V. EPA HAS FAILED TO MEET THE REQUIREMENTS OF SEVERAL EXECUTIVE ORDERS

A. EPA Has Utterly Failed to Undertake a Rigorous Economic Analysis of Alternative MACT Regulatory Options Pursuant to Executive Order 12866 (Regulatory Planning and Review).

Executive Order 12866 (Regulatory Planning and Review) requires, for each significant regulatory action, that the relevant agencies must prepare an

> "assessment, including the underlying analysis, of costs and benefits of potentially effective and reasonably feasible alternatives to the planned regulation, identified by the agencies or the public (including improving the current regulation and reasonably viable nonregulatory actions), and an explanation why the planned regulatory action is preferable to the identified potential alternatives."[1]

The Order also asserts that "in deciding how to regulate, agencies should assess all costs and benefits of available regulatory alternatives," and that "[i]n choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety and other advantages; distributive impacts; and equity."[2] E.O. 12866 further states that "costs and benefits shall be understood to include both quantitative measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify but nevertheless essential to consider."[3] In promulgating its MACT regulation for utility units, therefore, EPA "shall assess both the costs and the benefits of the intended regulation and recognizing that some costs and benefits are

[1] Executive Order 12866, Regulatory Planning and Review § 6(a)(3)(C), 58 Fed. Reg. 51,735 (September 30, 1993).
[2] *Id.* § 1.
[3] *Id*.

difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation outweigh its costs."[4]

After President Clinton signed E.O.12866, an interagency group spent two years reviewing and assessing the "state of the art for economic analyses of regulatory actions," and published "Economic Analysis of Federal Regulations Under Executive Order 12866 (January 11, 1996),[5] a policy directive describing best practices for performing the analyses required by the Executive Order. Executive Order 12866, and the 1996 Economic Analysis guidelines require the Agency to consider the most important alternative approaches to the identified problem and to provide analysis supporting the reasons for selecting the proposed regulatory action over identified alternatives.

EPA has failed to follow this approach in this proposed rule.[6] First, the Agency does not seriously evaluate alternative approaches to the MACT floor (for example a MACT floor developed on the basis of no subcategorization, or subcategorization based on process type rather than fuel rank). Second, the Agency does no assessment of alternative above-the-floor options for most Utility Units, except to provide excuses for why its standards ignore available techniques. Instead, the Agency adopts an approach to MACT, develops a floor, and determines in setting the standard not to go beyond the floor (based on little or no analysis of available process alternatives, pre-combustion methods or even control technologies). At that point, the Agency engages in a superficial "cost and benefit assessment" of the MACT standard against the section 111 cap and trade alternative. That assessment has none of the rigor of the analysis advanced in the

[4] *Id.* § (1)(b)(6).
[5] Available at http://www.whitehouse.gov/omb/inforeg/riaguide.html.

1996 Economic Analysis guidelines and required by E.O. 12866 (the "E.O. 12866 approach").

Rigorous analysis, however not only is directed by Executive Order, but also allows the public to understand and comment on the Agency's rulemaking proposal. Indeed, EPA has included such analyses in the record for other significant recent rulemakings, including the NOx SIP Call and its recent non-road heavy-duty diesel engine proposal.[7] EPA's failure to do so here epitomizes the arbitrary nature of EPA's proposal – the Agency has not identified and evaluated any legitimate alternatives to its MACT approach but has simply selected a MACT without analyzing it against others.

1. Undertaking a rigorous economic analysis using the E.O. 12866 Approach demonstrates that more stringent MACT emissions standards are achievable.

To demonstrate that more stringent mercury emission rates are feasible and highly cost-effective, and that such reductions will provide substantial additional human health benefits, CATF, with the assistance of ICF Consulting and MSB Energy Associates, has evaluated the benefits and costs of tighter mercury emission rates than those proposed by EPA. The alternative emission rates were derived, as described in section II.B.3.c of Chapter II, by taking EPA's methodology to account for variability in coal characteristics and removing those statistical adjustments that EPA unjustifiably used to arrive at the permissive emission limits it proposed. The resulting "Alternate Mercury Control Scenario" is consistent with EPA's approach of basing subcategories on fuel rank and implementing the standard in 2008. Moreover, it also assumes, as EPA does, that the

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[6] *See* 69 Fed. Reg. 4652, 4712 (describing limited E.O. 12866 approach); *see also id*. at 4706-4712 (reporting a minimal economic analysis comparing the preferred section 111 approach with the Agency's flawed MACT alternative, but failing to analyze various alternative MACT scenarios).
[7] *See, e.g.*, 63 Fed. Reg. 57,356 *et seq*.; 68 Fed. Reg. 28,328 *et. seq.*

MACT floor is the standard, *i.e.* it does not assume that any beyond-the-floor levels are justified.

It should be noted again that these emission rates do not represent MACT. As we argue above, there is no justification for a fuel-rank based subcategorization scheme, and there is ample evidence that beyond-the-floor techniques exist and should have been evaluated in setting a MACT standard for Utility Units, at least with respect to mercury. We adopt EPA's own perspective in order to demonstrate, through a rigorous E.O. 12866 approach, that alternative emission rates to EPA's MACT are cost-effective. EPA's failure to complete the assessment denies the public this information.

The alternative emission rates we evaluated against EPA's proposed MACT standards are standards representing 90 percent mercury reduction (measured as a reduction from the mercury content in the input coal) for bituminous-fired units, 1.5 lbs./TBtu for subbituminous units and 4.5 lbs./TBtu for lignite-fired units. The 90 percent level was specified for bituminous-fired units because EPA's Integrated Planning Model (IPM) cannot simulate reductions any higher than 90 percent. Also, we did not separately model IGCC or waste-fired units as there are only 4 units total in these two subcategories. Mercury trading was not permitted as part of the modeled scenario.

The "Alternate Mercury Control Scenario" also integrates EPA's proposed Interstate Air Quality Rule (IAQR) requirements, reflecting the emissions control investments that would be made assuming that both IAQR and MACT must be implemented. This is the "real world" scenario that electric power generators will face.

a. Alternate Mercury Control Scenario Analysis Methodology.

In conducting this analysis, we again used the methods and procedures used by EPA. Specifically, ICF Consulting evaluated the Alternative Mercury Control Scenario using the same IPM used by EPA to evaluate the mercury co-benefits of the IAQR[8] and Clear Skies proposal. This model predicts emission levels and costs of the Alternative Mercury Control Scenario. Because EPA failed to model a regulatory alternative that represented the IAQR plus EPA's proposed MACT emission rates (IAQR+ EPA MACT), we also modeled this scenario.

We determined incremental emission reductions and costs of the Alternative Mercury Control Scenario by comparing the emissions and costs from the Alternative Mercury Control Scenario to EPA's IAQR alone and to the IAQR + MACT regulatory scenario.

The more stringent alternative mercury emission rates resulted in additional reductions in SO_2 emissions beyond the IAQR and IAQR + EPA MACT base cases. Because EPA has not monetized any of the benefits specific to mercury control, however, we were only able to estimate the incremental benefits resulting from the Alternate Mercury Control Scenario based on estimated avoided deaths from $PM_{2.5}$ exposure. We utilized modeled values for avoided deaths per ton of SO_2 pollution removed generated from EPA's benefits analysis in the IAQR by directly applying these estimates to the SO_2 emissions inventories derived from the IPM runs for the Alternate Mercury Control Scenario. The estimated incremental health benefits were converted to dollar benefits by applying EPA's IAQR estimate of the value of a statistical life (VSL) to the number of

estimated avoided deaths. This approach results in an underestimation of the incremental benefits of the Alternate Mercury Control Scenario, since there are many benefits from reduced mercury levels that have not been monetized as well as other benefits, in addition to avoided premature death, from reduced $PM_{2.5}$ levels. This methodology has been developed by EPA for use in situations where time and resource constraints preclude detailed modeling (e.g., EPA's recent recreational engine rulemaking).[9] CATF's application of the methodology is described in further detail in Appendix 6.

b. Alternate Mercury Control Scenario Analysis Results.

The results of the CATF analysis of an Alternate Mercury Control Scenario are summarized in this section.[10] The results demonstrate that more stringent mercury emission rates are feasible, cost-effective, and produce substantial incremental benefits well in excess of incremental costs. The Alternate Mercury Control Scenario contains subcategories identical to those proposed by EPA and an implementation date of 2008, as required by section 112 of the Clean Air Act. We also note that while the benefits of the Alternate Mercury Control Scenario are substantial, they are lower than the benefits that would be expected to result from the stringent mercury MACT emission rates we urge EPA to adopt in these comments, as described in section II.B.3.c of Chapter II. Nevertheless, the benefits of these alternate rates reveal that EPA's far weaker proposal is arbitrary and capricious.

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[8] In its January 28, 2004 Memo to the Docket entitled "Analysis of the Marginal Cost of SO_2 and NOx Reductions," EPA states "IPM is a more sophisticated model of the power sector developed by ICF that EPA uses for much of its analysis of the power sector."

[9] *See, e.g.,* U.S. EPA, "Final Regulatory Support Document: Control of Emissions from Unregulated Nonroad Engines," EPA420-R-02-022, at § 10.2.1 (November 8, 2002), available online at http://www.epa.gov/otaq/regs/nonroad/2002/r02022k.pdf (visited June 29, 2004).

[10] A more detailed summary and cost specifications for both the Alternate Control Scenario (IPM run CATF-14) and the IAQR+EPA MACT scenario (IPM run CATF-20) are set forth in Appendix 7 hereto.

Below, we compare the IPM model outputs for the Alternate Mercury Control Scenario with similar modeling of EPA's IAQR and IAQR + EPA MACT requirements. We performed our own analysis of the IAQR + EPA MACT alternative because EPA did not provide this relevant analysis for public review and comment.

i. Projected National Power Plant Emissions

National power plant emissions projected from the Alternate Mercury Control Scenario as well as EPA's IAQR and IAQR + EPA MACT proposals are summarized in Table V-1.

Table V-1. Air Emissions by Year for Different Mercury Control Scenarios

	2005	2010	2015	2020
Proposed IAQR				
SO2 (thousand tons)	8.2	6.1	5.4	4.3
NOx (thousand tons)	3.8	2.6	2.3	2.3
Mercury (tons)	48.5	42.2	40.7	38.1
Proposed IAQR + EPA MACT				
SO2 (thousand tons)	11.6	4.8	4.2	3.7
NOx (thousand tons)	3.8	2.4	2.3	2.2
Mercury (tons)	46	26	25	23
Alternate Mercury Control Scenario (includes EPA's IAQR proposal)				
SO2 (thousand tons)	11.6	4.1	4.1	4.0
NOx (thousand tons)	3.8	2.2	2.3	2.3
Mercury (tons)	46	12	12	12

As shown, the Alternate Mercury Control Scenario not only reduces mercury emissions to a far greater extent, it does so much more rapidly than the current proposal (as represented by the IAQR + EPA MACT estimates). The Alternate Mercury Control Scenario mercury emissions are about 54 percent below the IAQR + EPA MACT proposal in 2010 and 48 percent less in 2020. The sulfur dioxide emissions that result

from the Alternate Mercury Control Scenario are also less than the IAQR + EPA MACT levels from 2010 until 2020.

ii. Alternate Mercury Control Scenario Benefits

As shown in Table V-2, the Alternate Mercury Control Scenario reduces particulate-related deaths to a greater extent than predicted EPA's IAQR alone. The monetized benefit of these avoided deaths is also shown in Table V-2.[11]

Table V-2. Incremental Avoided PM-Related Deaths from Alternate Mercury Control Scenario

Alternate Mercury Control Scenario	**2010**	**2015**	**2020**
Avoided Deaths (relative to IAQR)	5,191	4,465	1,096
Monetary Benefits Avoided Deaths (relative to IAQR in 1999$)	$28 billion	$26 billion	$7 billion

iii. Alternate Mercury Control Scenario Costs

Total production costs and mercury reductions relative to EPA's Reference Case are shown in Table V-3 below for the Alternate Mercury Control Scenario, as well as for EPA's IAQR and IAQR + EPA MACT proposals.

Table V-3. Annual Costs and Mercury Reductions of the Alternate Mercury Control Scenario, IAQR and IAQR + EPA MACT

[11] We will submit benefits information for the IAQR+EPA MACT scenario in supplemental comments.

	Hg (tons reduced relative to EPA reference case of 52.7 tons in 2010)		Total Annual Electricity Production Costs (billion $1999)	
	2010	**2020**	**2010**	**2020**
IAQR	10.5	14.6	$89.1	$113.3
IAQR + EPA MACT	26.7	29.7	$91.4	$115.0
Alternate Mercury Control Scenario	40.7	40.7	$94.1	$115.6

Table V-4 below shows the incremental cost of the Alternate Mercury Control Scenario, relative to EPA's IAQR proposal, and the IAQR+MACT scenario.

Table V-4. Incremental Costs of the Alternate Mercury Control Scenario

Alternate Mercury Scenario Incremental Costs Relative To:	2010	2020
IAQR	$5 billion	$2.3 billion
IAQR + EPA MACT	$2.7 billion	$0.6 billion

We note that these costs are overestimates for a number of reasons. First, as EPA has documented, the cost of activated carbon (the principal cost driver) is expected to decrease by at least 40 percent if a sufficiently stringent MACT is enacted and production of activated carbon increases.[12] Second, the IPM model assumes that control technologies are static. That is, mercury control technologies, represented by activated carbon injection in the IPM, never advance beyond the effectiveness or costs of controls that have been demonstrated over the past several years. A more realistic assumption would assume that technology would continue to prove more effective and be less costly (as is being demonstrated by the new technologies being introduced). Third, the model does not allow, and EPA does not address, the improvements in mercury capture that can

be achieved by optimizing conventional controls. Fourth, while the best performing units use fabric filter technology, the IPM does not offer fabric filters as a retrofit option to achieve mercury control. In fact, the model offers no options that would allow a plant to achieve more than 90 percent mercury control. Consequently, the costs estimated by the IPM should be considered conservative (high) estimates.

The benefits of the Alternate Mercury Control Scenario emissions reductions beyond those resulting from EPA's IAQR and Clear Skies proposals are clearly cost-beneficial. The Alternate Mercury Control Scenario benefits exceed costs relative to the proposed IAQR by 5.6 to 1 in 2010 and by 3 to 1 in 2020 – even where costs are likely overstated.

iv. Emissions Controls Installed

We project that the Alternate Mercury Control Scenario will result in the installation of 101,830 MW of activated carbon injection (ACI) retrofits by 2010, compared to 16,762 MW of ACI retrofits by 2010 for the IAQR + EPA MACT proposal. Consistent with these findings, the Energy Information Administration found that if Senator Carper's Clean Air Planning Act were to be adopted, "ACI fabric filter systems are expected to be the key compliance strategy for reducing mercury emissions," and estimated that "[b]y 2025, between 139 gigawatts and 142 gigawatts of capacity are projected to be retrofitted with ACI fabric filter systems in the Carper cases."[13] By contrast, EIA predicted that Senator Inhofe's bill, which parallels EPA's proposed

[12] U.S. EPA, 2004. Control of mercury emissions from coal-fired electric utility boilers. Air Pollution Prevention and Control Division, National Risk Management Research Laboratory, Office of Research and Development.

[13] Energy Information Administration, "Analysis of S.1844, the Clear Skies Act of 2003; S.843, the Clean Air Planning Act of 2003; and S.336, the Clean Power Act of 2003, at 21 (May 2004).

mercury trading program, "the mercury removal requirement can be achieved without the need for ACI fabric filters. . . ."[14]

v. Coal Consumption by Rank for Alternate Mercury Control Scenario

As shown in Table V-6, the Alternate Mercury Control Scenario results in slight shifts toward more bituminous coal use and moderate declines in sub-bituminous and lignite coal use. As shown, a similar shift is observed for the IAQR + EPA MACT proposal. Virtually any regulatory approach will cause a shift in the regulated market and related markets – in this rulemaking a shift in amount and type of coal consumed will occur whatever regulatory option is chosen. As we describe, the public health and environmental benefits of near-term and significant mercury reductions resulting from selecting an alternative like the Alternate Mercury Control Scenario far outweigh the impacts related to coal market shifts.

Table V-6. Coal Consumption by Coal Rank (TBtu)

Coal Consumption by Coal Rank (TBtu)				
Alternate Mercury Control Scenario	**2005**	**2010**	**2015**	**2020**
Bituminous	14,054	15,776	16,137	16,191
Subbituminous	5,556	4,404	4,375	4,445
Lignite	951	961	931	894
IAQR + EPA MACT Proposal				
Bituminous	14,109	15,053	15,337	15,985
Subbituminous	5,552	5,094	5,075	4,645
Lignite	951	944	917	870

[14] *Id.*

vi. Coal Use by Electric Power Sector for Alternate Mercury Control Scenario

Table V-7 summarizes coal use by region for the electric power sector. Results from the Alternate Mercury Control Scenario are compared with the IAQR + EPA MACT proposal. As shown in Table V-7, the Alternate Mercury Control Scenario shifts some coal production from Appalachia and the West to the Interior region. This is similar to the coal shifts predicted for the IAQR + EPA MACT. The Alternate Mercury Control Scenario reduces coal use in 2020 by less than 1 percent compared to the IAQR + EPA MACT proposal, to a level that would be about 6 percent above current (2001) electric power generation coal consumption.

Table V-7. Coal Use by Electric Power Sector by Region

Region Coal Production by year (Million Tons) – Alternate Mercury Control Scenario				
Coal Region	**2005**	**2010**	**2015**	**2020**
Appalachia	319	324	319	309
Interior	178	236	243	243
West	489	437	447	460
National	**985**	**997**	**1009**	**1012**
Region Coal Production by Year (Million Tons) - IAQR + EPA MACT				
Coal Region	**2005**	**2010**	**2015**	**2020**
Appalachia	320	315	321	311
Interior	178	212	228	235
West	489	476	465	468
National	**987**	**1003**	**1014**	**1014**

vii. Projected Retail Electricity Prices for Alternate Mercury Control Scenario

Table V-8 shows the retail electricity prices of the more stringent Alternate Mercury Control Scenario and the IAQR + EPA MACT proposal by power region. The Alternate Mercury Control Scenario results in a long-term electricity price increase of

about one-half cent per kilowatt hour (or 7 percent) for all power regions in the U.S. compared to the IAQR + EPA's MACT.

Table V-8. Projected Retail Electricity Prices

Power Region	Main States Included	Retail Prices (Cents Per Kwh - $1999)			
		IAQR + EPA MACT		*Alternate Mercury Scenario*	
		2010	**2020**	**2010**	**2020**
ECAR	OH, MI, IN, KY, WV, PA	5.43	5.91	5.46	5.91
ERCOT	TX	5.56	6.68	5.60	6.67
MAAC	PA, NJ, MD, DC, DE	6.14	7.53	6.12	7.51
MAIN	IL, MR, WI	5.53	6.45	5.59	6.47
MAPP	MN, IA, SD, ND, NE	5.48	5.01	5.65	5.10
NY	NY	8.29	9.11	8.29	9.09
NE	VT, NH, ME, MA, CT, RI	7.48	8.56	7.50	8.58
FRCC	FL	7.29	7.00	7.34	7.01
STV	VA, NC, SC, GA, AL, MS, TN, AR, LA	5.76	5.66	5.83	5.66
SPP	KS, OK, MR	5.33	5.76	5.39	5.79
PNW	WA, OR, ID	5.08	4.87	5.09	4.88
RM	MT, WY, CO, UT, NM, AZ, NV, ID	6.38	6.62	6.42	6.62
CALI	CA	9.69	9.78	9.69	9.78
National	Contiguous Lower 48 States	6.14	6.53	6.19	6.54

viii. Mine Mouth Coal Prices and Henry Hub Natural Gas Prices for Alternate Mercury Control Scenario

Table V-9 summarizes the mine mouth coal prices and Henry Hub natural gas prices for both the Alternate Mercury Control Scenario and the IAQR + EPA MACT proposal. As shown, coal prices under the more stringent alternate mercury control scenario are essentially unchanged compared to the IAQR + EPA MACT. In addition, the price of natural gas is also essentially unaffected by the more stringent scenario.

Table V-9. Mine Mouth Coal Prices and Henry Hub Natural Gas Prices

Minemouth Coal Prices by year (1999$/MMBtu)				
Coal Region – Alternate Scenario	**2005**	**2010**	**2015**	**2020**
Appalachia	0.91	0.83	0.80	0.78
Interior	0.8	0.74	0.68	0.64
West	0.38	0.40	0.38	0.37
National Avg. Coal Prices – Alternate Scenario	**0.65**	**0.64**	**0.61**	**0.58**
Coal Region – IAQR + EPA MACT	**2005**	**2010**	**2015**	**2020**
Appalachia	0.91	0.83	0.80	0.77
Interior	0.81	0.72	0.67	0.64
West	0.38	0.38	0.36	0.36
National Avg. Coal Prices – IAQR + EPA MACT	**0.66**	**0.62**	**0.59**	**0.57**
Henry Hub Gas Prices [US $/MMBtu]				
	2005	**2010**	**2015**	**2020**
Alternate Mercury Control Scenario	2.90	3.15	3.01	2.92
IAQR + MACT	2.87	3.13	3.01	2.93

c. Summary: The Benefits of the Alternate Mercury Control Scenario Far Outweigh the Costs

The Alternate Mercury Control Scenario we have presented results in an increase in the total cost of electricity production of $5 billion in 2010 and $2.3 billion in 2020,

relative to the IAQR alone. Compared to EPA's IAQR + MACT proposal, incremental cost increases in electricity production are $3.8 billion in 2010 and $0.6 billion in 2020. These costs are more than offset by the total estimated benefits of the Alternate Mercury Control Scenario of $28 billion in 2010 and $6.9 billion in 2020. In addition, as noted above, the 11 health and welfare benefits EPA identified which are associated with reducing mercury emissions were not quantified; only the health benefits resulting from reducing $PM_{2.5}$ were quantified. Consequently, the additional benefits of reducing mercury would be *even higher* than the benefits estimated here. In the MACT proposal, EPA in fact states that they believe the benefits of reducing mercury emissions "are large enough to justify substantial investment in mercury emission reductions."[15]

Typically a measure is considered cost-effective if it produces greater benefits than costs. The Alternate Mercury Control Scenario is certainly cost-effective. In 2010, the benefits of the Alternate Mercury Control Scenario exceed costs by a factor of almost 6 to 1. This illustrates that even more stringent mercury emission limits are cost-effective. The EPA must analyze and consider additional, more stringent mercury control scenarios to fulfill its obligations under the CAA and Executive Order 12866.

In summary, tighter mercury emission limits than EPA proposed – even if developed using EPA's coal rank subcategories and other assumptions -- will result in relatively insignificant increased costs to the power sector compared with EPA's IAQR + MACT emissions rate proposal, while at the same time providing thousands of avoided premature deaths, and billions of dollars in benefits.

[15] 69 Fed. Reg. at 4711

B. EPA Also Has Failed To Comply With Executive Order 13045 "Protection of Children From Environmental Health Risks and Safety Risks"

Compounding its error in failing to follow the E.O. 12866 approach to economic analysis of a range of MACT standards, EPA also has failed to follow Executive Order 13045, titled "Protection of Children From Environmental Health Risks and Safety Risks."[16] This failure is particularly egregious in light of the fact that the Agency has declared that developing fetuses and children are at the highest risk with respect to adverse effects of mercury contamination.[17]

In the preamble to the proposed rule, EPA explains that Executive Order 13045 applies to any rule that (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children.[18] If the regulatory action meets both criteria, Section 5-501 of E.O.13045 directs the Agency to evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives.

> In a draft proposal submitted to the White House's Office of Management and Budget, (OMB), EPA argued that E.O. 13045 did not apply because the decisions in the rulemaking were to be based upon control technology, not health and safety risks.[19]

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[16] 62 Fed. Reg. 19883 (April 23, 1997).
[17] *See* 65 Fed. Reg. at 79,829 ("The developing fetus is considered most sensitive to the effects from methylmercury; therefore, women of childbearing age are the population of greatest concern. * * * It is also possible that children exposed after birth are also potentially more sensitive to the toxic effects of methylmercury than adults because their nervous systems are still developing.")
[18] 69 Fed. Reg. 4,715
[19] *See e.g.*, Interagency Review Comments, Docket Item OAR-2002-0056-0107, at 522.
[22] *Id.* at 523; 69 Fed. Reg. at 4,715.

The record shows that, during the interagency review process, this justification was deleted and instead the following statement was suggested, which subsequently appeared in the preamble to the proposed rule:

> "In accordance with the Order, the Agency evaluated the environmental health and safety effects of the proposed rule and for the reasons explained above, the Agency believes that the proposed strategies are preferable to other potentially effective and reasonably feasible alternatives."[22]

This change says that EPA *did* evaluate effects of the rule on children pursuant to this E.O.13045 – but the record demonstrates that EPA in fact *did not* undertake such analysis. EPA's draft proposal says just the opposite: that the proposal is not subject to the Executive Order. This is no "wordsmithing," nor is it a subtle change based on reinterpretation of data by scientists or economists. This is a blatant and misleading representation of what EPA did with respect to assessing the impacts of the proposed rule on children's health, and with respect to following the directives of an Executive Order.

Not only did EPA fail to undertake any analysis of the impact of its proposed MACT or the section 111 cap and trade alternative on children's health, it also, as discussed above, failed to conduct any analysis of the impacts of its proposed MACT against other MACT standard approaches (i.e. of "other potentially effective and reasonably feasible alternatives"). Because of this failing, the proposed strategies can hardly be considered "preferable" as discussed in section 5-501(b) of E.O. 13045. This example is but one of many that illustrate how EPA's proposed language was changed to minimize the health risks of mercury exposure.[23]

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[23]See New York Times, April 7, 2004, White House Minimized the Risks of Mercury in Proposed Rules, Scientists Say, Jennifer 8, Lee, available at http://www.nytimes.com/2004/04/07/politics/07MERC.html?ex=1082345607&ei=1&en=a93dad350cc3c163