power plants and oil refineries; a campaign reflected in the industry memo's efforts to gin up legal arguments to banish EPA's legal positions;³⁰⁵ and a campaign continuing with the SIGECO attorneys' efforts to exploit publication of this rulemaking proposal to argue that EPA hereby has abandoned its legal positions – in this

³⁰³ 893 F.2d at 908 (emphases added).

³⁰⁴ October 20, 2002, 4:47 pm email from L. Otis, DOE, to J. Conaughton, CEQ, *et al.*

³⁰⁵ See Van Ness Feldman memo at 1-4 (arguing that EPA should abandon its legal position).

way hoping to relieve their clients of liability for alleged NSR violations.³⁰⁶ It is this industry campaign that the DOE legal paper picks up.

Contrast this first statement from the DOE legal paper, which echoes arguments in the industry memo and *SIGECO* briefs, with the subsequent statements by EPA and court decisions:

EPA does not believe (and has not argued) that what has been its current view is compelled by the language or policies of the Act.³⁰⁷

From EPA legal briefs:

EPA has extremely limited authority to exempt activities from the definition of “modification” under the Clean Air Act. The agency’s authority is limited to circumstances of administrative necessity (which EPA has never claimed) and circumstances having a “de minimis” or “trivial” impact on emissions. *Alabama Power*, 636 F.2d at 358-61.³⁰⁸

EPA’s narrow construction of the routine activity exception stems from two basic premises. First, Congress established an exceedingly broad definition of the term “modification” that triggers the requirements of the NSPS and NSR programs. EPA’s narrow interpretation of the routine activity exception most effectively implements the objectives of the Clean Air Act.

Indeed, in the NSR context specifically, EPA’s authority to limit the coverage of the statute is narrow. *Alabama Power Co. v. Costle*, 636 F.2d 323, 355-61 (D.C. Cir. 1979) (EPA has the authority to exempt *only* those activities when the benefits of regulation are trivial (or “*de minimis*”) or when regulation would be administratively impossible). EPA has consistently applied this principle to its interpretation of the routine activity exception. *See also National-Southwire Aluminum Co. v. EPA*, 838 F.2d 835, 840 (6th Cir. 1988) (apply “*de minimis* exception” to installation of pollution control system).³⁰⁹

From court decisions:

³⁰⁶ See *SIGECO* Supplemental Motion at 1-4 (arguing that EPA has abandoned its legal position).

³⁰⁷ DOE Legal Arguments at 2-3.

³⁰⁸ Pl.’s Opposition to Def.’s Motion for Summary Judgment on Fair Notice at 29. *See also id.* at 7-8 (“[T]he term’s [‘routine’] scope is constrained by EPA’s limited authority to create exemptions from Clean Air Act requirements, a central holding in *Alabama Power Company v. Costle*, 636 F.2d 323 (D.C. Cir. 1980).”).

³⁰⁹ Brief for Respondent EPA in *TVA v. EPA*, Case No. 02-1231-E (11th Cir.), at 63-67.

Giving the routine maintenance exemption a broad reading could postpone the application of NSR to many facilities, and would flout the Congressional intent evidenced by its broad definition of modification.³¹⁰

The DOE/industry arguments thus directly contravene EPA's current reading of the Clean Air Act – a reading that the courts have held is mandated by the clear language, purpose, and legislative history of the Act.

4. “Our Current Policy Is” Versus “Our Current Policy Has Been”

Finally, in a sign of hypersensitive DOE attention to the details that could succeed in undermining EPA's public commitment to its NSR positions on routine maintenance, and undermine EPA's NSR enforcement cases against coal-fired power plants in which those positions are the central contested legal issue, the DOE General Counsel urges the collective of political appointees identified above to compel EPA to distance itself from those NSR positions:

I am wondering if rather than saying, as we do now, “our current policy is”, we might use a phrase more like “our current policy has been” in contrast to “in the future.” I will try to go through again to identify where I think this should be done. My guess is that this will warrant some discussion but I think it is worth discussing.³¹¹

DOE was no doubt aware that utility defendants in pending enforcement cases would seize upon any signal in the proposal that EPA is retreating from its enforcement positions and NSR policies. Indeed, as we discuss elsewhere, SIGECO attorneys have already attempted to argue just that.

C. November 1, 2002 EPA Email Transmitting Legal Basis Included in Final Proposal

A November 1, 2002 email is the next document appearing concerning the asserted legal basis for the proposal. This email transmits 2 short paragraphs to OMB entitled “Legal Basis,” which ended up nearly verbatim in the final proposal as section V's “Legal Basis for Recommended Approaches.” We analyze this section, with its 21-word statement purporting to provide a legal basis for the sweeping, complex and unlawful proposal, earlier in these comments.

³¹⁰ *SIGECO*, 2003 WL 367901, at *13.

There are two possible conclusions to be drawn from the eradication of the DOE/industry legal analysis discussed above: (1) EPA exercised its authority as the statutorily empowered agency to issue regulations administering the NSR program, and recognized that the DOE/industry legal arguments: conflict with the Clean Air Act and its purposes; contradict EPA's consistent prior interpretations, and directly conflict with EPA's positions in the enforcement cases; embrace industry's positions in the pending enforcement cases; and therefore undermine EPA's positions in the enforcement cases; or (2) EPA agreed to drive the DOE/industry arguments underground as the unstated but real justifications for the proposal, while nonetheless proposing to adopt the same harmful loopholes and policies rooted in the DOE/industry arguments.

Unfortunately, EPA's proposal can only be understood as an expression of the latter conclusion.

X. Additional Comments in Response to EPA Solicitations

A. Annual Maintenance, Repair and Replacement Allowance Loophole

1. Reviewing Authorities Resources and Expertise

EPA requests comment on “the impact the use of a cost-based approach such as the annual maintenance, repair and replacement allowance will have on reviewing authorities, such as the need for staff knowledgeable in cost estimation.”³¹² As discussed herein, there is no justification in the plain language of the statute, its legislative history, or the policy objectives of the NSR program for the cost-based exemptions that EPA discusses for changes that will significantly increase emissions. As such, it is unsurprising that there is no indication in the statute or its legislative history, including statutory provisions discussing the minimum authorities and resources that reviewing authorities must have, that Congress believed or expected reviewing authorities to have the financial and accounting expertise and resources necessary to implement

³¹¹ October 20, 2002, 4:47 pm email from L. Otis, DOE, to J. Connaughton, CEQ, *et al.*, at 2.
³¹² 67 Fed. Reg. at 80,296/2.

and enforce the proposal's various cost-based approaches or related alternatives. Nor has EPA ever expressed the expectation before for reviewing authorities to have this expertise.

As state air regulators have affirmed in their public testimony opposing this proposal, state and local air pollution control agencies do not have accountants on staff to untangle the proposal's complex cost accounting and financial expectations that STAPPA-ALAPCO officials characterize as "incredibly onerous" and an "even more complex morass" than existing NSR regulations.³¹³ Nor does EPA itself have accountants on staff, or air pollution engineers knowledgeable about these cost issues, when EPA is the reviewing authority.³¹⁴ There is nothing in EPA's proposal, administrative record, or testimony presented at the public hearings challenging or rebutting these facts.

In light of all these considerations, it would be arbitrary and capricious and an abuse of discretion for EPA to adopt these or related cost-based approaches.

2. Multi-Year Cost Allowance

Noting that the proposal contemplates a one-year allowance, EPA also seeks comment on "whether a stationary source should have the option of a multi-year allowance, such as over 5 years," "in recognition of the fact that maintenance cycles in many industries extend for more than 1 year."³¹⁵ We reiterate the central point made throughout these comments that this approach rests on an unlawful and arbitrary exemption from the modification definition of activities that are physical or operational changes, without statutory authority, legislative history support, or a reasoned basis consistent with the purposes of the NSR program. It cannot remotely be defended as a *de minimis* exemption from statutory terms. Proposing to extend the period for this unlawful and harmful exemption from one year to five years (or any other multi-year period) – regardless of the impact on public health or all other objectives of the NSR program – merely

³¹³ See OAR-2002-0068-0550, Testimony of Lloyd L. Eagan, STAPPA President, on behalf of STAPPA-ALAPCO, March 31, 2003, at 2, 4.

³¹⁴ If EPA disagrees with this assessment of its own capacities in this regard, we call upon the agency to supplement the administrative record with, and accept public comment on, any evidence to the contrary.

causes additional legal insult to greater public health injury. Illegal pollution increases on the order of hundreds of thousands of tons resulting from a one-year allowance loophole could be increased five-fold or more with such a multi-year allowance loophole.

EPA proposes to exclude a miserly list of identified changes from eligibility for the annual allowance loophole, “to help ensure that activities that should be considered a physical change or change in the method of operation under the regulations are ineligible for exclusion from NSR under the annual maintenance, repair and replacement allowance.”³¹⁶

First, we note that this approach turns the Act’s modification definition completely on its head, since the statute defines a modification in relevant part to be “*any* physical change in, or change in the method of operation of” a stationary source. Nowhere does the statute or its legislative history limit changes to EPA’s suggested list, nor do these source materials exclude changes omitted from EPA’s list from being considered changes under the NSR modification provision.

EPA further fails to provide a rational or defensible explanation for limiting changes to this list, while excluding the vast number of other industrial changes from that list (and therefore from NSR obligations as modifications). EPA’s suggested division bears no relationship to the statutory structure or purposes of the NSR program and, worse, subverts and contradicts those purposes. Among the changes excluded from EPA’s list are those: that would allow enormous pollution increases and result in serious public health consequences; that would severely worsen air quality in nonattainment areas; that would consume increment in attainment areas; that could violate national ambient air quality standards; that would adversely impact visibility and other air quality-related values in national parks; that would require pollution controls and otherwise advance the development of technology intended by the NSR program; that would upgrade or extend the lives of grandfathered pollution sources; and that have always been considered

³¹⁵ 67 Fed. Reg. at 80294/1.

³¹⁶ 67 Fed. Reg. at 80294/3.

changes by EPA, including changes being prosecuted for NSR violations in pending enforcement cases.

Moreover, EPA's list of included and excluded changes is internally incoherent by its own terms. Some of the changes identified on EPA's meager list of changes excluded from the annual allowance loophole, when compared to the vast universe of changes qualifying for that loophole, may be smaller in magnitude or in scope or may have a smaller pollution impact, for example, than the exempt changes. This is not to suggest that EPA's proposed list of changes should be excluded from NSR coverage as well, since they plainly constitute changes for purposes of the modification definition.³¹⁷ Rather, we make this point to demonstrate that EPA's proposal reflects an arbitrary, incoherent, and result-oriented approach designed to exclude the greatest number of activities from NSR, regardless of their pollution impact, size, magnitude, importance, or ability to frustrate the objectives of the NSR program.

Second, the absurdity of EPA's contradiction of the statute is thrown into relief by the inescapable corollary to this brief list: any other changes not on this list – no matter their size, prevalence, or pollution consequences – are not considered changes by EPA. The proposal identifies *no* explanation or decisional principle, much less a coherent or reasonable one, for why the agency does not consider the excluded changes to be changes within the meaning of the modification definition.³¹⁸ EPA's lack of explanation is especially objectionable considering that EPA today *does* consider the excluded changes to be changes within the meaning of the modification definition. As discussed above, EPA and states and federal courts consider a whole host of activities not included on EPA's list to be NSR modifications. EPA and states and

³¹⁷ Accordingly, because the statute and purposes of the NSR program demand it, we support EPA's proposal to consider the listed activities changes within the meaning of the modification definition, and support the proposal to exclude the listed changes from qualifying for the annual allowance exclusion. *Id.* at 80294/3 – 80295/1.

³¹⁸ The closest that the proposal comes is the conclusory, unsubstantiated, and therefore uninformative assertion that EPA “[has] recognized that Congress did not intend to make every activity at a stationary source subject to the major NSR program” – regardless of how much pollution increased as a result of those activities. This assertion fails to provide the reasoned or even coherent explanation or

environmental and public health organizations are prosecuting enforcement actions on that very basis, against scores of those very changes.³¹⁹ For all these reasons, EPA's proposal is arbitrary and capricious and an abuse of discretion.

For its cost allowance exemption, EPA proposes an annual limit but also expresses the belief "that a multi-year limit is worthy of serious consideration as a possible option that could be chosen by owners or operators with multi-year maintenance cycles."³²⁰ For all the reasons that a one-year allowance would allow the unlawful exemption of significant and numerous physical and operational changes that cause significant emissions increases, extending those abuses to a multi-year allowance would just exacerbate the illegality and multiply the harmful air quality and health consequences.³²¹

Notably, EPA essentially acknowledges as much with the following coded passage:

Thus, while using a single year as the time period will reduce the flexibility for some owners or operators, we believe it will help to reduce the likelihood that *an after-the-fact NSR review will be required*.³²²

The italicized text represents the code: "after-the-fact NSR review" is EPA code for an illegal NSR modification, since the facility unlawfully failed to undergo NSR *preconstruction* review and therefore must undergo after-the-fact NSR review. Strikingly, however, EPA insists on

decisional principle to justify the division among changes discussed in the text above or, more generally, to explain EPA's approach to carrying out the modification definition.

³¹⁹ See Appendix A, "Project-by-Project Findings Regarding the Routine Maintenance Exception," *In re: Tennessee Valley Authority*, U.S. EPA Environmental Appeals Board, Final Order on Reconsideration, Docket No. CAA-2000-04-008 (Sept. 15, 2000).

³²⁰ 67 Fed. Reg. at 80,296/3.

³²¹ We also note the arbitrariness and disregard for the statute's air quality objectives associated with conferring upon facility operators the discretion to maximize uncontrolled pollution increases by selecting multi-year exemption periods. The notice also proposes that once an operator selects a time period for the cost allowance exemption, that this time period be permanent, but EPA also solicits comment on this. 67 Fed. Reg. at 80,297/2. While making clear our opposition to this concept, we note that it would be additionally arbitrary to allow facility operators to switch back and forth among different time periods for the allowance accounting. This would dramatically increase the opportunities for facilities to manipulate the timing and accounting for facility changes and their costs, significantly increasing emissions as a result, and avoiding pollution control measures.

³²² 67 Fed. Reg. at 80,297/2 (emphasis added).

“giving serious consideration to the multi-year approach of up to 5 years,”³²³ despite having just found a “likelihood” that this would result in illegal NSR modifications, *i.e.*, requiring after-the-fact NSR reviews. These approaches are arbitrary and capricious and an abuse of discretion.

This proposal passage, in which EPA discusses the time period for its cost-based allowance, is highly revealing, because it marks a surprisingly direct agency recognition of the proposal’s departure from the language and structure of the modification definition:

We believe that a limit applied over a specified period of time is more appropriate than an activity-based limit.³²⁴

The surrounding Federal Register discussion makes plain what EPA means here. First, the notice uses the word “limit” here to mean “exemption” or safe harbor. Second, here and throughout the proposal, EPA uses the word “activity” in order to avoid using the statutory term “change.” Read together, what the notice is saying is that EPA chose not to craft this exemption around the notion of a physical change or change in the method of operation, but around the more expansive, deregulatory concept of how many physical or operational changes a facility could accumulate over an arbitrarily selected period of time. This latter concept bears no relation to the statutory language or purposes of the NSR program, above all no relation to the enormous, harmful pollution consequences that it causes; but what is more revealing about this passage is that EPA affirmatively considered and rejected a concept at least linked to the modification provision – one that was “activity-based.” EPA’s very proposal, accordingly, reveals the origin of the decision to adopt the unlawful cost allowance exemption.

Having selected an unlawful and arbitrary cost allowance exemption approach for allowing enormous emissions increases to escape control, EPA next proposes to adopt the most inflated form of cost accounting it could possibly have selected – “source replacement cost” – that is designed to exclude the greatest number and magnitude of pollution-increasing activities

³²³ *Id.*

from cleanup obligations.³²⁵ For all the reasons set forth in these comments, this is unlawful, arbitrary and capricious, and an abuse of discretion.

3. EPA’s Proposed Reliance on the Maximum Achievable Hourly Emission Rate will Allow Virtually Unrestricted Increases in the Amount of Harmful Air Pollution Discharged from Modifications at Existing Sources in Contravention of the Clean Air Act.

EPA’s proposal indicates that an activity otherwise eligible for inclusion in the annual allowance exemption shall not be eligible if it “[r]esults in an increase in the maximum achievable hourly emissions rate of the stationary source of a regulated NSR pollutant.”³²⁶ In the preamble, EPA describes this test as a “safeguard” noting that activities that exceed this test “are more likely to result in possible significant emissions increases and, therefore, should not be excluded from NSR on the basis that they fall within the maintenance, repair and replacement allowance.”³²⁷ EPA, in turn, requests comments on the “appropriateness and adequacy” of this proposed safeguard “or any additional safeguards that may be appropriate.”³²⁸

EPA’s proposed maximum achievable hourly emissions rate test is an illusory safeguard. Moreover, given the far-reaching breadth of the proposed routine maintenance exemption, the maximum achievable hourly emissions rate test would represent the only remaining standard governing the amount of pollution that may be increased before a modification at an existing source is subject to new source review. Adoption of this test would therefore represent an abrupt shift in policy by abandoning actual pollution increases as the basis for determining a modification in favor of a potential maximum hourly emissions rate test. This proposed test will

³²⁴ 67 Fed. Reg. at 80,296/3. As with other assertions in its proposal, EPA offers no explanation why it “believes” a time-period based exemption – without regard to pollution consequences – is “more appropriate” than an “activity-based” exemption.

³²⁵ 67 Fed. Reg. at 80,297/3. EPA also requests “comment on other potentially appropriate bases for source cost, including invested cost, invested cost adjusted for inflation or any other viable methodology.” *Id.* For all the legal and policy objections to the cost-based exemption discussed in these comments, these alternative approaches would also be unlawful, arbitrary and capricious and an abuse of discretion.

³²⁶ See proposed 40 CFR §51.165(a)(1)(xliii)(B)(1), §51.166(b)(53)(ii)(a), §52.21(b)(55)(ii)(a) & §52.24(f)(25)(ii)(a).

³²⁷ 67 Fed. Reg. at 80,299.

³²⁸ *Id.*

fail to prevent massive emissions increases from activities that should lawfully be deemed modifications.

The term “maximum achievable emission rate” is unclear on its face and is undefined in the proposed NSR rule revisions. “Maximum achievable” emission rate could be construed as the maximum level that a source could be pushed to, regardless of whether it was ever operated at that level for any length of time in the past. Maximum achievable hourly emission rate could also include, among other things, the maximum emissions when pollution controls were bypassed, the maximum emissions based on the highest emitting fuel that could be used at the plant (regardless of whether the plant normally used such fuels), and the maximum achievable hourly emission rate under startup conditions. A source could make massive overall *actual* increases in pollution over the course of a year that never in fact increase the maximum hourly emissions rate. This is because the maximum hourly emissions rate is such an inflated and meaningless emissions test. In short, what EPA is proposing to adopt as a “safeguard” is an unlawful maximum hourly potential test that will not in fact have any meaningful role in protecting the public against the inevitable emissions increases that will result from its far-reaching maintenance allowance exemption.

EPA has in prior rulemakings expressed its severe concerns with an hourly potential emissions test.³²⁹ EPA described the adverse environmental consequences of such a test in its own compelling example demonstrating that the actual pollution discharged in tons per year could more than double even though the hourly potential emissions remain unchanged:

For example, assume the emissions unit at the widget factory that is emitting 10 pounds an hour but has historically operated at 40 percent capacity due at first to operating cost, but with age, reduced efficiency and reliability. This change [hourly potential emissions test] will allow the owner to use the machine at much higher levels (e.g., more hours per day or week) than it had in the past. As a result *actual emissions (measured in tpy) could more*

³²⁹ 61 Fed. Reg. at 38,268-70 (July 23, 1996).

*than double due to the increase in utilization even though hourly potential emission remain the same.*³³⁰

EPA conducted an analysis of state programs to estimate the environmental impacts associated with a maximum hourly potential test. EPA's resulting scrutiny of permitting activity in Texas and Illinois, two states deemed by EPA to have complete and accessible data and representative source categories, revealed that actual emissions are less than allowable emissions by a range of 30 to 86 percent:

[T]ypical source operation frequently does result in actual emissions that are substantially below allowable emissions levels. In these two States, actual emissions represent from 30 to 86 percent of the allowable emissions, depending on source category and pollutant.³³¹

In other words, based on EPA's own analysis, EPA self-styled "safeguard" would allow massive actual pollution increases that do not exceed the maximum hourly potential test.

EPA also expressed concern about what it described as "one of the most troubling side effects" of the maximum hourly potential methodology.³³² EPA explained that it could "ultimately stymie major new source growth by allowing unreviewed increases of emissions from modifications of existing sources to consume all available increment in PSD areas."³³³ EPA explained that "older plants would continue to be able to make changes resulting in significant unreviewed, and possibly uncontrolled, actual emission increases" that consume increment. As a result "[i]f a major new source with state-of-the-art emission controls proposes to locate in an area in which the increment has been consumed in this manner, it would be barred from building unless and until the increment problem was resolved."³³⁴

³³⁰ *Id.* at 38,269 (emphasis added).

³³¹ *Id.* at 38,270.

³³² *Id.*

³³³ *Id.*

³³⁴ *Id.*

EPA recently reiterated serious concerns about a potential-to-potential based applicability test in taking final action on its recent changes to the NSR program. EPA acknowledged both the air quality and legal deficiencies associated with this approach:

We agree that a potential-to-potential test for major NSR applicability could lead to unreviewed increases in emissions that would be detrimental to air quality and could make it difficult to implement the statutory requirements for state-of-the-art controls.³³⁵

EPA went on to conclude that a potential-to-potential based applicability regimen is not generally acceptable.³³⁶

Not surprisingly in light of the serious problems that EPA itself has identified with a maximum hourly potential test in particular and a potential-to-potential framework more generally, the long-standing tests under the NSR program for determining applicability for modifications on the basis of emissions increases is stated in tons per year. This approach must be maintained. Application of rigorous limitations on the tons per year that may be discharged from an existing facility that must be met to qualify for the routine maintenance exemption will help ensure meaningful protection against air pollution increases, will be consistent with EPA's long-standing implementation of the NSR program and will faithfully implement section 111(a)(4) of the CAA which expressly hinges on the "amount" of air pollution increased not the emission rate.

Finally, EPA has utterly failed to explain its proposed abrupt departure from evaluating modifications under the NSR program on the basis of the overall annual increase in pollution tons discharged. The United States Supreme Court has enunciated the explanatory burden that must be met should an agency change a previously mandated rule or rescind that rule all together. Specifically, where "an agency [has changed] its course by rescinding a rule, [it] is obligated to

³³⁵ 67 Fed. Reg. at 80,205.

³³⁶ *Id.* at 80,206.

supply a reasoned analysis for the change beyond that which may be required when an agency does not act in the first instance.”³³⁷

To provide an informed decision and to allow proper examination of its decision, “the agency must examine the relevant data and articulate a satisfactory explanation for its actions including a rational connection between the facts found and the choice made.”³³⁸ Where as in this case an agency has effectively turned its back on previous scientific and policy determinations the “agency must cogently explain why it has exercised its discretion in a given manner,” because not to do so may allow, “expertise, the strength of modern government, [to] become a monster which rules with no practical limits on its discretion.”³³⁹ EPA has proposed to unleash a monster by leaving the public unprotected from far-reaching changes at thousands of industrial facilities that will result in effectively unlimited air pollution increases.

Therefore, EPA has a duty under the basic rules of administrative law to adequately justify, on the record, the application of the maximum hourly achievable emissions rate test, which will not in fact safeguard the public against air pollution increases.

Even under the terms of the unlawful cost allowance exemption proposed by EPA, however, the approach is arbitrary and capricious and an abuse of EPA’s discretion. Incredibly – in light of the damage that this exemption would cause in denying all meaning to the pollution control measures and public health protections of the NSR program -- EPA provides no analysis or even discussion of the following issues or considerations:

“Any physical change” or “change in the method of operation”

- (1) The proposal and administrative record contains no agency explanation or even discussion of the attributes of exempt cost allowance changes generally that led EPA to propose considering them not to be “any physical change” within the meaning of the modification definition;

³³⁷ *Motor Vehicle Manufacturers' Assoc. v. State Farm Mutual Automobile Insurance Co.*, 463 U.S. 29, 42 (1983) (hereinafter “*State Farm*”).

³³⁸ *Id.* at 43.

³³⁹ *Id.* at 48.

- (2) The proposal and administrative record contains no agency explanation or even discussion of the attributes of exempt cost allowance changes generally that led EPA to propose considering them not to be any “change in the method of operation” within the meaning of the modification definition;
- (3) The proposal and administrative record contains no agency explanation or even discussion of any facts or attributes concerning exempt cost allowance changes – at any or all of the industrial source types covered by the NSR program -- that led EPA to propose considering them not to be “any physical change” within the meaning of the modification definition;³⁴⁰
- (4) The proposal and administrative record contains no agency explanation or even discussion of any facts or attributes concerning exempt cost allowance changes – at any or all of the industrial source types covered by the NSR program -- that led EPA to propose considering them not to be any “change within the method of operation” within the meaning of the modification definition;³⁴¹
- (5) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for cost allowance changes, and the reason and justification for allowing changes occurring during a one-year period, or multi-year period (such as 5 years), not to be considered “any physical change” or “change in the method of operation” within the meaning of the modification definition;
- (6) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for cost allowance changes, and the reason and justification for allowing changes not to be considered “any physical change” or “change in the method of operation” within the meaning of the modification definition – based upon the replacement cost of a facility, or the replacement cost of a process unit;
- (7) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for cost allowance changes, and the reason and justification for allowing changes not to be considered “any physical change” or “change in the method of operation” within the meaning of the modification definition – based upon the establishment of industry-specific percentages to cover “the RMRR capital and non-capital costs” described in the proposal;³⁴²
- (8) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for exempt cost allowance changes, and the reason and justification for allowing changes not to be considered “any physical change” or “change in the method of operation” within the meaning of the

³⁴⁰ The majority of industrial sources potentially affected by the proposal, according to EPA, fall within these industry groups: electric services; petroleum refining; chemical processes; natural gas transport; pulp and paper mills; paper mills; automobile manufacturing; and pharmaceuticals. 67 Fed. Reg. at 80,290.

³⁴¹ *Id.*

³⁴² 67 Fed. Reg. at 80,294/2.

modification definition – based upon any other cost-based approaches to establishing industry-specific percentages;³⁴³

- (9) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for cost allowance changes, and the reason and justification for allowing changes not to be considered “any physical change” or “change in the method of operation” within the meaning of the modification definition – based upon determination of industry-specific costs using the IRS “Annual Asset Guideline Repair Allowance Percentages”;³⁴⁴
- (10) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for cost allowance changes, and the reason and justification for allowing changes not to be considered “any physical change” or “change in the method of operation” within the meaning of the modification definition – based upon determination of industry-specific costs using the “North American Electric Reliability Council Generating Availability Data System (NERC/GADS) database or standard industry reference manuals.”;³⁴⁵
- (11) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for cost allowance changes, and how to determine what “the most appropriate procedures” are to be used for the purpose of determining costs, where several accounting procedures are used at a facility;³⁴⁶
- (12) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for cost allowance changes, and the reasonableness or justification for conferring total discretion on self-interested source operators for determining “the most appropriate” cost procedures to be used in determining whether a change constitutes “any physical change” or “change in the method of operation” within the meaning of the modification definition;³⁴⁷
- (13) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for cost allowance changes, and the reason and justification for allowing changes not to be considered “any physical change” or “change in the method of operation” within the meaning of the modification definition – based upon exclusion of costs for installing and maintaining pollution control equipment along the lines of any of the approaches suggested by EPA;³⁴⁸
- (14) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for cost allowance changes, and the reason and justification for allowing changes not to be considered “any physical change” or “change in the method of operation” within the meaning of the

³⁴³

Id.

³⁴⁴

Id.

³⁴⁵

Id.

³⁴⁶

Id. at 80,294/3.

³⁴⁷

Id.

³⁴⁸

Id. at 80,294/3, 80,298-99.

modification definition – based upon the application of the *EPA Air Pollution Control Cost* Manual to process equipment as well as add-on control equipment;³⁴⁹

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- (15) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for cost allowance changes, and why the time of these activities would not be a “logical point for owners or operators to install state-of-the-art controls”;
- (16) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for cost allowance changes, and what the associated emissions increases would be as a result of this exemption – either generally, or from individual units, facilities, states, or regions, in attainment areas or nonattainment areas;
- (17) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for cost allowance changes, and how or why the agency reached its conclusion that;
- (18) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for cost allowance changes, and what its impact would be on ensuring cleaner air in nonattainment areas following modifications, as a result of the NSR requirements for LAER and offsets;
- (19) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for cost allowance changes, and what the impact of associated emissions increases would be on increment consumption in attainment areas;
- (20) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for cost allowance changes, and what the impact of associated emissions increases would be on national parks, wilderness areas, and other class I areas;
- (21) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for cost allowance changes, and its impact on “one of the basic goals of the 1977 Amendments: technology-forcing”;³⁵⁰
- (22) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for cost allowance changes, and its impact on the Congressional objective of requiring grandfathered facilities to meet NSR performance standards upon modification;³⁵¹

³⁴⁹ *Id.* at 80,294/3.

³⁵⁰ *WEPCO*, 893 F.2d at 909 (citing to legislative history).

³⁵¹ *Alabama Power*, 636 F.2d at 400 (“The statutory scheme intends to ‘grandfather’ existing industries; but the provisions concerning modifications indicate that this is not to constitute a perpetual immunity from all standards under the PSD program. If these plants increase pollution, they will generally need a permit.”)

B. Equipment Replacement Provision

The proposal solicits comment on “whether replacing existing equipment with equipment that serves the same function and that does not alter the basic design parameters of a unit should also qualify without regard for other considerations for RMRR treatment provided the cost of the replacement equipment does not exceed a certain percentage of the cost of the process unit to which the equipment belongs.”³⁵² The answer is no. For all the reasons in these comments, such an exemption would be unlawful, arbitrary and capricious, and an abuse of the agency’s discretion. These activities are plainly physical changes or changes in the method of operation that constitute modifications when they cause significant emissions increases. And such replacement activities can and do cause enormous emissions increases, as the ongoing enforcement cases and enforcement settlements are demonstrating.

The very projects at issue in the *WEPCO* case, found by the court plainly to be physical changes and by EPA to be illegal modifications, involved the same types of equipment replacement activities that EPA proposes here to exempt.³⁵³ EPA’s proposed replacement activities clearly fall within the 7th Circuit’s view of a statutory physical change as installation or alteration of a piece of equipment at an existing plant.³⁵⁴

Of the 14 TVA projects found by the EAB to have been undertaken in violation of the Clean Air Act and existing rules governing repair, replacement, and modification, at least 9 involved major component replacements, both like-kind replacement and replacements with redesigned components that remained “inherent to the original design.”³⁵⁵

Like-kind replacements undertaken by EPA included (but were not limited to) the replacement of cyclones, lower furnace walls (including headers and footers) at Units 1, 2, and 3 of the TVA Paradise Plant, in Drakesboro, Kentucky; and the replacement of all waterwall tubes

³⁵² 67 Fed. Reg. at 80,295/2-3.

³⁵³ *WEPCO*, 893 F.2d at 907-908.

³⁵⁴ *Id.* at 908.

³⁵⁵ See EPA Enforcement Action Summary (January 28, 2000) (on file with Clean Air Task Force).

in front, rear and sidewalls of both furnaces, all burner tube panels, and superheater platen elements at Unit 3 of the John Sevier plant in Rogersville, Tennessee. *Id.* Replacements with redesigned components occurred at Cumberland plant Unit 1 and 2 (replacement of the front and rear secondary superheater outlet headers with redesigned components at both units) in Cumberland City, Tennessee. As set forth in Table A, while the EAB found all of these projects were undertaken in violation of the Clean Air Act, none of them reflected more than 50 % of the unit or facility replacement cost, and so all of these replacements would completely escape NSR applicability analysis under the proposed rule.

EAB not only found that these replacement projects were illegally undertaken without obtaining the appropriate permits, EAB also found that the projects resulted in significant net emissions increases.³⁵⁶ These results run directly contrary to EPA's unsupported categorical assertions in the preamble to the rule that equipment replacements, where inherent to the original design of the facility and of like-kind, or with "different or improved equipment" will not be "of regulatory concern" because they will not increase emissions.³⁵⁷ EPA makes these assertions with respect to its proposal to exempt all replacements up to 50 percent of the "current capital replacement cost of the existing affected source,"³⁵⁸ despite evidence from its own EAB that significantly smaller replacement projects (in terms of cost of the project as a percent of replacement cost, *see* Table A) have yielded significant net emissions increases.

EPA identifies no statutory authority and provides no reasoned legal or policy justification for considering such replacement activities not to be modifications. Nor does EPA identify any statutory authority or reasoned legal or policy justification for the various accoutrements of the proposed exemption, such as the functionality element, the design parameter condition, and the cost percentage. None of these measures is authorized by any provision of the

³⁵⁶ *See In re Tennessee Valley Authority*, Docket No. CAA 00-6, 9 EAD 357, 440-441, 443, 451 (2000).

³⁵⁷ 67 Fed. Reg. at 80,300/3.

³⁵⁸ *Id.* at 80,301/1 (citing 40 C.F.R. § 60.15(b)).

Clean Air Act and, indeed, they are just the fabricated components of a Rube Goldberg device invented by EPA that contradicts and subverts the governing statutory modification provision and the NSR program itself.

EPA has *always* considered the very equipment replacement activities proposed to be exempted here to be physical changes or changes in the method of operation when they are non-routine.³⁵⁹ Federal courts from *Alabama Power* to the *WEPCO* court to the *SIGECO* court to the EPA Environmental Appeals Board have agreed. As such it is clear that the plain language of the statute and the purposes of the NSR program require that these activities be considered physical changes. EPA fails to explain or support its proposal to abruptly reverse positions, to countenance activities that it is currently prosecuting as Clean Air Act violations, and to override the consistent positions of every court to address the issue -- for these reasons alone the agency's proposal is arbitrary and capricious and an abuse of discretion.

Even under the terms of the unlawful equipment replacement exemption proposed by EPA, however, the approach is arbitrary and capricious and an abuse of EPA's discretion. Incredibly -- in light of the total damage that this exemption alone would cause in denying all meaning to the pollution control measures and public health protections of the NSR program -- EPA provides no analysis or even discussion of the following issues or considerations:

“Any physical change” or “change in the method of operation”

- (23) The proposal and administrative record contains no agency explanation or even discussion of the attributes of equipment replacement activities generally that led EPA to propose considering them not to be “any physical change” within the meaning of the modification definition;
- (24) The proposal and administrative record contains no agency explanation or even discussion of the attributes of equipment replacement activities generally that led EPA to propose considering them not to be any “change in the method of operation” within the meaning of the modification definition;

³⁵⁹ As discussed elsewhere in these comments, EPA does not require that its proposed equipment replacement exemption apply merely to routine activities and, indeed, its very design belies any notion that it constitutes routine maintenance. Moreover, EPA can draw no legal significance to support the proposed equipment replacement exemption in this rulemaking from its prior consideration of “routine” replacement to be non-physical changes.

- (25) The proposal and administrative record contains no agency explanation or even discussion of any facts or attributes concerning equipment replacement activities – at any or all of the industrial source types covered by the NSR program -- that led EPA to propose considering them not to be “any physical change” within the meaning of the modification definition;³⁶⁰
- (26) The proposal and administrative record contains no agency explanation or even discussion of any facts or attributes concerning equipment replacement activities – at any or all of the industrial source types covered by the NSR program -- that led EPA to propose considering them not to be any “change within the method of operation” within the meaning of the modification definition;
- (27) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for equipment replacements that serves the same function as the replaced equipment, and the reason and justification for considering them not to be “any physical change” or “change in the method of operation” within the meaning of the modification definition;
- (28) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for equipment replacements that do not alter the basic design parameters of the replaced unit, and the reason and justification for considering them not to be “any physical change” or “change in the method of operation” within the meaning of the modification definition;
- (29) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for equipment replacements that do not alter the basic design parameters of the replaced unit, and the reason and justification for considering them not to be “any physical change” or “change in the method of operation” within the meaning of the modification definition;
- (30) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for equipment replacements based upon costs that fall below any cost thresholds, and the reason and justification for considering them not to be “any physical change” or “change in the method of operation” within the meaning of the modification definition;

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- (31) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for equipment replacement, and why the time of these replacements would not be a “logical point for owners or operators to install state-of-the-art controls”;
- (32) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for equipment replacement, and

³⁶⁰ The majority of industrial sources potentially affected by the proposal, according to EPA, fall within these industry groups: electric services; petroleum refining; chemical processes; natural gas transport; pulp and paper mills; paper mills; automobile manufacturing; and pharmaceuticals. 67 Fed. Reg. at 80,290.

what the associated emissions increases would be as a result of this exemption – either generally, or from individual units, facilities, states, or regions, in attainment areas or nonattainment areas;

- (33) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for equipment replacement, and how or why the agency reached its conclusion that it would be environmentally beneficial;
- (34) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for equipment replacement, and what its impact would be on ensuring cleaner air in nonattainment areas following modification, as a result of the NSR requirements for LAER and offsets;
- (35) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for equipment replacement, and what the impact of associated emissions increases would be on increment consumption in attainment areas;
- (36) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for equipment replacement, and what the impact of associated emissions increases would be on national parks, wilderness areas, and other class I areas;
- (37) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for equipment replacement, and its impact on “one of the basic goals of the 1977 Amendments: technology-forcing”;³⁶¹
- (38) The proposal and administrative record contains no agency explanation or even discussion of any facts concerning the exemption for equipment replacement, and its impact on the Congressional objective of requiring grandfathered facilities to meet NSR performance standards upon modification;³⁶²

The proposal discusses several examples of equipment replacement activities, in an effort to justify its exemption: replacement of a pump associated with a distillation column; replacement of worn out pipes in a chemical process plant; and replacement of controllers at a series of batch digesters.³⁶³ But EPA provides no reason or evidence to believe that emissions would increase significantly, *e.g.*, by 40 tons per year or more, as a result of these replacement activities. Indeed, EPA studiously avoids saying that these example activities would have increased emissions by

³⁶¹ *WEPCO*, 893 F.2d at 909 (citing to legislative history).

³⁶² *Alabama Power*, 636 F.2d at 400 (“The statutory scheme intends to ‘grandfather’ existing industries; but the provisions concerning modifications indicate that this is not to constitute a perpetual immunity from all standards under the PSD program. If these plants increase pollution, they will generally need a permit.”)

the significant amounts necessary to trigger NSR permitting. Nor is it obvious why these activities would have increased emissions significantly.³⁶⁴ Accordingly, as EPA well knows, these activities already would not be subject to NSR as modifications. It is entirely disingenuous for EPA to advance examples of physical changes that by all appearances would not cause significant emissions increases, in service of an argument to allow vast numbers of significant pollution increases to escape control, merely because EPA lumps both sets of activities under the same general heading of “equipment replacement.”

In a passage that is particularly revealing about the arbitrariness of EPA’s equipment replacement proposal, the agency struggles to explain why it might consider replacement of an entire production unit, or a 50% capital replacement project, to be a physical change, when it would not consider marginally lesser activities – still involving extensive physical changes – nonetheless not to be physical changes.³⁶⁵ The agency offers the following weak justification about the replacement of a production unit:

This is not the kind of activity that sources typically engage in to maintain their plants, and it is the kind of activity that would likely be a logical point for owners or operators to install state-of-the-art controls.³⁶⁶

First, we feel safe in predicting dryly that industry commenters will claim that sources typically do and will need to replace entire process units routinely. But the more telling point is the implied converse of EPA’s “logical” conclusion: EPA makes no showing, or produces no evidence, that physical or operational changes short of replacement of entire process units – or below 50% capital replacement projects – are not logical opportunities for adopting control measures as well. Indeed, EPA simply – and arbitrarily – assumes the contrary conclusion, and creates its exemption on the basis of this arbitrary conclusion. The proposed changes to the NSR

³⁶³ 67 Fed. Reg. at 80,300/3-80,301/1.

³⁶⁴ In addition, as EPA also well knows, even if a significant emissions increase would result from these replacement activities, industry can and routinely does “net out” those increases in order to avoid a significant net emissions increase and therefore avoid NSR requirements.

³⁶⁵ 67 Fed. Reg. at 80,301/2 – 80,301/3.

rules include a provision that would allow plant owners to replace operating unit subsystems with equivalent replacement units and still fall under the exemption from NSR. The only limit would be that the replacement subsystem could not cost more than 50% of the replacement cost of the overall operating unit.

The proposed rules state that the purpose of the replacement in kind provision is not to allow the piecemeal replacement of an entire process unit, one subsystem at a time. But the 50% of replacement cost cut-off which is suggested in the proposal will allow exactly that.

Here is the language EPA proposes as the definition of a “process unit” for a power plant:

For a steam electric generating facility, the process unit would consist of those portions of the plant that contribute directly to the production of electricity. For example, at a pulverized coal-fired facility, the process unit would generally be the combination of those systems from the coal receiving equipment through the emission stack, including the coal handling equipment, pulverizers or coal crushers, feedwater heaters, boiler, burners, turbine-generator set, air preheaters, and operating control systems. Each separate generating unit would be considered a separate process unit. Components shared between two or more process units would be proportionately allocated based on capacity.³⁶⁷

The rule leaves open the question of whether or not the pollution control equipment will be considered as part of the process unit.

This definition of the power plant process includes a list of eight separate subsystems. While the cost of each subsystem may vary, we are quite sure that no single subsystem will cost more than 50% of the total cost of all of the subsystems together (the replacement cost). What does this mean in practice? It means that a plant owner can put together an eight-step plant refurbishment program. In step one the owner completely replaces the coal handling equipment. This will cost less than 50% of the total replacement cost, so the project will be exempt from

³⁶⁶ *Id.* at 80,301/2.

³⁶⁷ 67 Fed. Reg. at 80,308/3 (proposed 40 C.F.R. § 51.165(A)(1)(xiv)(B)(1)); 80,310/1 (proposed 40 C.F.R. § 51.166(b)(54)(ii)(a)); 80,311/2 (proposed 40 C.F.R. Appendix S to Part 51 at II.A.22(ii)(a)); 80,312/2 (proposed 40 C.F.R. § 52.21(b)(56)(ii)(a)); 80,313/3 (proposed 40 C.F.R. § 52.24(f)(26)(ii)(a)). See also 67 Fed. Reg. at 80,302/3 (preamble discussion).

consideration for NSR. In step two the owner completely replaces the pulverizers and crushers. Again, the cost is less than 50% of the total replacement cost, so there is no NSR consideration. In step three, the owner completely replaces the entire boiler, including feedwater heaters, burners, and all the other parts. Again, the cost is less than 50% of the total replacement cost, and NSR consideration is avoided. The potential for significant abuse of the component replacement exemption quickly becomes quite clear. By the time the plant owner is finished, there may be nothing left of the original process unit. Every part will have been replaced, but since no subsystem has cost more than 50% of the overall replacement cost, NSR review has never been triggered. The only limitation appears to be that the overall electricity generating capacity of the process unit is not increased.

This approach sets up a road map under which any power plant owner would never have to worry about triggering NSR. An old power plant could be completely replaced –with every subsystem changed out for a new one – and it would still be considered to be the same plant.

It is outrageous that EPA notes that one reason the agency is proposing the equipment replacement loophole is that the annual allowance loophole may not allow enough industrial activities that significantly increase pollution to escape cleanup responsibilities and the NSR health protections.³⁶⁸ Instead, EPA should follow the advice of the National Academy of Public Administration and cease the multiplication and expansion of regulatory loopholes that have undermined the NSR program’s purposes of protecting air quality and public health.³⁶⁹

As noted, EPA’s proposal would create a sweeping exemption from NSR requirements based on “replacement of components of a process unit with identical or functionally equivalent

³⁶⁸ 67 Fed. Reg. at 80295/3.

³⁶⁹ See National Academy of Public Administration, *A Breath of Fresh Air: Reviving the New Source Review Program, Summary Report* (April 2003) (“NAPA Summary Report”, at 39 (noting that EPA has recently proposed further expanding the routine maintenance exemption, the NAPA Panel writes that “simply allowing more modifications to be excluded from NSR will not solve the problems with NSR, nor will it improve environmental protection. Indeed, creating wider loopholes will further thwart the intent of Congress for NSR to promote replacing or upgrading old polluting equipment.”).

components.”³⁷⁰ EPA also proposes to exclude from this far-reaching exemption changes that affect the basic design parameters of the process unit. EPA in turn indicates that the basic design parameters for electric utility steam generating units are “maximum heat input and fuel consumption specifications.”³⁷¹ EPA further asserts that “[a]n improvement in efficiency does not change a process unit’s basic design parameters.”³⁷²

We believe that EPA’s proposal to exclude equipment replacement that would change maximum heat input and fuel consumption specifications is exceedingly narrow and will be very difficult to administer. There are also many other basic design parameters that should be excluded from EPA’s far-reaching exemption. We urge EPA to consider as a superior alternative to its misguided proposals the notion of listing specific activities that might constitute routine maintenance or like-kind replacements as recommended by STAPPA/ALAPCO.

Further, we are deeply concerned that it is going to be very difficult to ensure that equipment replacement or other changes do not in fact alter the maximum heat input or fuel consumption specifications. We are aware of several examples in the utility industry in which these parameters have been portrayed by the industry as moving targets. Specifically, we have seen examples of electrical generating units that were originally permitted at certain “nameplate” heat input capacities that many years later claimed that the units could be operated at much higher heat input capacities and that the nameplate capacity only represented the manufacturer’s guarantee and not the maximum capacity of the unit. State and local air agencies, which will be overloaded with the work of reviewing the annual maintenance allowance activities and equipment replacement exemption requests, will likely not have the resources to investigate a company’s claim that an emissions unit was always capable of a certain maximum heat input or that a unit could always emit at a certain maximum emission rate.

³⁷⁰ See, e.g., proposed 40 CFR §51.165(a)(1)(v)(C)(I)(ii), §51.166(b)(2)(iii)(a)(2)(ii), App. S of part 51 at II.A.5(ii)(a)(2)(ii), §52.21(b)(iii)(a)(2)(ii), and §52.24(f)(5)(iii)(a)(2)(ii).

³⁷¹ *Id.*

³⁷² *Id.*

Not only will these proposed exclusions be ineffectual in protecting the public from annual emissions increases resulting from modifications, but the proposed regulations read as though the exclusions would apply on the basis of a specific equipment replacement “activity” rather than looking at all of the other changes accompanying the specific piece of equipment being replaced to determine whether emissions increases have resulted.

We also believe that EPA has erred as a matter of law and policy in broadly extending its equipment replacement exemption to an “improvement in efficiency.” EPA lacks any legal authority to advance the scope of exemptions in this way. The NSR program as long administered before EPA’s radical changes contained broad discretion and incentive for true efficiency improvements: an increase in production that did not result in a net increase in actual tons of air pollution. EPA’s new, unlawful usage of efficiency improvements would allow any number of activities because they do not lead to an increase in emissions rates even though the actual amount of air pollution will in fact increase. For all of the reasons noted elsewhere, this is contrary to law.

C. Other Options Considered

1. Capacity-based exemption.

EPA solicits comment on a “capacity-based option” for addressing RMRR based on the capacity of a process unit, excluding from the NSR modification provisions “any activity that did not increase the capacity of the process unit.”³⁷³ For all the reasons discussed in these comments, such an approach would be unlawful, arbitrary and capricious and contrary to the purposes of the NSR program.³⁷⁴ This proposed exclusion would encompass physical changes or operational changes that constitute modifications. EPA provides no explanation for why these activities

³⁷³ 67 Fed. Reg. at 80304/2.

³⁷⁴ In other words, EPA should read our objections to the capacity-based exemption to encompass every objection we have raised covering the other proposed exemptions, including but not limited to objections concerning the plain meaning of the modification definition, the Act’s legislative history, the NSR program’s purposes, case law discussed herein, EPA’s own legal positions, policies and enforcement positions, air quality and public health consequences, and general grounds of arbitrariness.

would not constitute physical or operational changes. The proposal points to no statutory authority or legislative history, and provides no reasoned explanation, for why increasing the capacity of a process unit is relevant either to whether there has been a physical or operational change – or whether there has been an emission increase – within the meaning of the modification definition.

Worse, EPA’s consideration of an RMRR provision based upon a “capacity-based option” would be to resurrect and embrace the discredited interpretation that the utility industry has advanced, an interpretation which adoption a leading court decision has said would “open vistas of indefinite immunity from the provisions of NSPS and PSD.” As we noted earlier, the industry’s interpretation would read the “modification” provision out of the Act, creating a permanent grandfather exemption for all the capacity that existed prior to 1970. In the landmark *WEPCO* case, the 7th Circuit rejected industry claims that original design capacity should define the boundary for the “routine” exemption. As noted, the court flatly rejected industry’s interpretation as one that would confer indefinite immunity from new source standards, contrary to Congress’ intent.

EPA’s consideration of this approach now is especially galling considering that EPA has consistently *opposed* the utility industry’s arguments that physical or operational changes that fail to increase the capacity of a process unit – such as those that restored the original design capacity of a unit – should not be considered modifications. EPA’s opposition dates back to the original Clay memo and the *WEPCO* matter. Indeed, in pending enforcement cases EPA and the Department of Justice are opposing these very interpretations. We strongly oppose EPA’s adoption of an exemption from NSR protections based on the capacity of a process unit or other variation that would allow significant emissions increases from physical or operational changes to escape control.

2. An “Age-Based” NSR Exemption is Unlawful and Contrary to the Purposes of the NSR Protections.

Finally, EPA solicits comment on an “age-based” exemption, under which “any process unit under a specified age could undergo any activity that does not increase the capacity of a process unit on a maximum hourly basis without triggering the requirements of the major NSR program.”³⁷⁵ This loophole is so absurd as to not warrant any consideration. It is unlawful, arbitrary and capricious, and contrary to the purposes of the NSR provisions for all the reasons stated in these comments.³⁷⁶ EPA actually proposes to codify and extend abuses perpetrated by grandfathered polluting facilities to evade the NSR modification protections and adopt responsible pollution control measures, turning these polluters into grandfathers on steroids for decades longer. It would allow massive pollution increases to escape control in violation of the plain language of the modification definition. As is true for the primary two loopholes proposed by EPA, virtually every coal-fired power plant that EPA and other parties have prosecuted for NSR violations would appear to qualify for this gaping loophole. Rather than proposing to join industry in illegally extending the grandfathered status of facilities and evading NSR, EPA should heed the recently issued National Academy report and require all grandfathered facilities to clean up, restrict loopholes in the current NSR program, abandon efforts to further expand loopholes such as this, and vigorously enforce the NSR requirements.

XI. Confidential Business Information

We object to EPA’s proposal to allow compliance with the proposed rule to be based on confidential business information that will be shielded from the public. The preamble states that “[o]wners or operators electing to use the annual maintenance, repair and replacement allowance

³⁷⁵ 67 Fed. Reg. at 80,305/1.

³⁷⁶ In other words, EPA should read our objections to the age-based exemption to encompass every objection we have raised covering the other proposed exemptions, including but not limited to objections concerning the plain meaning of the modification definition, the Act’s legislative history, the NSR program’s purposes, case law discussed herein, EPA’s own legal positions, policies and enforcement positions, air quality and public health consequences, and general grounds of arbitrariness. As such, the

to determine RMRR activities will be required to submit an annual report to the appropriate reviewing authority within 60 days after the end of the year over which activity costs have been summed.”³⁷⁷ EPA’s determination whether facilities are exempt from the requirements of NSR will be based on these reports.³⁷⁸

The preamble suggests that EPA will allow owners or operators to declare these submissions confidential and shielded from public scrutiny: “[t]he procedures set out in 40 CFR part 2 are available for confidential and business-sensitive information submitted as part of this report.”³⁷⁹ Thus, the collective result of EPA’s action is that existing facilities would be broadly excluded from the NSR program while simultaneously curtailing the ability of the public to evaluate whether even these misguided rules have been met by a particular facility. This is a perverse result in which the government rewrites the program to provide gaping loopholes for the regulated community and even then proposes to shield the public from the ability to assess compliance.

Reliance on confidential business information in this way is contrary to the terms and purposes of the Clean Air Act. For example, the congressionally declared purpose of the PSD program is to ensure informed public participation in any decision to permit increased air pollution:

to assure that any decision to permit increased air pollution in any area to which this section applies is made only after careful evaluation of all the consequences of such a decision and after adequate procedural opportunities for informed public participation in the decisionmaking process.³⁸⁰

“difficulties” cited by EPA are just a few of the legal, policy, air quality, enforceability, technical and practical problems created by this loophole. *Id.*

³⁷⁷ 67 Fed. Reg. at 80,295.

³⁷⁸ See, e.g., 67 Fed. Reg. at 80308 (proposed §51.165(a)(1)(xlili)(A)(4)), & 80309 (proposed § 51.166(b)(53)(i)(d)), & 80311 (proposed Appendix S to Part 51 Section II(A)(21)(i)(d)) & 80312 (proposed §52.21(b)(55)(i)(d)) & 80313 (proposed §52.24(f)(25)(i)(d)).

³⁷⁹ 67 Fed. Reg. at 80,295.

³⁸⁰ 42 U.S.C. § 7470(5).

Likewise, the PSD program prohibits construction of a new or modified source unless there has been rigorous and transparent opportunity for public participation. Section 165(a)(2) expressly provides that construction may not commence unless:

the proposed permit has been subject to review in accordance with this section, the required analysis has been conducted in accordance with regulations promulgated by the Administrator, and a public hearing has been held with opportunity for interested persons including representatives of the Administrator to appear and submit written or oral presentation on the air quality impact of such source, alternatives thereto, control technology requirements, and other appropriate considerations.³⁸¹

These statutory requirements to ensure transparency and procedural rigor in the decision to allow air pollution increases are violated by EPA's proposal to allow facilities to cloak their compliance reports in a veil of secrecy. Not only will massive pollution increasing activity be allowed under EPA's flawed loopholes but citizens will be unable to determine whether sources comply even with these standards under a proposal that allows owners or operators to claim their compliance reports or major elements thereof as CBI.

We are likewise deeply concerned about EPA's failure to meaningfully describe the contents of the 60-day compliance reports, to make it clear that failure to timely submit such reports is – each day – a separate violation of a key reporting requirement, and to describe ways in which the Agency will ensure that these reports are review and made available to the public. EPA must address these serious administrative, enforceability and public participation deficiencies.

XII. Additional Procedural Deficiencies

EPA's failure to propose a specific allowance percentage prevents interested parties from being able to fully analyze and comment upon the potential effect of the RMRR rule. By withholding this basic detail from such a critical aspect of the proposal, the Agency has violated Section § 307(d)(3) of the Clean Air Act.

In determining whether an agency has fulfilled its rulemaking responsibilities, courts ask “whether the purposes of notice and comment have been adequately served,” that is “whether the notice given affords exposure to diverse public comment, fairness to affected parties, and an opportunity to develop evidence in the record.”³⁸² Notice is inadequate where, as here, “the interested parties could not reasonably have anticipated the final rulemaking from the draft [rule].”³⁸³ The extent of the negative impact of the proposed rule depends heavily on the percentage ultimately selected by the EPA. Commenters, however, have no way of reasonably anticipating what percentage will be used in the final rulemaking, and are therefore deprived of a “fair opportunity to comment” on the proposal.³⁸⁴

XIII. EPA Has Failed to Meet the Requirements of Executive Order 12866.

The development of EPA’s RMRR proposal transgresses the procedural requirements of EO 12866. Specifically, section 6(a) of EO 12866 directs EPA to “seek the involvement of those who are intended to benefit from and those expected to be burdened by any regulation” *before* issuing a notice of proposed rulemaking. Under these provisions, EPA is also directed to, at the very least, explore the use of consensual mechanisms for developing regulations.

In fact, EPA utterly failed to consult in a meaningful way with the environmental community, public health organizations or interested citizens before issuing this proposal. The members of the organizations submitting these comments are among the millions of Americans that will be burdened by the air quality protections eviscerated under EPA’s proposed rulemaking action. EPA’s lack of outreach, transparency or procedural rigor in discussing its proposed policies with the environmental community, public health organizations or interested citizens is especially problematic given the abrupt change in public policy that EPA has proposed.

³⁸¹ *Id.* § 7475(a)(2).

³⁸² *National Mining Association v. Mine Safety and Health Administration*, 116 F.3d 520, 531 (D.C. Cir. 1997) (internal quotations omitted).

³⁸³ *Id.* (internal quotations omitted).

³⁸⁴ *See Air Transp. Assn. of America v. Federal Aviation Administration*, 169 F.3d 1, 6 (D.C. Cir. 1999).

EPA likewise failed to carry out its most basic analytical responsibilities under EO 12866. Section 6(a)(3)(B)(ii) directs EPA to include “an explanation of the manner in which the regulatory action is consistent with a statutory mandate.” EPA fails to explain in any meaningful way the statutory basis for its proposal. Again, EPA’s failure to set forth the statutory basis for its proposal stands in stark contrast to the abrupt shift in policy EPA is advancing.

Section 6(a)(3)(C)(ii) of EO 12866 also requires EPA to assess as a core element of its regulatory impact analysis “any adverse effects on . . . health, safety, and the natural environment, together with, to the extent feasible, a quantification of those costs.” EPA has failed to conduct a comprehensive, informative, transparent or accurate assessment of the harmful impacts its proposal will have on public health, safety and the natural environment. This deficiency not only runs afoul of EPA’s responsibilities under EO 12866 and other requirements, but it also flies in the face of any basic notions of good government. Any action by EPA to promulgate the proposed rule would thus be arbitrary, capricious, and otherwise not in accordance with law.

XIV. EPA Has Failed to Meet the Requirements of Executive Order 13045.

EPA's proposed rule also fails to comply with the administrative requirements of Executive Order 13045, "Protection of Children From Environmental Health Risks and Safety Risks," (April 21, 1997). The preamble to EPA's proposed rule states:

This proposed rule is not subject to Executive Order 13045, because we do not have reason to believe the environmental health or safety risks addressed by the action present a disproportionate risk to children. We believe that this package as a whole will result in equal or better environmental protection than currently provided by the existing regulations, and do so in a more streamlined and effective manner.³⁸⁵

These two sentences constitute the entirety of EPA's treatment of the order in the context of the proposed rule. To permit such a conclusory and woefully inadequate statement to discharge EPA's duties under the order would render the order's requirements meaningless, allowing any

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67 Fed. Reg. at 80,306.

agency to simply assert without supporting evidence that their regulation is an improvement over the status quo and thus will not harm children.

Executive Order 13045 sets forth the executive branch's policy of protecting children from the disproportionate environmental health and safety risks from which they suffer. According to the order, these risks arise because, among other things, children “eat more food, drink more fluids, and *breathe more air* in proportion to their body weight than adults.”³⁸⁶ Given these findings, the order requires that each federal agency promulgating a rule that “concern[s] an environmental health risk or safety risk that an agency has reason to believe may disproportionately affect children,”³⁸⁷ must provide both “an evaluation of the environmental health or safety effects of the planned regulation on children” and “an explanation of why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the agency.”³⁸⁸ The Bush administration recently reaffirmed its commitment to this policy by issuing Executive Order 13296 on April 18, 2003, extending the life of the Task Force on Environmental Health and Safety Risks to Children originally created by Executive Order 13045. The Task Force has identified asthma as one of its priority areas.³⁸⁹

While the proposed rule clearly will have environmental health implications for the population at large, and in particular for children, who as the executive order says “*breathe more air in proportion to their body weight than adults*,” EPA refuses to perform the inquiry required by the order, claiming without analysis that the order does not apply.³⁹⁰ This claim fails for three distinct reasons.

³⁸⁶ Exec. Order 13045, § 1-101 (emphasis added).

³⁸⁷ *Id.*, § 2-201.

³⁸⁸ *Id.*, § 5-501.

³⁸⁹ See Executive Order 13296, published at 68 Fed. Reg. 19931 (April 23, 2003); EPA Press Release, “President Extends Executive Order for Task Force on Environmental Risks to Children,” April 21, 2003.

³⁹⁰ 67 Fed. Reg. at 80,306 (“we do not have reason to believe the environmental health or safety risks addressed by this action present a disproportionate risk to children.”).

First, the disproportionate health risks to children from air pollution, and particularly from air pollution emitted by power plants currently exempted from meeting NSR requirements, is well established.³⁹¹ Indeed, the recent press release accompanying Executive Order 13296 focused primarily on asthma and included statements from EPA Administrator Christie Whitman and HHS Secretary Tommy Thompson about ensuring that children "have clean air to breathe" and are encouraged "to be physically active, thus assuring their healthy growth and development." Since the proposed rule deals specifically with the scope of power plant and other stationary source exemptions from NSR, it is by its terms a regulation that concerns an environmental health risk that may disproportionately impact children and subject to the requirements of Executive Order 13045.

Second, despite its claim that the proposed rule "will result in equal or better environmental protection than is currently provided," EPA has provided absolutely no analysis to support this conclusion. On the contrary, both the intent and effect of EPA's proposed rule would be to expand the universe of polluting sources with outdated pollution control technologies that could continue to operate and expand without cleaning up to modern pollution standards. Although EPA claims that its rule will result in efficiency increases, it has provided no analysis to demonstrate that such efficiency increases, if achieved, would come anywhere close to offsetting the increases in emissions that would be allowed under the dramatically weakened RMRR standard it proposes.

Furthermore, even if EPA could support its assertion that the proposed rule "will result in equal or better environmental protection than currently provided," such a generalized inquiry into the overall effects of a proposed rule on environmental protection does not meet the requirements of Executive Order 13045. By its terms, the order is intended to offer *additional* consideration of and protection for children above and beyond that provided for the rest of the population on

³⁹¹ See generally Clean Air Task Force, 2002, *Children at Risk* (summarizing health studies of air pollution impacts on children and health threats to children from power plant pollution).

account of the disproportionate environmental health risks children face. EPA refuses to provide this additional consideration in its proposed rule, acknowledging that there are environmental health or safety risks addressed by the action, yet baldly asserting that these risks do not affect children disproportionately.³⁹² Such a conclusion flies in the face of the clear language of the executive order, which recognizes that air pollution is a significant risk to children and may have a disproportionate impact on their still developing neurological, immunological, digestive, and other bodily systems. EPA's conclusion also flies in the face of the “growing body of scientific knowledge” on which the executive order was based.³⁹³ Indeed, even common sense points the other direction.

For an action that so clearly “concerns an environmental health or safety risk” that “may have a disproportionate effect on children,” EPA may not ignore Executive Order 13045. EPA has every reason to believe that this action may disproportionately impact children and is thus obligated to satisfy the inquiry required by Section 5-505. At the very least, its assertion that the order does not apply must be supported by evidence and analysis and not the conclusory remarks presented in the proposed rule. EPA’s failure to satisfy the mandate of Executive Order 13045 ensures that any action the agency takes to promulgate the rule would be arbitrary, capricious, and otherwise not in accordance with law.

XV. The History of the “Routine Maintenance” Exclusion in the NSR Regulations

In June 1972, the U.S. District Court for the District of Columbia held that the 1970 Clean Air Act Amendments prohibited EPA from approving state implementation plans that allowed air quality to deteriorate significantly in areas meeting the national ambient air quality standards (“NAAQS”).³⁹⁴ In July of the following year, EPA responded to the court’s order by

³⁹² 67 Fed. Reg. at 80,306.

³⁹³ See, generally, *Children at Risk*, *supra*.

³⁹⁴ *Sierra Club v. Ruckelshaus*, 344 F.Supp 253 (D.D.C. 1972). The U.S. Court of Appeals for the District of Columbia Circuit affirmed the district court’s ruling later that year, *Sierra Club v. Ruckelshaus*, 2 Env’tl. L. Rep. 20,656 (D.C. Cir. 1972), and the Supreme Court upheld the D.C. Circuit’s decision seven

proposing regulations for preventing significant deterioration of air quality in attainment areas.³⁹⁵

A year later, the agency proposed more specific regulations “to focus attention and solicit comment on the detailed procedural and technical aspects” of preventing significant deterioration of air quality.³⁹⁶

The detailed PSD regulations proposed by EPA included a provision declaring that before an owner or operator could commence “construction or expansion” of an air pollution source belonging to one of several industrial categories, EPA or a delegated state authority would need to determine that the proposed activity would not cause air pollution concentrations in any area to increase above limits set forth elsewhere in the regulations.³⁹⁷ If the source belonged to a category for which EPA had not yet established new source performance standards (“NSPS”), the reviewing authority would also need to determine that the constructed or expanded source would “apply and operate the best available control technology for minimizing emission of particulate matter and sulfur dioxide.”³⁹⁸ The term “expansion” referred to “any source which intends to increase production through a major capital expenditure.”³⁹⁹

EPA received comments criticizing the concept of “expansion,” and EPA’s definition of the term, as being too vague. In response to these comments, EPA in its final PSD rule replaced “expansion” with “modification,” a term that the agency had already employed in its NSPS regulations.⁴⁰⁰ The definition of “modification” in the final PSD rule was as follows:

- (d) The phrases “modification” or “modified source” mean any physical change in, or change in the method of operation of, a stationary source which increases the emission rate of any pollutant for which a national standard has been promulgated under Part 50 of this chapter or which results in the emission of any such pollutant not previously emitted, except that:

months later. *Fri v. Sierra Club*, 412 U.S. 541 (1973) (*per curiam* decision affirming, by an equally divided Court, the D.C. Circuit’s decision).

³⁹⁵ 38 Fed. Reg. 18,986 (July 16, 1973).

³⁹⁶ 39 Fed. Reg. 31,000 (August 27, 1974).

³⁹⁷ *Id.* at 31,008/2.

³⁹⁸ *Id.*

³⁹⁹ *Id.* at 31,007/1-2.

⁴⁰⁰ 39 Fed. Reg. 42,510, 42,513/1 (December 5, 1974).

- (1) Routine maintenance, repair, and replacement shall not be considered a physical change, and
- (2) The following shall not be considered at change in the method of operation:
 - (i) An increase in the production rate, if such increase does not exceed the operating design capacity of the source;
 - (ii) An increase in the hours of operation;
 - (iii) Use of an alternative fuel or raw material, if prior to the effective date of a paragraph in this Part which imposes condition on or limits modifications, the source is designed to accommodate such alternative use.⁴⁰¹

Three years after EPA promulgated the PSD regulations, President Carter signed the 1977 Clean Air Act Amendments into law. Among the provisions added to the Act were comprehensive new PSD requirements.⁴⁰² As amended, the Act declared that no major emitting facility could be “constructed” unless detailed permitting requirements were met.⁴⁰³ The Act defined “construction” to include “modification,” which was in turn defined as

any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted.⁴⁰⁴

Whereas EPA’s PSD regulations defined “modification” as any change that increased the emission *rate*, the amended Act defined the term as any change that increased the *amount* of any air pollutant emitted.⁴⁰⁵ Moreover, the Act’s definition of “modification,” unlike EPA’s definition, did not exclude anything from the meaning of “physical change” or “change in the method of operation.”⁴⁰⁶ These provisions of the Act remain unchanged to this day.

In June 1978, EPA published notice of final agency action amending “its regulations relating to prevention of significant air quality deterioration (PSD) in order to implement the new

⁴⁰¹ *Id.* at 42,514/2.

⁴⁰² 42 U.S.C. § 7470, *et seq.*

⁴⁰³ *Id.* § 7475.

⁴⁰⁴ *Id.* § 7411(a)(4).

⁴⁰⁵ *Compare* 39 Fed. Reg. at 42,514/2 to 42 U.S.C. § 7411(a)(4).

⁴⁰⁶ 42 U.S.C. § 7411(a)(4).

PSD requirements of the Clean Air Act Amendments of 1977.”⁴⁰⁷ The agency explained that “[t]hese requirements follow the outline of the pre-existing regulations, but are in general more comprehensive and stringent.”⁴⁰⁸

The new PSD regulations declared that “[n]o major stationary source or major modification shall be constructed” unless the source owner and the reviewing authority met their obligations under the new permitting requirements, which paralleled those set forth in the amended Act.⁴⁰⁹ “Major modification” was defined as

any physical change in, change in the method of operation of, or addition to a stationary source which increases the potential emission rate of any air pollutant regulated under the act (including any not previously emitted and taking into account all accumulated increases in potential emissions occurring at the source since August 7, 1977, or since the time of the last construction approval issued for the source pursuant to this section, whichever time is more recent, regardless of any emission reductions achieved elsewhere in the source) by either 100 tons per year or more for any source category identified in paragraph (b)(1)(i) of this section, or by 250 tons per year or more for any stationary source.⁴¹⁰

Whereas the amended Act applied the permitting requirements to any “modification,” which it defined in terms of any change that increased the *amount* of any air pollutant emitted, EPA’s new PSD regulations applied the permitting requirements to any “major modification,” which the agency defined in terms of any change that increased the *potential emission rate*.⁴¹¹ Moreover, notwithstanding the absence in the amended Act of any exclusions from the meaning of “physical change” or “change in the method of operation,” the new rule, like EPA’s original PSD regulations, excluded certain types of activity from those terms.⁴¹² In particular, the regulations

⁴⁰⁷ 43 Fed. Reg. 26,388/1-2 (June 19, 1978).

⁴⁰⁸ *Id.* at 26,388/2.

⁴⁰⁹ *Id.* at 26,406/2.

⁴¹⁰ *Id.* at 26,403/3-26,404/1.

⁴¹¹ *Compare* 42 U.S.C. § 7411(a)(4) to 43 Fed. Reg. at 26,403/3-26,404/1.

⁴¹² *Id.* at 26,404/1.

declared that “[a] physical change shall not include routine maintenance, repair and replacement.”⁴¹³

In response to petitions for review subsequently filed by environmental groups, the D.C. Circuit vacated the “potential emissions rate” thresholds in new PSD rule’s definition of “major modification.”⁴¹⁴ In so doing, the court noted that, in the amended Clean Air Act, “the term ‘modification’ is nowhere limited to physical changes exceeding a certain magnitude.”⁴¹⁵ After reviewing the legislative history of the 1977 Amendments, moreover, the court found that the lack of any magnitude-based threshold for the “modification” trigger reflected a deliberate decision reached by Congress:

Describing the scope of the Senate Bill, Senator Buckley stated, “‘No significant deterioration’ is a policy that has no effect on existing sources, unless a source undertakes a major expansion program. It requires the States to study the impact on air quality resulting from the siting of new major sources of pollution” 122 Cong.Rec. 23,833 (1976). Senator Buckley was ranking minority member of the Subcommittee on Environmental Pollution at the time the bill was drafted, and took a leading role in its drafting and in explaining it on the floor of the Senate. When this debate took place, the statutory language did not apply PSD preconstruction review to source “modification.” In November 1977, the Senate and House passed technical amendments, one of which had the effect of defining “construction” to include “modifications.” It was this new language that had the effect of overriding Senator Buckley’s interpretation of the meaning of “no significant deterioration.”⁴¹⁶

Whether industry liked it or not, the “modification” language enacted by Congress required a permit for activities far more minor than “a major expansion program”:

Implementation of the statute’s definition of “modification” will undoubtedly prove inconvenient and costly to affected industries; but the clear language of the statute unavoidably imposes these costs except for *de minimis* increases. The statutory scheme intends to “grandfather” existing industries; but the provisions concerning modifications indicate that this is not to constitute a perpetual immunity from all standards under the

⁴¹³ *Id.*

⁴¹⁴ *Alabama Power*, 636 F.2d at 399-400.

⁴¹⁵ *Id.* at 400.

⁴¹⁶ *Id.* at 400 n.47.

PSD program. *If these plants increase pollution, they will generally need a permit.* Exceptions to this rule will occur when the increases are *de minimis*, and when the increases are offset by contemporaneous decreases of pollutants, as we discuss below. These two exceptions, we believe, will allow for replacement of depreciated capital stock, without imposing a completely disabling administrative and regulatory burden.⁴¹⁷

In response to the court's ruling, EPA in August 1980 published a new regulatory definition of "major modification."⁴¹⁸ It declared that the term meant

any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act.⁴¹⁹

The new regulations, like the old, identified "[r]outine maintenance, repair, and replacement" as an activity not included in the term "physical change or change in the method of operation."⁴²⁰

The "routine maintenance" exclusion remains unchanged to this day.⁴²¹

In 1983, the Wisconsin Electric Power Company ("WEPCO") proposed to replace four rear steam drums and four air heaters at its Port Washington electric power plant.⁴²² After receiving notice of WEPCO's plans for the Port Washington plant, EPA examined the relevant law and facts before issuing a memorandum to the company. With respect to the former, the memorandum stated that

The clear intent of the PSD regulations is to construe the term "physical change" very broadly, to cover virtually any significant alteration to an existing plant. This wide reach is demonstrated by the very narrow exclusion provided in the regulations: other than certain uses of alternative fuels not relevant here, only 'routine maintenance, repair and replacement' is excluded from the definition of physical change.⁴²³

⁴¹⁷ *Id.* at 400.

⁴¹⁸ 45 Fed. Reg. 52,676, 52,730 (August 7, 1980).

⁴¹⁹ *Id.*

⁴²⁰ *Id.*

⁴²¹ See 40 C.F.R. §§ 51.165(a)(1)(v)(C)(1), 51.166(b)(2)(iii)(a), 52.21(b)(2)(iii)(a).

⁴²² *WEPCO*, 893 F.2d at 907-08.

⁴²³ Clay Memo, at 3, *quoted in SIGECO*, 2003 WL 367901, at *23.

The memorandum then weighed “the nature, extent, purpose, frequency, and cost of the work as well as other relevant factors, to arrive at a common-sense finding” that the activity in question was not “routine,” and thus was a “physical change in” the Port Washington plant.⁴²⁴ In reaching that conclusion, EPA noted, “The available information indicates that the work proposed at Port Washington is far from being a regular, customary, or standard undertaking for the purpose of maintaining the plant in its present condition.”⁴²⁵

WEPCO challenged EPA’s determination before the U.S. Court of Appeals for the Seventh Circuit, arguing that Congress did not intend simple equipment replacement to qualify as “any physical change”:

The plain meaning of “modify” is “to change or alter” [Webster’s New World Dictionary] or “to make basic or fundamental changes in.” [Webster’s Ninth New Collegiate Dictionary]. Reflecting the plain meaning of this term, Congress provided that a facility (1) must undergo a physical or operational “change” before it is evaluated under the modification provision Thus, under the plain meaning of the Act, a unit should not be deemed “modified” as a result of the replacement of equipment with equipment similar to that replaced. As in the case of Port Washington, such like-kind replacement does not “change or alter” the design or nature of the facility. Rather, it merely allows the facility to operate again as it had before the specific equipment deteriorated.⁴²⁶

The court rejected WEPCO’s attempt to define “physical change” as an alteration in the design or nature of the facility:

[T]o adopt WEPCO’s definition of “physical change” would open vistas of indefinite immunity from the provisions of NSPS and PSD. Were we to hold that the replacement of major generating station systems – including steam drums and air heaters – does not constitute a physical change (and is therefore not a modification), the application of NSPS and PSD to important facilities might be postponed into the indefinite future. There is no reason to believe that such a result was intended by Congress.⁴²⁷

⁴²⁴ *Id.* at 910 (quoting Clay Memo at 3).

⁴²⁵ Clay Memo at 3-5 (*quoted in U.S. v. SIGECO*, 2003 WL 367901, at *22).

⁴²⁶ *WEPCO*, 893 F.2d at 908.

⁴²⁷ *Id.* at 909.

Referencing both legislative history and judicial decisions, the court concluded that Congress did not intend to require that physical activity work a “basic or fundamental change” in a facility before it would qualify as a “physical change”:

The Supreme Court reported in *Chevron* that Senator Muskie, one of the principal supporters of the Clean Air Act, remarked: “A source . . . is subject to all the nonattainment requirements as a modified source if it makes *any physical change* which increases the amount of any air pollutant” 467 U.S. at 853, 104 S.Ct. at 2787 (quoting 123 Cong. Rec. 26874 (1977)) (emphasis supplied). And other courts considering the modification provisions of NSPS and PSD have assumed that “any physical change” means precisely that. *See, e.g., National-Southwire Aluminum Co. v. EPA*, 838 F.2d 835 (6th Cir.), *cert. denied*, 488 U.S. 955, 109 S.Ct. 390, 102 L.Ed.2d 379 (1988) (turning off pollution control equipment constitutes “physical change” and modification); *Alabama Power v. Costle*, 636 F.2d 323, 400 (D.C. Cir. 1979) (“[T]he term ‘modification’ is nowhere limited to physical changes exceeding a certain magnitude.”); *ASARCO Inc. v. EPA*, 578 F.2d 319, 322 (D.C. Cir. 1978) (NSPS applies to any stationary source that is “physically or operationally changed in such a way that its emission of any air pollutant increases.”) (emphasis removed). *Cf. United States v. Narragansett Improvement Co.*, 571 F.Supp. 688, 694-95 (D.R.I. 1983) (replacement program not modification because, despite physical change, no increase in emissions).⁴²⁸

After citing approvingly to a commentator’s statement that the Act’s preconstruction permitting requirements “are triggered not only when an operator builds a new plant, but also whenever the operator installs or *alters a piece of equipment* in an existing plant and thereby increases emissions,”⁴²⁹ the court held that WEPCO’s extensive renovation of the Port Washington plant was non-routine and thus a “physical change.”⁴³⁰

⁴²⁸ *Id.* at 908-09.

⁴²⁹ *Id.* at 908 (quoting Butler, *New Source Netting in Nonattainment Areas under the Clean Air Act*, 11 Ecology L.Q. 343, 349-50 (1984)) (emphasis supplied by the court).

⁴³⁰ *Id.* at 913. In the *SIGECO* decision discussed below, the court concluded that “nothing in *WEPCO* suggests that any project smaller than *WEPCO*, or that *WEPCO* was some type of baseline for companies to compare its projects to in efforts to determine if they would qualify for routine maintenance. Rather, *WEPCO* was an easy case on routine maintenance – the EPA and the Seventh Circuit quickly disposed of the defendant’s arguments that it qualified for routine maintenance.” *SIGECO*, 2003 WL 367901, at *21.

During the same period in which EPA issued its *WEPCO* determination and the Seventh Circuit affirmed it, Congress enacted the Clean Air Act Amendments of 1990. Congress was asked to include amendments to alter EPA's standard for determining routine maintenance and considered specific amendments that would have reversed the agency's standard.

A main rallying point for a "*WEPCO* fix" was the claim that EPA's standard would retard the application of installation and adoption of clear pollution control technologies. Yet some measures introduced in Congress went beyond pollution control exclusions and ventured into the territory exempting life extension projects and other emission-increasing major modifications. For example, Amendment 1349, offered by Senator McClure, was offered to solve "all the problems that EPA has created with the *WEPCO* interpretations" by allowing a unit to undertake physical changes without NSR so long as the facility did not emit more than its design maximum.⁴³¹

Senator Chafee, Ranking Member of the Senate Environment and Public Works Committee and floor manager for the 1990 CAA revisions, opposed the amendment by explaining how the existing Act's grandfathering provisions helped achieve the goal of cleaning the nation's air:

The rationale that is behind permitting these old plants to emit is first of all, they are inefficient, and at some point they are so inefficient they are going to be replaced. And there you come in with a new plant and a clean plant.⁴³²

Senator Chafee then responded to the position, put forth by Sen. McClure, that refurbishing grandfathered plants would not increase air pollution. "The flaw," explained the Chafee, is that "we are not seeing the end of these plants. We are not seeing them go either out or be reused in a very reduced fashion."⁴³³ Accordingly, that *WEPCO* amendment was opposed on grounds that it

⁴³¹ 1990 CAA Leg. Hist. 6946, 6965 (Sen. McClure, Senate Debate on S. 1630, Apr. 3, 1990).

⁴³² *Id.* at 6970 (Sen. Chafee, Senate Debate on S. 1630, Apr. 3, 1990).

⁴³³ *Id.*

would “increas[e] the total amount of emissions that are occurring in our Nation.”⁴³⁴ In short,

Chafee said:

The whole purpose of the Clean Air Act is to reduce these emissions, so [Sen. McClure,] wants to get around that. In effect, you could say that he is creating a great big loophole. That is not what we want.⁴³⁵

The amendment was defeated 64-33.⁴³⁶

Another attempt was made to obtain *WEPCO* relief in the Conference Committee that was appointed to resolve differences between competing House and Senate CAA bills. Senator Baucus, sponsor of S.1630, was Chair of the Senate Subcommittee handling the amendments, and Chairman of the Conference Committee that ultimately reconciled the House and Senate versions of the amendments. Several Senators wrote to Sen. Baucus and specifically urged him to adopt a comprehensive repeal of *WEPCO* that, in addition to allowing for the installation of pollution control measures without triggering NSR, would “[a]llow utilities to undertake needed repairs at an existing unit without triggering an obligation to meet stringent new source performance standards.”⁴³⁷

The Conference Agreement version of S.1630 did not include a reversal of the *WEPCO* routine maintenance standard. Senate Majority Leader Mitchell, in the floor debate whereby the Conference Report was adopted, entered the following legislative history explaining why the *WEPCO* “fix” was left out of the bill:

In 1970, the Clean Air Act required that new sources meet tight emission standards. *At that time, it was assumed that electric utility units had an average lifetime of 30 years. But many utilities are now choosing to extend the life of their plants rather than meet the new source performance standards mandated under current law.* This development has exacerbated our pollution problems and made national acid rain controls even

⁴³⁴ *Id.*

⁴³⁵ *Id.*

⁴³⁶ *Id.* at 6978 (Sen. Chafee, Senate Debate on S. 1630, Apr. 3, 1990).

⁴³⁷ 1990 CAA Leg. Hist. 731, 1087 (Sen. McClure reading October 12, 1990 letter from Sens. Riegle, Gramm, Thurmond, and Nickles, Senate Debate on CAA Amendments of 1990 Conference Report, Oct. 27, 1990).

more necessary. *Some approaches to the WEPCo problem would again shield utilities from meeting new source standards - - and postponing needed emission reductions -- even though such utilities may in essence be rebuilding their units.*⁴³⁸

Senator Baucus, Conference Chair provided further explanation why fixes to the *WEPCO* routine maintenance standard were rejected. In *WEPCO*, he explained, “EPA did exactly what it was supposed to do” under the PSD provisions.⁴³⁹ The Congress had been very clear in the past, the Senator said, that new source review provisions apply to “existing sources that undergo physical and operational changes when such changes increase emissions.”⁴⁴⁰ He explained:

The issue is whether old facilities that are substantially renovated and refurbished should continue to be allowed to emit at much higher rates or to emit more pollution, and with little or no pollution control equipment, compared to new sources. The obvious answer is that they should not, as long as the common sense exceptions to the rules continue to apply, which I am sure they will. [...] *The WEPCo fix that would reverse the case would tie the EPA's hands and completely halt, or seriously deter, what little use the Agency has made of the modification provisions of the existing act.*⁴⁴¹

Those who had pushed to overturn the *WEPCO* standard on routine maintenance, replacement and repair in Congress were thus left to hope that EPA would reverse its *WEPCO* standard administratively.⁴⁴² However, an official with the Administration’s Council of Economic Advisors presciently warned Congress that if EPA expanded “what types of projects would be considered routine and thus not subject to new source review” to include nonroutine

⁴³⁸ *Id.* at 791 (Sen. Mitchell, Senate Debate on the CAA Amendments of 1990 Conference Report, Oct. 27, 1990) (emphasis added).

⁴³⁹ 1990 CAA Leg. Hist. 6539, 6675 (Sen. Baucus, Senate Debate on S. 1630, Mar. 28, 1990).

⁴⁴⁰ *Id.* at 6675-6676.

⁴⁴¹ *Id.* at 6676 (emphasis added).

⁴⁴² Representative Sharp, for instance, admitted that the final bill did not address the portion of *WEPCO* that could “prevent utilities from undertaking needed equipment changes . . . at their power plants without first meeting expensive and time-consuming new source review requirements,” the omission was due to the administration’s claim that it could solve any problems administratively. *See* 1990 CAA Leg. Hist. 1177, 1219 (Rep. Sharp, House Debate on the CAA Amendments of 1990 Conference Report, Oct. 26, 1990) (Attached as Exhibit 11). The actual Conference Report language, however, clarifies that the “deletion of most provisions relating to the *WEPCO* decision” was *not* intended “to affect or prejudice *in any way* the issues or resolution of the *WEPCO* matter,” and helpfully directs EPA to resolve the *WEPCO* matter “as appropriate.” 1990 CAA Leg. Hist. 1451, 1794 (Joint Explanatory Statement of the Committee of Conference, CAA Amendments of 1990, Oct. 26, 1990) (emphasis added).

physical renovations complementary to and contemporaneous with a pollution control projects, “a court likely would find it to be inconsistent with the present statute if implemented through rulemaking.”⁴⁴³

Two years after the *WEPCO* decision, EPA stated in the preamble to a proposed rulemaking concerning electric power plants that the agency had “always recognized that Congress obviously did not intend to make every activity at a source subject to new source requirements.”⁴⁴⁴ The only example the agency gave at the time of physical activity that it believed Congress did not intend to subject to the Act’s permitting requirements was “the repair or replacement of a single leaky pipe.”⁴⁴⁵ Later in the same preamble, EPA mentioned that its regulations had “long excluded emissions increases associated with routine maintenance[,] repairs and replacement.”⁴⁴⁶

Two years later, EPA circulated among stakeholders draft regulatory language that defined “routine maintenance, repair and replacement” not to include any physical activities that increased emissions. The draft definition read, in full:

- (A) Routine maintenance, repair and replacement means: an activity normally performed during regularly scheduled equipment outage involving minor maintenance and repair of minor parts and components or the replacement of minor parts or components with identical or functionally equivalent items.
- (B) Routine maintenance, repair and replacement does not include:
 - (1) *An activity that either increases or affects: emissions of any pollutant, the present efficiency, capacity, operating rate, utilization, or fuel adaptability of the source or any emission unit;*
 - (2) *An activity that substantially extends the useful economic life of the emission unit; or*

⁴⁴³ 1990 CAA Leg. Hist. 10726, 10747 (Responses from Richard Schmalensee, Council on Economic Advisors, to Sen. Ford, Extended Remarks on Passage of S. 1630, Nov. 2, 1990) (citing *WEPCO*).

⁴⁴⁴ 57 Fed. Reg. 32,314, 32,316 (July 21, 1992).

⁴⁴⁵ *Id.* Of course, as discussed herein, NSR applies only to significant pollution increases that result from a physical or operational change; EPA did not provide examples of pipe repair or replacement that would cause significant pollution increases.

⁴⁴⁶ *Id.* at 32,321.

(3) A reconstruction as defined in 40 CFR 60.15.⁴⁴⁷

In the preamble, EPA identified as a “key provision” the portion of the draft rule that declared that activities were not “routine” if they increased emissions.⁴⁴⁸

Industry stakeholders opposed the draft definition. A coalition of twenty-five electric utilities argued in a letter to an EPA official that a regulatory definition of “routine maintenance, repair, and replacement” was unnecessary since companies had a “fairly good understanding” of the meaning of the term. According to the electric utilities, that understanding derived from

existing legal opinions, such as in the WEPCO case, guidance from EPA on specific situations regarding routine activities, engineering requirements and vendor recommendations, a review of normal industry practice from EPA on specific situations regarding routine activities, engineering requirements and vendor recommendations, a review of normal industry practice regarding maintenance, repair and replacement, and EPA’s general guidance on this issue.⁴⁴⁹

In the face of industry’s opposition to the draft definition, EPA decided not to promulgate it.⁴⁵⁰

In August 1996, EPA responded to a request by the Sunflower Electric Power Corporation for a determination as to whether physical activity proposed at one of its plants would constitute a “modification.” The agency responded that the proposed physical activity was not “routine” since it incorporated redesigned and upgraded turbine blades.⁴⁵¹

Also in 1996, EPA began to investigate whether electric utility companies had been modifying their facilities without satisfying the permitting requirements in the Act and the agency’s regulations. In 1999, EPA began referring cases to the Department of Justice (“DOJ”) for civil enforcement actions against the utility companies. In response to the lawsuits, many of

⁴⁴⁷ EPA, *New Source Review Reform, Preliminary Staff Draft* (July 11, 1994) (emphasis added).

⁴⁴⁸ *Id.* at 117-118 (emphasis added).

⁴⁴⁹ William Bumpers, Letter to EPA Office of Air Quality Planning and Standards New Source Review Section Chief David Solomon, entitled “Comments of the Class of ’85 Regulatory Response Group on EPA’s Draft Revisions to the New Source Review Regulations” (September 9, 1994), at 5.

⁴⁵⁰ EPA Response to Issues Raised by Industry on Clean Air Act Implementation Reform (May 30, 1995) at 20.

⁴⁵¹ See U.S. Department of Justice Office of Legal Policy, *New Source Review: An Analysis of the Consistency of Enforcement Actions With the Clean Air Act and Implementing Regulations* (January 2002) (“OLP Report”), at 21.

the companies argued that the physical activities alleged in the complaints qualified as “routine maintenance, repair, and replacement.”⁴⁵²

In May 2000, EPA issued another applicability determination, this time to the Detroit Edison Company. Applying the factors enunciated in the WEPCO proceeding, the agency concluded that Detroit Edison’s proposed replacement and reconfiguration of steam turbines at one of its power plants was non-routine and thus a “physical change.”⁴⁵³

In May 2001, in response to a recommendation by the vice president’s National Energy Policy Development Group, President Bush instructed the DOJ’s Office of Legal Policy to review the lawsuits against the electric utility companies “to ensure that the enforcement actions are consistent with the Clean Air Act and its regulations.”⁴⁵⁴ After reviewing “the applicable law, agency action, and representative pleadings filed in the pending cases,” OLP reported that “EPA reasonably may conclude that the enforcement actions are consistent with the Clean Air Act and its regulations.”⁴⁵⁵

In February 2003, the U.S. District Court for the Southern District of Indiana addressed SIGECO motion for summary judgment in one of the enforcement actions.⁴⁵⁶ In the underlying case, SIGECO “attack[ed] the physical change element [of “modification”] by arguing that all of its projects were routine maintenance, repair, and replacement, and thus exempt from the definition of physical change.”⁴⁵⁷ For its part, EPA argued that the “routine maintenance” exclusion did not apply to any of SIGECO’s projects.⁴⁵⁸

⁴⁵² See OLP Report at iii.

⁴⁵³ See OLP Report at 21 (citing EPA Regional Administrator Francis X. Lyons, Letter to Counsel for Detroit Edison Company Henry Nickel (May 23, 2000)). Because none of the information presented by the company indicated that the proposed replacement and reconfiguration activity would increase emissions, however, EPA did not conclude that the “nonroutine physical change to the facility” constituted a “modification.” National Academy of Public Administration, *A Breath of Fresh Air: Reviving the New Source Review Program* (April 2003), at 56 n.205 (quoting May 2000 letter from Lyons to Nickel).

⁴⁵⁴ See *Report of the National Energy Policy Development Group* (May 2001), ch. 7, at 14.

⁴⁵⁵ OLP Report at iii-iv.

⁴⁵⁶ *SIGECO*, 2003 WL 367901, at *27.

⁴⁵⁷ *Id.* at *3.

⁴⁵⁸ *Id.*

SIGECO based its motion on the claim that EPA’s prior statements and actions had led the company to the conclusion that its projects qualified as “routine maintenance, repair, and replacement.”⁴⁵⁹ In response, EPA asserted that the interpretation of “routine” that led the agency to view each of SIGECO’s projects as a “physical change” was consistent with the agency’s prior statements and actions, including its determination in the WEPCO proceeding:

The interpretation EPA urges in this case is the same interpretation that the Seventh Circuit upheld more than a decade ago in *Wisconsin Electric Power Co. v. Reilly*, 893 F.2d 901 (7th Cir. 1990) (“WEPCO”). This interpretation has three hallmarks. *First, the exemption applies to a narrow range of activities, in keeping with EPA’s limited authority to exempt activities from the Clean Air Act.* Second, the exemption applies only to activities that are routine for a generating unit. The exemption does not turn on whether the activity is prevalent within the industry as a whole. Third, no activity is categorically exempt. EPA examines each activity on a case-by-case basis, looking at the nature and extent, purpose, frequency, and cost of the activity.⁴⁶⁰

In its brief to the court, EPA repeatedly stressed the point that the agency interpreted “routine maintenance” narrowly because the statute’s broad definition of “modification” did not permit anything more than a narrow interpretation of the regulatory exclusion. For example, the agency wrote that

EPA has extremely limited authority to exempt activities from the definition of “modification” under the Clean Air Act. The agency’s authority is limited to circumstances of administrative necessity (which EPA has never claimed) and circumstances having a “de minimis” or “trivial” impact on emissions. *Alabama Power*, 636 F.2d at 358-61.⁴⁶¹

In its decision, the district court first concluded that EPA’s narrow interpretation of “routine maintenance was consistent with the plain language of the definition of “modification”

⁴⁵⁹ *Id.*

⁴⁶⁰ *Id.* at *12 (quoting Pl.’s Opposition to Def.’s Motion for Summary Judgment on Fair Notice at 1) (emphasis added).

⁴⁶¹ Pl.’s Opposition to Def.’s Motion for Summary Judgment on Fair Notice at 29. *See also id.* at 7-8 (“[T]he term’s [‘routine’] scope is constrained by EPA’s limited authority to create exemptions from Clean Air Act requirements, a central holding in *Alabama Power Company v. Costle*, 636 F.2d 323 (D.C. Cir.

in the PSD regulations,⁴⁶² and that, when considered in context, the text of the regulations provided regulated companies with some notice that EPA would read “routine” narrowly:

[T]he context of the exemption does provide SIGECO and the regulated community with some notice that the EPA does not interpret routine maintenance broadly. As discussed earlier, Congress sweepingly defined modification as “any physical change” at an existing facility, and the goal of the CAA was “to speed up and intensify” the war against pollution. Moreover, the D.C. Circuit rejected the EPA’s earlier attempts to make broad, categorical exclusions from the CAA’s definition of modification. *See Ala. Power v. Costle*, 636 F.2d 323 (D.C. Cir. 1980) (striking down EPA’s exemptions from the CAA definition of “modification” for sources that emit less than fifty tons of pollutants per year, and for physical changes that do not qualify as “major” as beyond EPA’s authority). With this regulatory context in mind, a context that a sophisticated entity like SIGECO was surely aware of, it would be inconsistent for EPA to broadly define a regulatory exemption that would delay application of NSR to existing sources.⁴⁶³

The court then focused on the EPA memorandum upheld in *WEPCO* and, in particular, on the “very narrow exclusion” language quoted above:

This 1988 EPA description of routine maintenance as a “very narrow exclusion” illustrates that the EPA’s current view of routine maintenance is not a “new” interpretation that the EPA set forth for the first time in this litigation.⁴⁶⁴

In fact, the EPA memorandum “explicitly notified the regulated community that the EPA considered routine maintenance to be a narrow exemption.”⁴⁶⁵

Based, in large measure, on its review of the EPA memorandum and the *WEPCO* decision, the court concluded that SIGECO had been given fair notice of the EPA interpretation

1980).”); *id.* at 9 (“*Alabama Power* gives clear notice that EPA must narrowly construe exemptions from the definition of ‘modification’ in order to remain consistent with the Clean Air Act.”).

⁴⁶² *SIGECO*, 2003 WL 367901, at *13.

⁴⁶³ *Id.* at *18; *see also id.* (“Reading the regulation in context, however, gives notice that the regulation will not be construed broadly.”).

⁴⁶⁴ *Id.* at 23.

⁴⁶⁵ *Id.*

of “routine” that had led the agency to find that each of the company’s projects constituted a “physical change.”⁴⁶⁶

XVI. Incorporation by Reference

We hereby incorporate by reference all of the comments submitted to the EPA docket, A-2001-19, by each of the organizations submitting these comments.

⁴⁶⁶ *Id.* at *27.