

Deconstructing CAMR: The Bush Administration's Construction of Mercury Emissions Related Risks

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I. Introduction

A. Political Backdrop: Are Mercury Emissions a Party Issue?

For the first time since 1954, the White House and both houses of Congress are in the control of the Republican Party. “For the first time in modern history, the bipartisan national consensus that led to our strong system of environmental protections has fallen apart.”¹ For the first time in U.S. and global history, a federal environmental agency, the EPA², enacted a rule to regulate mercury emissions from coal-fired power plants.³ For the first time since research in the 20th century on mercury has been conducted, the Bush Administration took a lone path and “attempted to reclassify mercury as ‘non-toxic,’ despite its well-documented toxicity.”⁴ Does the debate over CAMR⁵ easily fall down along partisan lines? Whose side, if either, proffers “the truth”?

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¹ Richard Toshiyuki Drury, *Rousing the Restless Majority: The Need for a Blue-Green-Brown Alliance*, 19 J. ENVTL. L. & LITIG. 5, 5 (2004). See also David Morgan, *Environmental Defense – Bush v. the Clean Air Act*, (Apr. 3, 2003) (“It is a classic case of ‘If it ain’t broke, don’t fix it.’ Yet the Bush administration is doing exactly that, throwing away three decades of environmental success to satisfy special interests whose by-products foul our communities.”); Patrick Parenteau, *Anything Industry Wants: Environmental Policy Under Bush II*, 14 DUKE ENVTL L. & POL’Y F. 363 (2004) (“From day one, the Bush Administration has set about the task of systematically and unilaterally dismantling over thirty years of environmental and natural resources law.”), available at <http://www.environmentaldefense.org/article.cfm?contentid=2727> (last visited Mar. 10, 2006).

² Here, and for the rest of this paper, I am referring to the Federal U.S. Environmental Protection Agency, unless specifically noted otherwise.

³ Fact Sheet – Reconsideration of the Clean Air Mercury Rule, EPA, available at <http://www.epa.gov/air/mercuryrule/fs20051021a.html> (last visited Mar. 10, 2006).

⁴ Drury, *supra* note 1, at 6.

⁵ Clean Air Mercury Rule, 69 Fed. Reg. 4,652 (Jan. 30, 2004).

Though many align strong environmental policies with the political left,⁶ environmental regulation and G.O.P. leadership and aspirations are not necessarily incongruent.⁷ Some might argue that more so than which political party the President represents, the appointment of high ranking officials in EPA matters the most in determining the direction of federal environmental policies and regulations. Herein lays the present source of contention. “The head of the Environmental Protection Agency’s Air Division is the utility lobbyist Jeffrey Holmstead, who has represented no one but the worst air polluters throughout his whole career.”⁸ It was this Jeff Holmstead who pushed for CAMR,⁹ served as the triggering catalyst for EPA Inspector Tinsley to resign, and allowed memos from Latham & Watkins to be placed directly into the CAMR.¹⁰ One could infer that Holmstead’s past practice of representing large law firms in disputes against EPA regulations and continued reliance on their work, such as the memos for the CAMR, denote a sense of bias against the presumed interest and goals of EPA’s Congressional purpose. Conversely, one could also infer that given his work experience, he knows how firms respond to regulation and may be in a better situation to help formulate regulations that will in theory and practice effectively achieve EPA’s goals.

⁶ Drury, supra note 1, at 259 (“I don’t think there is any such thing as Democratic children or Republican children. I think the worst thing that can happen in the discussion about the environment is if it becomes the province of a single political party.”).

⁷ Symposium, Barton H. Thompson, Jr., *Conservative Environmental Thought: The Bush Administration and Environmental Policy*, 32 *ECOLOGY L.Q.* 307 (2005) (interesting article that delineates how different types of conservatives may, at least theoretically, support certain forms environmental policy).

⁸ Robert F. Kennedy Jr., Esq., *The Power of Law, Remarks to Pennsylvania State University’s Dickinson School of Law* (Mar. 30, 2005), in 12 *PA. ST. ENVTL. L. REV.* 259, 260 (2005).

⁹ Eric Pianin, *EPA Led Mercury Policy Shift: Agency Scuttled Task Force that Advised Tough Approach*, *WASH. POST*, Dec. 30, 2003, at A17, available at <http://www.washingtonpost.com/ac2/wp-dyn/A39770-2003Dec29?language=printer>.

¹⁰ US. Sen. Patrick Leahy, *Vermont’s U.S. Senators Decry Bush Administration’s Flawed Mercury Proposal: Witnesses Tell Senator Mercury Pollution Will Increase Under Bush Plan*, at <http://leahy.senate.gov/press/200407/070904.html> (last visited Mar. 10, 2006) (“Earlier this year, it was disclosed that parts of the Bush Administration mercury rule were written verbatim from memos and proposals from lobbyists working for Midwestern power plants.”).

This example illustrates how most factual statements can cut both ways depending on the inferential chain drawn from the proposition. The issue then becomes ascertaining: (1) the validity of the statements; (2) the persuasiveness of the inferences; (3) whether the inferences are linked together logically; (4) the strength of inferences – the more inferences, the weaker the claim; and (5) whether there are other factual statements that must, or at least should, be considered to better understand the issue at hand. Many litigators state that an effective argument before a jury is not necessarily one purely based on the legal arguments, but one that appeals to their humanness, if you will – one that creates a story that the jury can buy into and support. Similarly, the strength and persuasiveness of mercury emissions regulation depends upon the story told and images invoked. But what happens when this inferential chain is hidden? Many times, it is up to the audience to draw the chain of inferences, but, regardless, the connections depend on what information is presented and how it is depicted. By examining the contrasting portrayals of the CAMR, I hope to unravel the Bush Administration's process of creating a concept of risk and safety. I will do so by investigating their underlying assumptions and social constructions of risk related to mercury emissions from coal-burning facilities.

B. Defining Social Construction

The notion of social construction¹¹ relies on the premise that ideas¹² “are not fixed and inevitable.”¹³ Historical, social events, society, and ideologies create and mold ideas.¹⁴ “They are the product of historical events, social forces, and ideology.” Therefore, ideas are not innate, self-producing entities – they exist in and through societies.¹⁵ Ideas that are often taken for granted lie ready for deconstruction. Quite often, individuals implement a deconstructive analysis to critique the status quo and unveil the value judgments and assumptions beneath the presently reigning idea/ belief.¹⁶ In other words, what a society or culture accepts as the unadulterated “truth” is not necessarily an inevitable interpretation of a reality/ instance/ phenomenon. For instance, notions of adulthood have altered over time – where it was once acceptable for a twelve year old girl to marry a forty five year man, it is now not only unacceptable but illegal and morally corrupt, at least in the United States. Perhaps, the social construction of

¹¹ Social construction is the cultural characterization, virtue, or valence ascribed to a policy target by the general public. The policy target may be portrayed in positive or negative terms with symbolism, metaphor, and fable. In the simplest terms, a policy target may be constructed as good or bad. Social construction is one manifestation of the ontological philosophy of constructivism. (citations omitted)

Brian Czech & Paul R. Krausman, *The Endangered Species Act: History, Conservation Biology, and Public Policy* 58 (2001).

¹² See HACKING, *THE SOCIAL CONSTRUCTION OF WHAT?* 22 (1999) (“[By ideas,] I mean ideas, concepts, beliefs, attitudes to, theories. They need not be private, the ideas of this or that person. Ideas are discussed, accepted, shared, stated, worked out, clarified, contested.”).

¹³ *Id.* at 2.

¹⁴ *Id.*

¹⁵ *Id.* at 10.

¹⁶ Social construction work is critical of the status quo. Social constructionists about X tend to hold that:

- (1) X need not have existed, or need not be at all as it is. X, or X as it is at present, is not determined by the nature of things; it is not inevitable.

Very often they further, and urge that:

- (2) X is quite bad as it is.
- (3) We would be much better off if X were done away with, or at least radically transformed.

Id. at 6.

ideas appears rather straightforward and obvious, especially when recognizing how an idea like morality has altered over eras and across cultures. However, social deconstruction can prove incredibly useful when applied to a current idea because it enables society to reveal the premises and values that are often shielded from critical inspection.¹⁷

By being able to classify something, the process of classification creates and codifies an idea that previously did not exist¹⁸ and further serves to form a social construction. Classifications reflect the societal values, roles, institutions, traditions, practices.¹⁹ At one spectrum, linguistic idealism holds that “only what is talked about exists; nothing has reality until it is spoken of, or written about.”²⁰ At another, reality and ideas are created and ever evolving – something can exist pre-social construction but it is the social construction that gives that thing meaning.²¹ For example, one main critique of social construction is that science is “real” and exists without any construction.

However, rather than arguing that lead poisoning is socially constructed, it is rather our

¹⁷ A thesis of type (1) is the starting point: the existence of character of X is not determined by the nature of things. X is not inevitable. X was brought into existence of shaped by social events, forces, history, all of which could well have been different. May social construction theses at once advance to (2) and (3), but they need not do so. One may realize that something, which seems inevitable in the present state of things was not inevitable, and yet is not thereby a bad thing. But most people who use the social construction idea enthusiastically want to criticize, change, or destroy some X that they dislike in the established order of things.

Id. at 6-7. Much social deconstruction exists with relation to gender and race, though the field and application can extend to anything and everything. In this paper, I choose to focus on the social construction of risk, specifically how the Bush Administration has constructed the risk related to mercury emissions.

¹⁸ *Id.* at 11.

¹⁹ “Moreover, classifications do not exist only in the empty space of language but in institutions, practices, material interactions with things and other people.” *Id.* at 31.

²⁰ *Id.* at 24. Linguistic idealism expands much further than the scope of this paper but poses the intriguing question of whether something exists if it cannot be named. For instance, some cultures have numerous defining different types of snow whereas in the U.S. I only know of the word “snow” to describe snow.

²¹ “Perhaps it is the idea of quarks, rather than quarks, which is the social construction.” *Id.* at 30.

understanding and conception of lead poisoning that is a construction. Science is based on theories and theories are based on, in part and limited by, one's experiential and academic knowledge. Thus, it's not that lead poisoning does not exist but rather that our understanding of it is created and limited. The risk associated with lead poisoning has always existed but it was not until relatively recently that this risk was scientifically discovered and socially acknowledged.

The goal of social construction is “enthüllung, which means revealing or exposing.”²² Therefore, in this paper I hope to reveal the social and political dimensions of a specific environmental problem – mercury emissions from coal-burning facilities in the U.S.²³ Applying social construction to CAMR will equip society to understand how the Bush Administration “gives meaning and importance to the ranking of problems, regardless of their intrinsic importance”, through ideological, social, and political factors “that influence or bias the selection of what is risky and what is safe.”²⁴ Environmental regulations serve as fertile ground for analysis; social construction is “an important, albeit overlooked, political phenomenon that should take its place in the study of public policy by political scientists . . . because it contributes to studies of agenda setting, legislative behavior, and policy formulation and design.”²⁵

²² *Id.* at 53. Enthüllung is the process of unmasking, as described by Karl Mannheim in his writing on the sociology of knowledge.

²³ [T]here is a social dimension to environmental problems that has the same reality status as that of their physical dimensions. From this perspective, environmental problems depend on a process of social construction and are identified by their perception and public recognition. A problem may have a physical existence, but unless it is socially perceived and assumed as such, the physical facts become socially irrelevant.

José Luis Lezama, *The Social and Political Construction of Air Pollution: Air Pollution Policies for Mexico City, 1979-1996*, in *THE POLITICS AND CULTURE OF AIR POLLUTION: SMOKE AND MIRRORS* 324, 325 (E. Melanie DuPuis, ed., 2004).

²⁴ *Id.* at 325.

²⁵ CZECH, *supra* note 11, at 58.

One may ask what the purpose of deconstruction is if everything can be deemed value latent and that ideas are relative and changing. Then arguably there is no “right” answer. First, deconstruction enables us to be critical thinkers by acknowledging the premises and values behind an idea; if something is not exposed, it cannot be realized or debated. Second, there is value in admitting that ideas are not immutable and that they are impacted by society. If we recognize that the premises and values behind an idea are actually out of step with mass society, the construction can be altered, especially when a select few in power serve to define a particular idea. For instance, I would argue that the Bush Administration wields a great amount of power and is relatively limited in number compared to the masses and is largely defining the risks associated with mercury emissions. Perhaps by critically examining the Bush Administration’s social construction, it will be revealed that the underlying values and assumptions are out of sync with larger society’s values; this dissonance will spur a re-casting of risks associated with mercury emissions and will in turn presumably alter mercury emissions regulations. Third, deconstruction entails many different camps. One such camp is that of constrained constructivism “whereby not all interpretations are equally valid.”²⁶

In Hayles’s constrained constructivism, the claim of truth is replaced by the claim of consistency and is vulnerable to negation. As long as the interpretation of an event falls within constraints, it is deemed worthy of deliberation, at least for the time being. Ironically, the brand of con-structivism is virtually identical to the predominant philosophy of science (Popper 1994), which adamant social construction theorists would prefer to dethrone as the most respectable source of knowledge. The ‘constrained’ social construction of a phenomenon is like a hypothesis to be tested and will gradually become like a theory if continually found consistent with knowledge and evidence.

BRIAN CZECH & PAUL R. KRAUSMAN, THE ENDANGERED SPECIES ACT: HISTORY, CONSERVATION BIOLOGY, AND PUBLIC POLICY 75 (2001).

²⁶ *Id.* at 79.

Therefore, if the deconstruction of an idea falls beyond certain “constraints,” it can be rejected.

C. The Social Construction of Risk

“A sociological approach to the study of risk assumes that risk and safety exist in and through social organization rather than as objective conditions that individuals simply perceive either more or less accurately.”

Robert A. Stallings, *Media Discourse and the Social Construction of Risk*, 37 SOC. PROBS. 80, 80 (1990).

The risk-safety spectrum eludes neutral demarcations. The distinction between safety and risk relies on value judgments. It is through social entities, such as the media,²⁷ the scientific field,²⁸ community organizations, and the political bodies,²⁹ that risk is defined.³⁰ Risk is not something definite and static but rather something negotiated and molded by society.³¹ The use of “objective” analysis, such as science,

²⁷ Robert A. Stallings, *Media Discourse and the Social Construction of Risk*, 37 SOC. PROBS. 80, 80 (1990) (“News organizations are one of the most significant actors involved in the social construction of risk (Short 1984:721).”).

²⁸ See Dale Jamieson, *Uncertainty and Risk Assessment: Scientific Uncertainty and the Political Process*, 545 ANNALS AM. ACAD. POL. & SOC. SCI. 35, 36 (1996) (“Without science and scientists, there would be little public concern about a wide range of important issues.”). It is not to say that such things as cancer would not exist without the scientific factual background but rather science equips us with the knowledge to understand and appreciate that risk.

²⁹ California’s Proposition 65 exemplifies how the process of identifying hazards, determining risk assessment, and implementing enforcement standards is a political process. See William S. Pease, *Identifying Chemical Hazards for Regulation: The Scientific Basis and Regulatory Scope of California’s Proposition 65 List of Carcinogens and Reproductive Toxicants*, 3 RISK 127 (1992). This list of social entities is by no means an all-inclusive enumeration but rather identifies some of the more pertinent social organizations with relation to my discussion.

³⁰ Risk and safety are not objective conditions ‘out there’ simply waiting to be perceived by citizens or calculated by professional risk analysts (cf. Covello 1983; Kahneman, Slovic, and Tversky 1982). Sociological analysis focuses on social organization that simultaneously creates, filters, and distributes risks (Perrow 1984; Clarke 1988, 1989). Two central tasks in such an analysis are to identify precisely *who* participates in creating, filtering, and distributing risks; and to isolate the mechanisms or *processes* through which these are carried out, that is, through which risks are constructed.

Stallings, *supra* note 27, at 80.

³¹ *Id.* at 82 (“Risk is not the *outcome* of media and public discourse, but exists *in and through* processes of discourse. Hence risk is never constant. It is created and recreated in discussion of events that are seen to undermine a world taken for granted.”) (alteration in original). Note how we negotiate the acceptable level of risk by setting the speed limit for roads. We know that a certain amount of deaths tend to occur when a certain speed limit is imposed, but nonetheless, at least in California, we accept a 65 mph speed limit on

serves limited means of circumscribing risk,³² because science offers numbers and theories.³³ Scientists may suggest a tolerable rate of risk, and that rate may be widely accepted, but it is nonetheless a value judgment. Since everyday risks often escape our attention,³⁴ the focus of this paper shall be teasing out the processes by which the Bush Administration constructs the risks associated with mercury emissions. I will begin by providing a background on mercury and the effects of mercury emissions on the environment and health of wildlife and humans. I will then progress to address the history, content, creation, and media portrayal of the Bush Administration's Clean Air Mercury Rule. Through an analysis of CAMR, I aim to disentangle how the Bush Administration constructs the risks associated with mercury emissions. Finally, I will offer some explanations for how to alter the social construction of risk associated with mercury emissions.

In certain circumstances, risk creation is initially a passive process where individuals and society are receptors for the images of risks brought to us from the media.³⁵ In a society where the base knowledge dwindles and where the reliance on specialization ever increases, many of us rely on experts to inform us of various issues. Expert opinions oftentimes emerge in mass society through media representations.

freeways because the benefit of arriving somewhere quicker outweighs the annual deaths caused by increased chances of fatal accidents. Note also how risk alters over time. It was once ok to play with elemental mercury. Now we have regulations for the clean-up of toxic exposure to elemental mercury spills. Mercury has not changed. We have.

³² Jamieson, *supra* note 28, at 43 (“One reason the role of science would remain limited is that our most important public policy decisions involve questions of value that cannot be addressed by science.”).

³³ Stallings, *supra* note 27, at 91 (“Central to the sociology of risk is the assumption that the status of events, activities, and conditions as either risky or safe is not self-evident. ‘Data’ for assessing risk do not exist independently of human observation nor do they interpret themselves.”).

³⁴ *Id.* at 81 (“Most of the time people ignore the risks in everyday life.”).

³⁵ *Id.* (“[M]ost of us rely on news organizations to bring the experts to us. We watch, listen, and read about the likely causes of the unsettling event In other words, the reality of risk for most of us exists mainly in images created by others.”).

Individuals must then interact with the expert opinions,³⁶ as filtered through the media, and decide how to classify the information: valid v. specious; imminent v. long-term; significant v. trivial. Part of creating this image of risk is the ability to make explicit, or at least intelligible, the links between seemingly disconnected events/ issues, and then highlighting the individuality of the phenomenon.³⁷ Links must be produced in order to create logical connections between seemingly discrete events/ theories/ issues. This link formation enables the receptors of the information to buy into the correlation, if not causation, of x and a given risk. The risk must then be carved out as something distinct enough to rise to the level of a recognized risk that is not ignored in daily life. Robert F. Kennedy Jr., Esq. adeptly demonstrates this concept:

I go and buy my fishing license for \$30 every year and I get that little book that says you can't eat virtually any of the fish caught in fresh water in New York anymore. I read that and I'm saying, 'that son of a bitch George Bush.' But most fishermen when they read that they don't make the connection. Therefore they go and pull the lever for Bush again because the press has not connected the dots for them.³⁸

³⁶ Discourse about risks consists of two interrelated processes (see Lazarsfeld, Berelson, and Gaudet 1944; Katz 1957; Van den Ban 1964): personal conversations about risk, and media discourse about risk. Whether rejected, accepted, or modified, comments by expert risk definers contained in news accounts serve as points of departure for personal conversations. Risk-related comments therefore constitute a source of raw material for public discourse on risk.

Id.

³⁷ Any link among events is not an inherent property of the events themselves. One event is similar to another when people recognize only their common properties while forgiving their differences. In other words, a pattern exists when someone successfully creates a link among events that others might see as unique. A corollary is that the treatment in the media discourse of events as unique may also be the result of hard work by claims-makers. Maintaining singularity of an incident can be an important aspect of what Gusfield (1981:12-13) calls disownership.

Id. at 88.

³⁸ Robert F. Kennedy Jr., Esq., *The Power of Law, Remarks to Pennsylvania State University's Dickinson School of Law* (Mar. 30, 2005), in 12 PA. ST. ENVTL. L. REV. 259, 262 (2005).

Therefore, when looking at the description of mercury emissions and the related regulations, it is productive to look at what links the Bush Administration seeks to create in comparison to what links other people establish.

II. Background on Mercury and Mercury Emissions Regulation

Many of us are familiar with the 'Mad Hatter' from Lewis Carroll's Alice in Wonderland. While fictional, this character was based on the hat-makers ('milliners') of Victorian England who were exposed to mercury vapors while using quicksilver (mercurious nitrate) to manufacture hats. Due to this continual exposure to mercury vapors, milliners developed symptoms ranging from muscle spasms to hallucinations.

Andrew T. Bockis, *Do You Feel the Breeze? Why the Window of Opportunity to Enact Meaningful Mercury Switch Removal Legislation is Opening . . . and Closing*, 11 PENN. ST. ENVTL. L. REV. 85, 88 (2005) (citations omitted).

A. Environmental and Health Impacts of Mercury

Mercury³⁹ is classified as a persistent bioaccumulative toxic (PBT) chemical, which remains in the environment for long periods of time, is not readily destroyed, and accumulates in body tissue.⁴⁰ Mercury exists in three chemical forms: elemental mercury (Hg), inorganic mercury, and oxidized mercury called methylmercury (MeHg).

Elemental mercury evaporates at room temperature and can pose a significant health threat to individuals, especially when exposure occurs in poorly ventilated spaces.

Inorganic mercury compounds have been used in make-up, antiseptics, disinfectants, and

³⁹ The health effects database for mercury is among the best available for any environmental toxicant. Substantial health effects data on mercury are available from a number of laboratory studies as well as studies on large populations of people. These include epidemic poisonings as well as exposures to lower levels of mercury through diet. In an infamous event in Japan in the late 1950s, many residents near Minamata and Nigata Bays were severely poisoned by industrial discharges of mercury. Many deaths occurred and many children exposed in utero developed serious birth defects and neurological impairments. Another epidemic poisoning occurred in 1972 in Iraq when seed grain treated with a mercurial fungicide was accidentally used to make bread. Again, in addition to numerous deaths, those exposed suffered from a range of adverse affects including neurological symptoms.

Pamela D. Harvey & C. Mark Smith, *The Mercury's Falling: The Massachusetts Approach to Reducing Mercury in the Environment*, 30 AM. J.L. & MED. 245, 253 (2004) (citations omitted).

⁴⁰ Data and Publications About Mercury, EPA, available at <http://www.epa.gov/mercury/data.htm> (last visited Mar. 10, 2006). See also Notice, 65 Fed. Reg. 79825, 79829 (Dec. 20, 2000).

fungicides. Though most of those uses were discontinued, inorganic mercury compounds can still be found as preservatives in some medicines and skin-lightening and freckle creams.

Most individuals in the United States are exposed to mercury through methylmercury. When mercury emissions deposit to the earth's surface, either through rain or snow, the mercury enters into the water. Microscopic bacteria convert the mercury into methylmercury. Tiny fish consume this methylmercury, then bigger fish eat the tiny fish, then even bigger fish eat those fish, and finally the humans eat the big fish. Throughout this process called bioaccumulation, the methylmercury levels increase up the food chain.⁴¹ "Adverse effects of mercury on fish, birds, and [fish-eating] mammals include death, reduced reproductive success, impaired growth and development, and behavioral abnormalities."⁴² With respect to human exposure, "[a]most all people have at least trace amounts of methylmercury in their tissues, reflecting methylmercury's widespread presence in the environment and people's exposure through consumption of fish and shellfish."⁴³

Mothers, who consume mercury poisoned fish, expose their fetus to the methylmercury and continue to do so even once her baby is born through breast-

⁴¹ Frequent Questions About Mercury, EPA, available at <http://www.epa.gov/mercury/faq.htm> (last visited Mar. 10, 2006). To view an updated list of fish with mercury advisories, see Mercury Levels in Commercial Fish and Shellfish, FDA, available at <http://www.cfsan.fda.gov/~frf/sea-mehg.html> (last modified March 19, 2004).

⁴² Mercury Study Report to Congress: Overview, EPA, available at <http://www.epa.gov/mercury/reportover.htm>.

⁴³ Mercury: Health Effects, EPA, available at <http://www.epa.gov/mercury/effects.htm> (last visited Mar. 10, 2006). See also Wendy Thomas, Note, *Through the Looking Glass: A Reflection on Current Mercury Regulation*, 29 COLUM. J. ENVTL. L. 145, 159 (2004) ("The average American consumes 15.2 pounds of fish per year.⁵⁸ Most of that fish is contaminated by MeHg. The major source of MeHg exposure in humans is seafood consumption.").

feeding.⁴⁴ The presence and severity of the effects of mercury depend on the chemical form of mercury, the dose, the duration of exposure, the route of exposure, other chemical exposures, and the specific characteristics of the person.⁴⁵ “Dietary methylmercury is almost completely absorbed into the blood and distributed to all tissues including the brain; it also readily passes through the placenta to the fetus and fetal brain.”⁴⁶ Children exposed to methylmercury before birth are at an “increased risk of poor performance on neurobehavioral tasks, such as those measuring attention, fine motor function, language skills, visual-spatial abilities and verbal memory.”⁴⁷ Methylmercury causes irreversible damage to developing central nervous system of fetus.

B. What This Translates into for Americans

Presently, “for every six women of childbearing age in the US, one of them has mercury levels in her blood high enough to put her baby at risk.”⁴⁸ “A total of 2,349 fish consumption advisories for mercury contamination were issued in 45 states in 2003.

⁴⁴ Frequent Questions About Mercury, EPA, available at <http://www.epa.gov/mercury/faq.htm> (last visited Mar. 10, 2006). See also Harvey & Smith, *supra* note 39 at 260 (“As of 2004, FDA and EPA jointly recommended that pregnant women, women who might become pregnant, nursing mothers, and young children should not eat shark, swordfish, king mackerel, or tilefish because they contain high levels of mercury.”).

⁴⁵ Frequent Questions About Mercury, EPA, available at <http://www.epa.gov/mercury/faq.htm> (last visited Mar. 10, 2006).

⁴⁶ Mercury Study Report to Congress: Overview, EPA, available at <http://www.epa.gov/mercury/reportover.htm> (last visited Mar. 10, 2006) (“Dietary methylmercury is almost completely absorbed into the blood and distributed to all tissues including the brain; it also readily passes through the placenta to the fetus and fetal brain.”).

⁴⁷ Mercury: Health Effects, EPA, available at <http://www.epa.gov/mercury/effects.htm> (last visited Mar. 10, 2006).

⁴⁸ Public Health Losses, Dirty Power Plants Win As Bush Administration Signs Mercury Rule This Week, (Mar. 15, 2005) (quoting Sierra Club Executive Carl Pope), at <http://www.sierraclub.org/pressroom/releases/pr2005-0-21.asp> (last visited Mar. 10, 2006). See also Harvey & Smith, *supra* note 39 at 264 (“Based on a Centers for Disease Control and Prevention national survey data and a recent EPA assessment, between 7,000 and 13,500 newborns per year in Massachusetts may be at risk of adverse effects due to their mothers’ exposure to mercury.¹⁹⁷”); Revision of December 2000 Regulatory Finding on the Emissions of Hazardous Air Pollutants From Electric Utility Steam Generating Units and the Removal of Coal- and Oil-Fired Electric Utility Steam Generating Units From the Section 112(c) List, 70 Fed. Reg. 15994, 16012 (Mar. 29, 2005).

Seventy-six percent of fish samples from U.S. lakes were found to contain mercury levels unsafe for children 3 years old and younger to eat twice a week, according to EPA.

Every year more than 600,000 newborns may have been exposed to levels of mercury exceeding EPA health standards while still in the womb.”⁴⁹ Some analogize the harmful effects of mercury to those of lead.⁵⁰ In 2003, individuals criticized a General Electric New Jersey site “as an imminent public health hazard because it contained levels of human toxin mercury that required the relocation of sixteen families and twenty businesses from the area.”⁵¹

⁴⁹ *Rewriting the Rules (2005 Special Edition): The Bush Administration’s First Term Environmental Record*, National Resources Defense Council, *available at* <http://www.nrdc.org/legislation/rollbacks/execsum.asp> (last visited Mar. 10, 2006). *See also* Kennedy, *supra* note 38 at 263 (“[T]he only two states where all the fish are still safe to eat are Alaska and Wyoming. This is because the Republican controlled legislatures in those states refused to appropriate money to test the fish. In all other states, some, most, or all the fish are unsafe to eat.”); Samuel LaBudde, Symposium, *Environmental Protection in the Developing World: A Look at the Responsibility of State and Non-State Actors*, 15 FORDHAM L. REV. 407, 411 (2004) (“In Indiana, where I lived until I was eighteen or nineteen, 100 percent of the streams and waterways have hazardous fish advisory consumptions against them for mercury.”). Note how the number of advisories has increased from the year 2000. *See* Notice, 65 Fed. Reg. 79825, 79827 (Dec. 20, 2000) (“As of July 2000, 40 States and American Samoa have issued fish advisories for mercury. Thirteen of those States have issued advisories for all water bodies in their State, and the other 27 States have issued advisories for over 1,900 specific water bodies.”).

⁵⁰ Mercury is a highly toxic chemical with effects on the central nervous system comparable to those of lead. Exposure to mercury, particularly in the womb, can cause severe neurological and developmental problems that include poor attention span and delayed language development, impaired memory and vision, problems processing information, and impaired fine motor coordination.

Clear the Air: The Bush Administration’s Mercury Proposal: EPA’s Weakening of the Clean Air Act’s Mercury Protections, *available at* <http://www.cleartheair.org/proactive/newsroom/release.vtml?id=25340> (last visited Mar. 10, 2006). *See also* “Hg is highly toxic, persistent, and bioaccumulates in food chains.” Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4656 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63) (recognizing the highly toxic nature of mercury).

⁵¹ Joann Castagna, Corps and EPA Remediate New Jersey Site, (Sept. 8, 2003), *at* www.nan.usace.army.mil/business/prjlinks/envt/pdf/090803.pdf.

C. Mercury Emissions and Deposition within the United States⁵²

EPA estimates that, of the anthropogenic⁵³ U.S. originated emissions of mercury for the year 1994, almost 90% of the 158 tons of emissions were from combustion sources, such as coal- and oil-fired utilities.⁵⁴ This trend continues into the present as “[m]ost of the emissions of mercury are produced when waste or fuel containing mercury is burned.”⁵⁵ Coal-burning facilities serve as the regulated medium for CAMR.⁵⁶ “A March 2002 National Resources Defense Council report examining the top power plant polluters determined that mercury emissions from power plants are concentrated, with three power companies – American Electric Power, Southern Company, and Edison International – accounting for 25% of emissions, and eleven companies accounting for 50% of power-plant based mercury emissions.^{43,57} A computer model “suggests that about three times as much mercury is being added to the global reservoir from U.S. sources as is being deposited from it.”⁵⁸ The deposition of mercury emissions does not fall equally upon the different regions within the United States. “The highest deposition rates from anthropogenic and global contributions for mercury are predicted to occur in the Southern Great Lakes and Ohio River valley, the Northeast and scattered areas in the

⁵² For a brief overview of international responses to reducing mercury emissions, visit “International Actions for Reducing Mercury Emissions,” EPA, *available at* <http://www.epa.gov/mercury.international.htm> (last visited Mar. 10, 2006).

⁵³ Anthropogenic denotes human-created.

⁵⁴ Mercury Emissions and Deposition in the U.S., EPA, *available at* <http://www.epa.gov/mercury/reportover.htm> (last visited Mar. 10, 2006).

⁵⁵ Mercury Study Report to Congress: Overview, EPA, *available at* <http://www.epa.gov/mercury/reportover.htm> (last visited Mar. 10, 2006).

⁵⁶ David B. Spence, *Coal-Fired Power in a Restructured Electricity Market*, 15 DUKE ENVTL. L. & POL’Y F. 187, 191 (2005) (“Irrespective of its pollution byproducts, coal remains the fuel source for roughly 50 percent of total net power generation in the United States, and an even higher percentage of power generated from utility-owned power plants.²⁹”).

⁵⁷ Thomas, *supra* note 43, at 155.

⁵⁸ Mercury Emissions and Deposition in the U.S., EPA, *available at* <http://www.epa.gov/mercury/reportover.htm> (last visited Mar. 10, 2006).

South, with the most elevated deposition in the Miami and Tampa areas.”⁵⁹ Moreover, higher deposition occurs in humid locations than in arid locations.⁶⁰ The patterns of deposition can also lead to the development of mercury hot spots.⁶¹

D. Formation of the Clean Air Mercury Rule

The Clean Air Act (CAA) was, in part, Congress’ response to concerns about the harmful effects of coal-fired plant emissions.⁶² CAA covered sulfur dioxide and nitrogen oxides. The CAA Amendments of 1990 established deadlines for the regulation of air toxics emissions, including mercury. However, EPA missed the 1993 deadline of providing Congress a study on the risks of hazardous air pollutants from power plants. After two lawsuits, EPA submitted its Mercury Study Report⁶³ to Congress, which

⁵⁹ Mercury Emissions and Deposition in the U.S., EPA, *available at* <http://www.epa.gov/mercury/reportover.htm> (last visited Mar. 10, 2006). It should be noted that the “Great Lakes form the world’s largest body of fresh water, holding nearly twenty percent of the fresh water found on Earth. In addition, these ‘sweet water seas,’ as early explorers described them, contain between ninety and ninety-five percent of the United States’ fresh surface water.” Alana M. Fuierer, *The Anti-Chlorine Campaign in the Great Lakes: Should Chlorinated Compounds be Guilty Until Proven Innocent?*, 43 BUFF. L. REV. 181 (1995) (citations omitted). Moreover, the “lakes within this basin have a uniquely long water retention time, which is a relative indication of the time required to flush out contaminants. This long retention period allows persistent toxic substances to build up continuously without being flushed out of the Great Lakes.” Fuierer, *supra* at 195. Thus, mercury deposition in the Great Lakes poses even more of a problem as the effects of the long-life of mercury combine with the long water retention time of the water.

⁶⁰ Mercury Emissions and Deposition in the U.S., EPA, *available at* <http://www.epa.gov/mercury/reportover.htm> (last visited Mar. 10, 2006).

⁶¹ Controlling Power Plant Emissions: Guiding Principles, EPA, *available at* http://www.epa.gov/mercury/control_emissions/inquiry.htm (last visited Mar. 10, 2006) (“Some people, however, may be at risk from eating a large amount of fish from a single watershed, raising concerns about the possibility of elevated mercury deposition nearby emission sources.”).

Sources in the United States contribute to local mercury ‘hot spots’ and add to global mercury pollution levels, leading to contaminated water, fish that is not healthy for consumption, and brain damage in infants . . . EPA modeling shows that at mercury hot spots (locations where mercury deposition is highest), local emission sources within a state can be the dominant source of deposition. In-state sources contribute more than 50% of the pollution to sites in the top 8 worst hot spot states.

Michael Shore, *Out of Control and Close to Home: Mercury Pollution from Power Plants*, *available at* www.environmentaldefense.org/go/mercurypowerplants (last visited Mar. 10, 2006).

⁶² Spence, *supra* note 56, at 187.

⁶³ Mercury Study Report to Congress, EPA, *available at* <http://www.epa.gov/mercury/report.htm> (last visited Mar. 10, 2006).

analyzed the environmental and health effects of mercury emissions from utilities. In December 2000, EPA found that it was “appropriate and necessary” to regulate coal- and oil-fired utilities under section 112 of the CAA,⁶⁴ thereby triggering the requirement for EPA to propose regulations to control air toxics emissions from utilities by December 15, 2003.⁶⁵ It was held that a MACT program would be the best way to implement the 112 requirements.

However, proposed on January 30, 2004, the Clean Air Mercury Rule (CAMR)⁶⁶ entailed a maximum achievable control technologies (MACT) approach⁶⁷ as well as a cap-and-trade program and also suggesting removing the §112 categorization.⁶⁸ EPA recommended placing mercury emissions from coal-burning facilities under §111

⁶⁴ Notice, 65 Fed. Reg. 79825 (Dec. 20, 2000), *available at* http://www.epa.gov/ttn/oarpg/t3/fr_notices/utilfind.pdf. *See also* Eric Pianin, *EPA Led Mercury Policy Shift: Agency Scuttled Task Force that Advised Tough Approach*, WASH. POST, Dec. 30, 2003, at A17, *available at* <http://www.washingtonpost.com/ac2/wp-dyn/A39770-2003Dec29?language=printer> (“In December 2000, the EPA concluded that mercury emissions from power plants were a hazardous pollutant that should be controlled under section 112, which mandated swift adopted of the ‘maximum available technology.’”)

⁶⁵ Controlling Power Plant Emissions: Decision Process and Chronology, EPA, *available at* http://www.epa.gov/mercury/control_emissions/decision.htm (last visited Mar. 10, 2006).

⁶⁶ 69 Fed. Reg. 4652 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. §§60, 63).

⁶⁷ For information on the technology available to control mercury emissions, visit “Controlling Power Plant Emissions: Control Technology” at the EPA’s website,

http://www.epa.gov/mercury/control_emissions/technology.htm (last visited Mar. 10, 2006). *See also* *Chem-Mod Technology Shown to Dramatically Reduce Mercury Emissions at Coal-Fired Power Plants Up to 98%: New Technology Achieves More Favorable Results Than Proposed EPA Clean Air Mercury Rule Standards and is Available for Implementation Now*, PR NEWSWIRE US, Feb. 8, 2006, *available at* <http://www.prnewswire.com>; *Chem-Mod*, *available at* <http://www.chem-mod.com> (last visited Mar. 10, 2006).

⁶⁸ EPA is proposing to revise the December 2000 regulatory finding, to remove coal- and oil-fired Utility Units from section 112(c) list, and instead to regulate Hg emissions from coal-fired Utility Units and Ni emissions from oil-fired units pursuant to existing authority in section 111 of the Act. But as an alternative..., EPA believes it also has authority to leave the December 2000 “appropriate and necessary” finding in place, and to proceed to regulate under section 112(n) of the Act. In that event, EPA could promulgate, under section 112(n)(1)(A), a cap-and-trade program for Hg somewhat like the one that EPA is today proposing to CAA section 111.

Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4661 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63).

because “most or all of the ancillary benefits of Hg control would be achieved anyway, regardless of whether a section 112 MACT is promulgated.”⁶⁹ Thus, even though the EPA recognized that “[e]xposure to emissions of Hg at low levels may cause neurological damage and learning disorders,”⁷⁰ it still urged for §111 treatment. Further, EPA argued that §112 as applied in the December 2000 decision was overly broad; but nonetheless EPA still recognized that even if the decision was overly broad, it was reasonable to apply to mercury emissions from coal-burning facilities.⁷¹ A §112 categorization would not allow the EPA to consider the costs of programs “necessary” and “appropriate”⁷² to regulate HAP emissions from coal-burning facilities - §111 allows EPA to weigh the costs of programs in its choice of regulation.⁷³

On December 1, 2004, EPA published a Notice of Data Availability for its proposed Clean Air Mercury Rule.⁷⁴ At the closure of the public comments period on

⁶⁹ Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4711 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63).

⁷⁰ Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4707 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63).

⁷¹ See Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4683 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63) (“the most EPA could have intended to state in the December 2000 ‘necessary’ finding is it is necessary to regulate Hg from coal-fired Utility units and Ni from oil-fired Utility Units because the implementation of other requirements under the CAA will not adequately address the serious public health hazards arising from such emissions or the environmental hazards associated with Hg.”).

⁷² Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4656 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63) (“EPA stated that it was ‘necessary’ to regulate HAP emissions from coal- and oil-fired Utility Units ‘because the implementation of other requirements under the CAA will not adequately address the serious public health and environmental hazards arising from such emissions. (See 65 Fed. Reg. 79830).”).

⁷³ Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 70 Fed. Reg. 28606, 28615 (May 18, 2005).

⁷⁴ Controlling Power Plant Emissions: NODA Fact Sheet, EPA, *available at* http://www.epa.gov/mercury/control_emissions/nodafact.html (last visited Mar. 10, 2006).

January 3, 2005, EPA received over 680,000 comments⁷⁵ on the proposed rule.⁷⁶ On May 15, 2005, EPA issued the federal CAMR, which adopted the cap-and-trade model.⁷⁷ Jeff Holmstead, in EPA's air office, exerted a fundamental role in the development of the cap-and-trade approach to regulation of mercury emissions.⁷⁸

For the affected coal-burning facilities, “[c]ontinuous emissions monitoring systems (CEMS) must be installed and operated to monitor emissions from each affected unit.”⁷⁹ EPA also reversed its 2000 finding and determined that it was not appropriate or necessary to regulate hazardous air emissions from utilities under Section 112 of the CAA. On October 21, 2005, EPA reopened for public comment the CAMR. EPA reversed its prior decision and found that Section 112 fails to apply to mercury emissions.⁸⁰

⁷⁵ For access to public comments on the proposed CAMR, visit the Federal Docket Management System (FDMS) at <http://www.regulations.gov/> and type “OAR-2002-0056” into the Keyword Search Box. Click submit and then click the OAR-2002-0056 link.

⁷⁶ Controlling Power Plant Emissions: Public Comments, EPA, *available at* http://www.epa.gov/mercury/control_emissions/comment.htm.

⁷⁷ The EPA founded its justification for selecting a cap-and-trade program over a MACT approach on the following: “For both a cap-and-trade system and a MACT, emissions limits are established and must be achieved. However, under a cap-and-trade system reductions and caps emissions are capped permanently and nationwide emissions can only go down. The ability to bank unused allowances for future use can lead to early reductions of mercury. A trading approach is forward-looking in its assessment of technology because it provides a continuous incentive for technology innovation. A traditional Section 112(d) MACT approach sets standards based on technology performance. Each plant subject to a MACT must meet a specific emissions limit. However, benefits of MACT are not always permanent: With shifts in coal use and with economic growth, nationwide emission reductions could erode over time. In addition, a MACT approach would not create as much continuous incentive for the development of new mercury control technology.” Clean Air Mercury Rule – Basic Information, EPA, *available at* <http://www.epa.gov/oar/mercuryrule/basics.htm> (last visited Mar. 10, 2006).

⁷⁸ Pianin, *supra* note 48.

⁷⁹ Section-By-Section Summary of Clear Skies Act of 2003 (Feb. 27, 2003), *available at* <http://www.epa.gov/air/clearskies/legis.html>.

⁸⁰ Controlling Power Plant Emissions: Decision Process and Chronology, EPA, *available at* http://www.epa.gov/mercury/control_emissions/decision.htm (last visited Mar. 10, 2006).

III. The Bush Administration's Selection of Cap-and-Trade Over Command-and-Control

A. Economy and Environmental Regulation

The Bush Administration alleges that CAMR will be beneficial to the economy whereas CAA and MACT would have been cost prohibitive. When speaking of economical benefits, it is prudent to identify what costs and benefits are being taken into account. The Bush Administration points to costs imposed on coal-burning facilities and the potential costs passed down to consumers. In contrast, CAA supporters assert that the benefits under MACT significantly outweigh the benefits obtained under CAMR.⁸¹

Environmental regulation is oftentimes discussed within the framework of the costs it will impose on the economy⁸² and the benefits to health. However, the benefits can extend into the market by creating new jobs.⁸³ Numbers are not neutral. Statistics carry political messages because what one chooses to research and analyze reflect value judgments of what is important. Unfortunately, when individuals hear numbers, they may fail to ask what factors and assumptions the statistics are based on. Thus, wherever one falls politically or along the environmental policy spectrum, one should know that the explicit and implicit assumptions and factors of the numerical analyses are based on value judgments.

The fear of expansion into the “pristine West” served as one factor for not creating more stringent environmental regulations, such as those proposed by MACT.

The Bush Administration expressed concern that if the places with presently the highest

⁸² Cf. Richard Toshiyuki Drury, *Rousing the Restless Majority: The Need for a Blue-Green-Brown Alliance*, 19 J. ENVTL. L. & LITIG. 5, 16 (2004) (“Numerous studies have debunked the jobs-versus-the-environment myth.”).

⁸³ *Id.* at 17 (“Environmental regulations create jobs: jobs designing and building environmental control equipment, jobs installing and operating that equipment, jobs cleaning up polluted sites, jobs recycling and re-using waste, and many others.”).

levels of mercury emissions were forced to comply with “too” low of standards “too” quickly, then coal-burning facilities would be burgeoning in the West.⁸⁴ Is this a necessary and logical conclusion? No where on the EPA’s website does it address such a concern or explicitly lay out how this would occur. The issue of whether permits or limits on individual power plants should be implemented will be discussed next.

B. Achieving Cleaner Air More Efficiently: Permits v. Set Plant Limits

The Bush Administration asserts that CAMR will achieve the goals of reducing mercury emissions more efficiently than the original CAA. Thus, how do the proponents of CAMR and MACT vary over the definition of “efficiency”, and is efficiency even the primary factor of MACT supporters? Even assuming that one agrees with EPA’s construction of efficiency, some doubt whether the goals and projected caps are realistic outcomes under the cap-and-trade program.⁸⁵

Proponents of MACT often point to the actual percentage reductions in a given time frame. MACT would have mercury emissions down to five tons in 2008, a 90% reduction. CAMR would get us to only a 69% reduction but in 2018.⁸⁶ Thus, MACT supports follow a definition of efficiency that emphasizes acting directly to produce an effect in a well organized manner. Both MACT and CAMR act directly to produce a

⁸⁴ Lauren Parry, *Clean Air Rules of 2004: Motivation, Impacts, and Concerns*, 25 J. LAND RESOURCES ENVTL. L. 367, 390 (2005) (“The Clean Air Rules disproportionately impact the eastern, southern, and mid-western United States. This raises two major concerns: (1) the economic burden will fall most heavily on those regions and on the industries located there,²⁵⁶ and (2) the rules will encourage pollutant-emitting companies to move west to areas . . .”).

⁸⁵ Patrick Parenteau, *Anything Industry Wants: Environmental Policy Under Bush II*, 14 DUKE ENVTL. L. & POL’Y F. 363, 377 (2004).

⁸⁶ David B. Spence, *Coal-Fired Power in a Restructured Electricity Market*, 15 DUKE ENVTL. L. & POL’Y F. 187, 216-17 (2005) (“It is obvious that [a cap-and-trade program] would not reduce emissions as much as [MACT] favored by most Democrats in Congress. [MACT] calls for larger and quicker reductions in emissions of sulfur dioxide, nitrogen oxides, and mercury than [a cap-and-trade program], and would regulate carbon dioxide emissions while the Bush bill would not.¹⁴⁷”).

change in the rate of mercury emissions, but MACT acts quicker in time and thus more efficiently.

Proponents of CAMR stress its more cost efficient approach that, like other cap-and-trade programs, would incentivize innovation⁸⁷ and reduce administrative burdens on the EPA.⁸⁸ However, even if one were to agree that the cap-and-trade program would be cheaper than the new source review approach, “the argument for the flexible Bush approach over the Clinton command-and-control approach is less persuasive with respect to mercury pollution. While a cap and trade approach to mercury would guarantee a specified total amount of emissions reductions, it would not prevent ‘hot spots’ – locations near individual plants whose owners purchase pollution rights so as to continue to pollute at high levels.”⁸⁹ Thus, the persuasiveness of each definition of efficiency turns on how waste is delineated. Efficiency now takes on the primary meaning of being able to function without waste. If one circumscribes waste to cost of implementing the programs, then CAMR should be selected. Working from the premise that pollution is waste, then if one encompasses the amount of surplus mercury emissions and injury to the environment and life, then MACT should be chosen over CAMR. Not only is another

⁸⁷ CAMR is a “much more rational investment in emissions control than a traditional MACT approach.” Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4688 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63).

⁸⁸ A cap-and-trade program would “reduce the administrative burdens on both EPA and the States and would ensure national consistency.” Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4662 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63).

⁸⁹ *Id.* at 217-18.

generation subjected to higher levels of mercury than need be under the cap-and-trade program, but for the mercury that is emitted, no technologies exist for cleaning it up.⁹⁰

Even assuming one ascribed to the first definition of waste, perhaps other factors should be considered into the efficiency arguments.⁹¹ While obviously wanting to maintain a healthy and stable supply of energy to Americans, perhaps the primary focus of the regulation should not be how the utility companies will respond. Perhaps we should question an Act when the regulated parties so, or even too, eagerly support it.⁹² Efficiency to a coal-burning facility turns on how expensive it will be to the company. Working from the premise that the goal is not to put all coal-fired factories out of business and from the premise that regulation typically is not eagerly greeted by the regulated entities, perhaps something a bit more stringent than CAMR should exist.⁹³ Perhaps the ultimate and primary focus should not be the cost to the coal-burning utility units but rather the larger costs to society, particularly women, children, and fetus – and anyone who cares about them.

⁹⁰ Parry, *supra* note 84, at 387.

⁹¹ Ronald P. Jackson Jr., Esq., *Extending the Success of the Acid Rain Provisions of the Clean Air Act: An Analysis of the Clear Skies Initiative and Other Proposed Legislative and Regulatory Schemes to Curb Multi-Pollutant Emissions from Fossil Fueled Electric Generating Plants*, 12 U. BALT. J. ENVTL. L. 91, 124-35 (2005) (holds that the potential benefits of a cap-and-trade program “are outweighed by the loopholes in the new Title IV provisions that will be used to accomplish the Initiative’s objectives; those loopholes will allow the power industry to skirt the NSR, avoid HAP restrictions, and slow the progress that has resulted from the Title IV acid rain program.”).

⁹² *Id.* at 92 (“CSA has received widespread support from electric power companies, the coal mining industry, and both small and large manufacturers.”).

⁹³ See Pamela D. Harvey & C. Mark Smith, *The Mercury’s Falling: The Massachusetts Approach to Reducing Mercury in the Environment*, 30 AM. J.L. & MED. 245, 281 (2004) (“As states like Massachusetts demonstrate the dramatic reductions in mercury are technically and economically achievable, the lack of comparable federal standards is difficult to justify.”); Lisa Heinzerling & Rena Steinzor, *A Perfect Storm: Mercury and the Bush Administration*, at <http://www.americanprogress.org/site/pp.asp?c=biJrJ8OVF&b=38332> (last visited Mar. 10, 2006) (“In the case of chlor-alkali facilities, for instance, 34 out of the nation’s 43 plants already produce chlorine without emitting mercury; shutting down the nine that do would yield significant health benefits with little if any effect on consumers.”).

But returning to the notion that efficiency is premised on the ability to achieve a desired result, how and where is this desired result determined? How were the two phases of CAMR established? Why were they so much lower than the standards set forth in MACT? “A report issued February 3, 2005, by EPA Inspector General Nikki Tinsley supports the assumption that the agency drafted the mercury legislation with the intent of protecting the energy industry without proper consideration of human health.²²⁰ Tinsley asserted that agency administrators instructed EPA staff members to set a specific mercury limit, 34,000 tons annually, find a way to justify the designation, and ignore scientific data that would justify setting a more health conscious limit.²²¹”⁹⁴ The Bush Administration argues that following MACT would place too much financial stress on coal-burning companies, because there is a lack of alternative sources of cheap fuel.⁹⁵ Further, the Bush Administration posits that existing technology to achieve such goals do

⁹⁴ Parry, *supra* note 84, at 386. Tinsley subsequently resigned from the U.S. EPA. Some Republicans claim that her accusations are merely partisan allegations. However, further studies tend to support Tinsley’s claims. *See*

The Union of Concerned Scientists (‘UCS’), an independent nonprofit alliance of more than 100,000 citizens and scientists, including a number of Nobel Laureates, decided to find out [what the Bush Administration means by the need for ‘good science’ in setting environmental policies]. It undertook an investigation of the allegations that the administration was not using good science... The UCS found that there is a well-established pattern of suppression and distortion of scientific findings by high-ranking Bush Administration political appointees across numerous federal agencies.¹⁷⁶ These actions have consequences for human health, public safety, and community well-being. It also found that there is strong documentation of a wide-ranging effort to manipulate the government’s scientific advisory system to exclude advice that might run counter to the administration’s agenda.¹⁷⁷ Further, it found that there is evidence that the administration often imposes restrictions on what government scientists can say or write about ‘sensitive’ topics.¹⁷⁸

Parenteau, *supra* note 85, at 391.

⁹⁵ There is a “lack of available alternative types of fuel for a given unit.” Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4669 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63).

not exist.⁹⁶ However, there are no reputable studies that I am aware of that predict such devastation and, as previously discussed, technology does exist to achieve the MACT standards.⁹⁷ Therefore, the Bush Administration argued that the combination of the alleged stresses on the coal-burning utilities combined with the alleged lack of technology would render the time frame infeasible.⁹⁸ But most striking, the fifteen (15) ton cap in 2018 was “grounded largely in the modeling completed in support of the

⁹⁶ See Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 70 Fed. Reg. 28606, 28619 (May 18, 2005) (“We do not believe that such full scale technologies can be developed and widely implemented within the next 5 years; however, it is reasonable to assume that this can be accomplished over the next 13 years.”). See also Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4673-74 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63) (“EPA believes 90 percent emission reductions cannot be achieved across all Utility Units in the proposed section 112 time frame.”). EPA also rejects MACT, in part, because of the Eastern versus Western coal divide. Allegedly, taking into account the different qualities of the coal would produce a regional tension and favoritism/ harm. See Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4668 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63) (“The EPA has no data on which to determine the ‘best’ seam, or rank, of coal on which to base such a requirement. Further, even if a ‘better/best’ seam could be identified, changing to a specific or different seam of coal would essentially determine the area of even mine from which the coal could be produced.” “avoid actions that create regional disparities.”). It should also be noted that, at present, it is difficult to remove elemental mercury from the stacks, which is more present in subbituminous coal and lignite coal. See Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4692 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63). Recall that elemental mercury evaporates at room temperature and can pose a significant health threat to individuals, especially when exposure occurs in poorly ventilated spaces.

⁹⁷ For information on the technology available to control mercury emissions, visit “Controlling Power Plant Emissions: Control Technology” at the EPA’s website, http://www.epa.gov/mercury/control_emissions/technology.htm (last visited Mar. 10, 2006). See also Chem-Mod Technology Shown to Dramatically Reduce Mercury Emissions at Coal-Fired Power Plants Up to 98%: New Technology Achieves More Favorable Results Than Proposed EPA Clean Air Mercury Rule Standards and is Available for Implementation Now, PR Newswire US (Feb. 8, 2006), available at <http://www.prnewswire.com>; Chem-Mod, available at <http://www.chem-mod.com> (last visited Mar. 10, 2006).

⁹⁸ “[T]he MACT deadline is so tight (2007 with only 1 year of possible extension) that affected firms would unlikely to risk both capital and non-compliance in order to use more innovative approaches to Hg control.” Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4688 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63).

President's Clear Skies initiative."⁹⁹ It is this same Clear Skies Act that was overwhelming rejected by both parties. Finally, if we examine the two alternatives from an inefficiency standard, then CAMR is the most inefficient because it fails to make the best use of time.

C. The Appropriateness of Choosing Emissions Trading for Regulating Mercury

EPA chose to implement emissions trading for acid rain reduction based on two assumptions: (1) SO₂ and NO_x travel over large distances; and (2) hot spots are unlikely to occur. Similarly, EPA believes that it can build upon the "success" of the Acid Rain Program.¹⁰⁰ EPA asserts that a cap-and-trade program for mercury emissions will not lead to hot spots¹⁰¹ based on their research and the fact that none of the comments during the Notice and Comment period could prove the inevitability of such an occurrence.¹⁰²

While mercury can travel long distances in the air, deposition trends illustrate that

⁹⁹ Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4699 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63).

¹⁰⁰ See Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 70 Fed. Reg. 28606, 28617 (May 18, 2005).

¹⁰¹ Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 70 Fed. Reg. 28606, 28630 (May 18, 2005) ("EPA does not believe that utility-attributable hot spots will be an issue after implementation of CAIR and CAMR. Nevertheless, we are committed to monitoring closely the effects of utility emissions.") See also Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4700 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63) ("EPA does not expect any local or regional hot spots."); Revision of December 2000 Regulatory Finding on the Emissions of Hazardous Air Pollutants From Electric Utility Steam Generating Units and the Removal of Coal- and Oil-Fired Electric Utility Steam Generating Units From the Section 112(c) List, 70 Fed. Reg. 15994, 16026 (Mar. 29, 2005).

¹⁰² Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4657 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63) ("The EPA cannot currently quantify whether, and the extent to which, the adverse health effects occur in the populations surrounding these facilities, and the contribution, if any, of the facilities to those problems."). Hence, since the EPA is unsure whether hot spots will occur, it uses its discretion to not err on the side of caution.

mercury hot spots can and do occur.¹⁰³ Nonetheless, EPA placed the onus on the public to prove that hot spots would occur. However, EPA also admits local deposition can occur.¹⁰⁴ It would be reasonable to believe that if local deposition occurs, hot spots can occur. And apparently EPA agrees with this proposition but arrives at a different solution than national regulation and conformity: let the States address hot spots.¹⁰⁵ The proposed cap-and-trade would permit States to implement more stringent requirements than the cap-and-trade program. EPA views hot spots as a local, state issue than one of national concern and rather than one fit for a national remedy. However, given that mercury emissions can lead to the development of hot spots and that mercury emissions are already concentrated in certain regions of the U.S., then MACT would better address and limit the occurrence of hot spots.¹⁰⁶

D. Miscalculations of CAA and the Continued Pollution from Old Power Plants

When Congress passed CAA in 1970, it permitted existing power plants to escape the newly implemented regulations under the premise that the old power plants would

¹⁰³ Sources in the United States contribute to local mercury ‘hot spots’ and add to global mercury pollution levels, leading to contaminated water, fish that is not healthy for consumption, and brain damage in infants . . . EPA modeling shows that at mercury hot spots (locations where mercury deposition is highest), local emission sources within a state can be the dominant source of deposition. In-state sources contribute more than 50% of the pollution to sites in the top 8 worst hot spot states.

Michael Shore, *Out of Control and Close to Home: Mercury Pollution from Power Plants*, at www.environmentaldefense.org/go/mercurypowerplants (last visited Mar. 10, 2006); Environmental Defense – Press Release: Environmental Defense Names Top 10 U.S. Mercury ‘Hot Spots’, (Dec. 9, 2003), available at <http://www1.environmentaldefense.org/pressrelease.cfm?ContentID=3426> (“In 9 out of 10 hot spots states, more than 50% of mercury contamination comes from local sources.”).

¹⁰⁴ Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4702 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63) (“Mercury emissions from power plants sometimes are deposited locally near the plant.”).

¹⁰⁵ Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4702 (proposed Jan. 30, 2004) (to be codified at 40 C.F.R. pts. 60, 63).

¹⁰⁶ See generally Wendy Thomas, Note, *Through the Looking Glass: A Reflection on Current Mercury Regulation*, 29 COLUM. J. ENVTL. L. 145 (2004).

soon be retired.¹⁰⁷ However, those same old power plants remain in use today.¹⁰⁸ “Pre-1977 power plants emit four to ten times more pollution per megawatt than modern plants, and are responsible for seventy to eighty percent of power plant emissions. As a result of the changes enacted by the Bush administration, most of these facilities will never have to install modern pollution control equipment.”¹⁰⁹ Thus, the exemption for the old power plants persists under CAMR. Therefore, this exclusionary provision begs the question of whether and how effective the regulation will be when the unregulated power plants produce a majority of the emissions pollution. People in opposition to CAMR affirm that, under CAA, New Source Review (NSR) enables EPA to impose regulations on older power plants once they upgrade their facilities. Some assert that the tangible success of NSR is questionable.¹¹⁰ But the elimination of NSR destroys both theoretical and potential gains achieved by NSR in bringing older facilities up to par in regulatory standards with newer facilities.¹¹¹ In response, states can, and have, passed

¹⁰⁷ David B. Spence, *Coal-Fired Power in a Restructured Electricity Market*, 15 DUKE ENVTL. L. & POL’Y F. 187, 195 (2005) (“Members of Congress sought to avoid imposing a costly pollution control burden on existing, identifiable plants, and the voters who work at and own those plants.⁴⁶”).

¹⁰⁸ Patrick Parenteau, *Anything Industry Wants: Environmental Policy Under Bush II*, 14 DUKE ENVTL. L. & POL’Y F. 363, 373 (2004) (“In 1977, Congress badly miscalculated when it grandfathered existing Midwestern power plants out from under the strict technology requirements of the landmark Clean Air Act Nearly all the plants operating in 1977 are still operating today and still pumping out tons of SO₂, NO_x, mercury, particulates, and carbon dioxide.”).

¹⁰⁹ Richard Toshiyuki Drury & A.J. Napolis, *Curbs on Clean Air*, RACE, POVERTY & ENV’T, Fall 2004, at 4.

¹¹⁰ Ronald P. Jackson Jr., Esq., *Extending the Success of the Acid Rain Provisions of the Clean Air Act: An Analysis of the Clear Skies Initiative and Other Proposed Legislative and Regulatory Schemes to Curb Multi-Pollutant Emissions from Fossil Fueled Electric Generating Plants*, 12 U. BALT. J. ENVTL. L. 91, 101 (2005) (“The NSR permit process has not forced power companies to upgrade old power plants with modern emission control technology or permanently shut the plants down; therefore, NSR has failed an essential function that Congress envisioned it to perform.”).

¹¹¹ Thomas, *supra* note 106, at 158 (the cap-and-trade program eliminates “new source review requirements, thereby enabling coal power plants to upgrade their plants without having to install NSPS control devices.⁵⁴ Furthermore, the ‘Clear Skies’ plan actually raises allowable mercury emissions as compared to current [Clear Air Act] requirements.”).

bills to retain NSR.¹¹² However, the continued survival of the extremely mercury-polluting power plants undermines the Bush Administration's seriousness of addressing mercury emissions.¹¹³

III. Conclusion

A. Why Aren't Mercury Emissions at the Forefront of Political and Social Debate?: The Environmental Movement and Supporters

Though the focus of this essay is not to create a multivariate analysis explaining why or why not individuals and groups align with the national environmental or a local environmental movement, a brief discussion of the relationship between the masses and environmental movement helps to explain the social process of creating risk with relation to mercury emissions.¹¹⁴ Arguably the more disconnected individuals and groups are from a movement, the easier it is for them to accept, or at least tolerate, policies that may not necessarily reflect their actual values and concerns. Moreover, what makes the environmental movement lag, what makes CAMR able to pass, is that the risk of

¹¹² California State Senate Bill 288 preserved New Source Review as a matter of California state law, despite Bush administration regulations to eliminate the program at the federal level.

¹¹³ As an aside, CAMR offers unique implications for international responses to regulating mercury emissions. EPA constantly underscores how CAMR is the first in the nation and world to regulate mercury emissions from power plants. However, opponents of CAMR deflate this alleged ground breaking regulation by comparing its achievements to those previously established in CAA and MACT. Moreover, if one finds CAMR to be less than desirable, or even demonstrating regulatory capture, then what example are we setting for our peer nations?¹¹³ Thus, while the U.S. remains the first in generating this type of regulation, perhaps our model is not as rigorous or efficient as it should be. It will be interesting to see how further research and planning develops with respect to producing more cohesive and effective responses to the global effects of mercury emissions. See Samuel LaBudde, Symposium, *Environmental Protection in the Developing World: A Look at the Responsibility of State and Non-State Actors*, 15 FORDHAM L. REV. 407, 411 (2004) ("If we cannot adjudicate and solve problems in the United States, which is still the model for the world in terms of a lot of things, although environmental policy seems to be lagging behind now, how can we ever hope to foment and advance these agendas in other countries?").

¹¹⁴ See Richard Toshiyuki Drury, *Rousing the Restless Majority: The Need for a Blue-Green-Brown Alliance*, 19 J. Envtl. L. & Litig. 5, 10 (2004) ("[N]ot only has the environmental movement failed to build upon its base, it has actually alienated large portions of the American public who are generally sympathetic to its goals.").

environmental harm is oftentimes processed as remote and intangible or inevitable.¹¹⁵

The characterization of methylmercury as fairly rare reinforces the notion of mercury emissions as not a perpetual, major threat. For instance, EPA alleges that “[o]nly a small component of the mercury released by power plants and present in the atmosphere is converted into the form of most concern: methylmercury.”¹¹⁶ This alienation from the potential harms of mercury emissions reinforces the notion that other issues are of more pressing concern.

Thus, even though the majority of voters support the notion that air and water cannot be purchased and even though this era could be characterized as health conscious with respect to dietary and exercise knowledge, the Bush Administration’s presentation of CAMR as attending to health and environmental concerns coupled with the need to protect energy companies simultaneously places mercury emissions as significant enough to address but not as severe of a threat as to mandate stricter regulation.¹¹⁷ Perhaps, this is an instance of being overwhelmed with warnings – of how seemingly everything we do or eat exposes us to a carcinogen - so why not just enjoy life and not worry? But I would argue that the lack of identifying with the environmental movement is more than that. It equates to more than just a parallel history with the feminist movement, of being located

¹¹⁵ While mercury pollution imposes diffuse delirious health costs on all of American society, its effects are so dispersed that individuals are unlikely to appreciate the costs imposed. Nor are such costs easily quantified. Furthermore, since all Americans are affected, the transaction costs¹⁷⁷ associated with organizing any movement against mercury polluters are significant. And without an organized movement, individuals are unlikely to assumed the costs of challenging the mercury polluters themselves, opting instead to free-ride on the actions of others.

Thomas, *supra* note 111, at 176-77.

¹¹⁶ Controlling Power Plant Emissions: Guiding Principles, EPA, *available at* http://www.epa.gov/mercury/control_emissions/inquiry.htm (last visited Mar. 10, 2006).

¹¹⁷ See Drury, *supra* note 114, at 9-10 (“An overwhelming percentage of voters [88%] believe that air and water belong to everyone; only [7%] say air and water belong to their users and that they have a right to buy and sell pollution rights.²⁵”).

in and around white, (arguably upper) middle-class America. Though surely the roots of the movement should not be too quickly dismissed, as many lower-income and communities of color are disproportionately affected by pollution yet arguably remain estranged from mainstream environmental movements, the majority of America is still white and (supposedly) middle-class and nonetheless alienated. At least with respect to mercury emissions, the related health and environmental affects persist as frequently dismissed concerns. I would argue that part of bringing the masses into the environmental movement revolves around the ability to effectively create a persuasive social construction of risk. Part of this development would rely on moving beyond the myth and dichotomous thinking of environmentalism as a Democratic issue and business stability and improvement as a Republican agenda.¹¹⁸ A strong economy and strong environmental protection are not inherently incongruous.

B. What Would The Story and The Risk Look Like Under MACT?¹¹⁹

A link must be established between a phenomenon and the harm which raises the harm above an everyday risk that is readily ignored. The predicted challenged learning abilities for an unborn child fail to register as an immediate and important risk when compared to death or grotesque abnormalities. Perhaps, the elevation of a risk to that of significance has become increasingly more difficult as the news media bombards us with horrific and devastating images each day, not to mention the violence portrayed in

¹¹⁸ Tinsley's critique of the EPA could be located within the broader partisan split of the era, with Republicans quickly dismissing her claims and Democrats readily rallying behind her. If Tinsley can be viewed as a government agent carrying out Congress' intent, then one would recognize her as an individual upholding the valued practice of creating regulations based on science rather than formulating science around a desired end-result regulation.

¹¹⁹ Here I offer not the sole depiction of MACT, but a depiction – one where social mechanisms would “enable certain aspects of reality to acquire a special meaning and significance, enabling them to emerge on the public scene.” José Luis Lezama, *The Social and Political Construction of Air Pollution: Air Pollution Policies for Mexico City, 1979-1996*, in *THE POLITICS AND CULTURE OF AIR POLLUTION: SMOKE AND MIRRORS* 324, 325 (E. Melanie DuPuis, ed., 2004).

television and on screen in general programming. Perhaps the thought of an autistic child is a tolerable level of risk. Perhaps one generation of innocently injured babies is acceptable. However, I would argue that more than any of that, the Bush Administration successfully framed the risks associated with mercury emissions as adequately addressed by CAMR - that the set standards are the “best” we can do and that mercury is not that dangerous. Granted, everything is relative. An assassin holding a gun to someone’s head is a much more imminent threat than the accumulation of mercury within the brain tissues of an unborn baby. If the assassin pulls the trigger, that person is dead. If the baby is one of the 600,000 unfortunate children born each year with such high rates of mercury to cause nervous system damage, the baby may not be able to talk for several years later than her peers. She may be placed in special learning classes but she is alive. By classifying her harm as “impaired developmental learning”, the distance between the risk and society spreads. Similarly by framing the argument around the traditional cap-and-trade program (an allegedly “pro-business” model) versus command-and-control (and allegedly “strong government” response), the masses become alienated from the issue. In contrast, by visualizing mercury invading an unborn child’s brain, the risk becomes more vivid, imminent, and tangible. By framing the argument around protecting the health of our increasing methylmercury infected national waters and injured babies, the risk becomes more relevant and pressing.

It is widely accepted that substantial alcohol consumption by a mother during pregnancy leads to the “impaired developmental learning” of her baby. We as a society have decided to not only place labels on alcoholic beverages but overall condemn such behavior. Hence, the social construction of risk related to alcohol consumption by a

pregnant mother has been clearly delineated as morally unacceptable and undesirable. Why is it “okay” if this “impaired developmental learning” is caused by mercury emissions, and not fetal alcohol syndrome? Perhaps, in part, because we have yet to name and classify a syndrome for the impact of methylmercury poisoning on fetus and infants. Recall how naming and classifying lead to the creation of an idea and proving its reality. Yes, mothers could abandon eating fish. But fish offer health benefits.¹²⁰ Moreover, the elimination of fish from consumption would disproportionately affect certain populations: fisherwomen and fishermen and certain ethnic communities whose diets revolve around seafood. Why rid ourselves of the nutritional value of fish?¹²¹ Why harm people whose lives and sustenance revolves around fishing?¹²²

Whether the mercury emissions risk remains a readily ignored daily risk or emerges as a clearly identifiable and recognized risk centers on risk thinking. “In ‘At Risk of Madness,’ Nikolas Rose suggests that ‘risk thinking’ across a wide of disciplines has one thing in common: ‘It seeks to bring the future into the present and make it calculable.’”¹²³ Thus, we need to bring the harm inflicted on the unborn babies, young children, and other Americans into the present. But how do we value the health of an

¹²⁰ Thomas, *supra* note 111, at 167 (“The regular consumption of fish may help to prevent cardiovascular disease, osteoporosis, and cancer.”).

¹²¹ Because of the nutritional advantages of diets rich in fish and the minimal health and safety risks of seafood regulation, the long-term goal of the United States should be a reduction in the concentration of MeHg in fish, rather than a replacement of fish in the diet by other foods. In other words, better to stop poisoning fish than stop eating it.

Id. at 168. I leave for another arena whether and in what quantities fish, or meats, should be consumed. I work from the assumption that most individuals are not vegetarian and are not likely to voluntarily convert to vegetarians in the near future.

¹²² Here I am not arguing that there should be no regulation on fishing. Nor am I arguing that we should eat conscientiously. We should recognize the fishing cycles and be careful not to over-fish any species. But rather I am confronting how fisherpeople already perform extremely difficult jobs and why subject them to more stresses than necessary?

¹²³ Brian J. Glenn, *Risk, Insurance, and the Changing Nature of Mutual Obligations*, 28 L. & SOC. INQUIRY 295, 309 (2003) (book review).

infant? A five year old? In her role as a niece? In his role as a grandson? Do we make calculations based on the additional medical needs? The cost of special education services spent in the public school system? I do not seek to propose any sort of valuation method. But it must also be recognized that such valuation of a life and health impairments are already performed by various government agencies, including EPA as well as IRS. What I do know is that technology exists for implementing a MACT program, mercury emissions are destroying our nations' lakes and streams, and hundreds of thousands of fetuses, babies, children, and everyday Americans. Therefore, while the Bush Administration frames CAMR as a regulation taking into account the health of the environment and our nations' residents, is it doing so to the best and fullest extent? Is the Bush Administration's social construction one that withstands scrutiny, the nation's scrutiny? Do its underlying values truly reflect the masses' values? Especially given that a significant number of individuals who voted for President Bush align with "pro-family" values. How is permitting another generation of fetus and children be harmed, when the harm could be prevented, pro-family? Or perhaps the "pro-business" aspects outweigh the "pro-family" values. Perhaps the States bear the onus of protecting their residents and the nation should not care or respond. But this is at least a decision, a choice, that mass America and all of its communities should recognize is taking place.