



What Opponents Are Saying about the Pennsylvania Mercury Rule

Opponents to the strong state rule say: Mercury poses no danger from inhalation or physical contact, the primary pathway into humans is through eating fish. The U.S. Centers for Disease control conducted a nationwide survey and found no evidence that mercury blood levels among the population approached that required to cause adverse health effects. Therefore, we should take *reasonable* precautions to protect public health.

THE TRUTH: This twisting of facts about the effects of mercury on babies' brains must not go unchallenged. Mercury is a powerful neurotoxin that can interfere with the proper development of babies' brains. A study by the Centers for Disease Control found that about six percent of women have mercury levels in their blood above what the National Academy of Sciences, the Food and Drug Administration and the Environmental Protection Agency say is safe. That means that an estimated 600,000 babies are born each year that have been exposed to unsafe levels of mercury in the womb.

Mercury gets into a mother's blood through food, and it is true that ingesting fish is the primary pathway. But methylmercury is found in many other sources of food in addition to fish, such as beef liver, grains, milk, and poultry. Once mercury is in a mother's blood, it easily crosses the placenta and *concentrates at even higher levels in the blood of the developing baby*. This means that even small amounts of mercury can be very harmful to a developing fetus or baby. Mercury acts like a bio-chemical "Trojan Horse," since the developing fetus recognizes it as a protein instead of the toxin that it is. The growing baby attempts to incorporate it into its development, especially in building brain tissue that needs protein. Exposure to unsafe levels of mercury can lead to learning disorders, attention deficit disorders, problems with coordination and even mental retardation.

High amounts of mercury in fish make fish unsafe to eat, and fish are healthy sources of protein and other essential nutrients. We need to get the mercury out of the fish. Power plants are the last unregulated source of mercury pollution. The technology exists to control this toxic pollution at reasonable cost. It's time to stop power plant mercury pollution from compromising our children's future.

Opponents to the strong state rule say: Under the Bush Administration, the United States became the first nation in the world to mandate mercury emission reduction from coal-fired power plants.

THE TRUTH: The federal Clean Air Mercury Rule was passed in 2005, and is being challenged by Pennsylvania and 15 other states, together with several Indian tribes and public interest organizations, as illegal for failing to treat mercury as the toxic that it is.

The European Union is leagues ahead of the United States on protecting public health from mercury, and has implemented extensive and comprehensive measures to reduce mercury emissions and exposures from all its sources. The EU has a long list of legislation and there are many examples of even more protective laws at the individual national level throughout the EU, all aimed at managing various aspects of the mercury problem, but primarily concerned with emissions and use of mercury. Additionally, the EU has instituted extensive monitoring programs for mercury, and has documented reductions of mercury in the environment by almost 60 percent between 1990 and 2000, thanks to their policies, despite global emissions of mercury *increasing* by 20 percent during that same period.

Mercury emissions from major industrial sources in European Member States are subject to EU Directive 96/61/EC on Integrated Pollution Prevention and Control (IPPC), passed in 1996 and implemented in all Member States by October 1999, that allowed States until October 2007 to bring existing facilities into compliance. This directive covers all coal burning plants above 50 MW_{th} (150 MW), and other EU directives cover sources like metals, cement, and chemicals industries. The EU is even considering how to achieve reductions from smaller plants and residential use of coal, through multi-pollutant strategies as part of the Clean Air for Europe (CAFE) program. Further, the EU is considering creating a funding program to assist countries with high dependence on coal such as India, China, and Russia in developing research and pilot programs to reduce mercury emissions in those nations, and to promote clean and efficient use of coal or other solid fuels.

Similar comprehensive approaches are being taken elsewhere, including Canada and India, and the U. S. Environmental Protection Agency (EPA) is involved internationally in efforts to reduce mercury (<http://www.epa.gov/mercury/international.htm>).

Opponents to the strong state rule say: Mercury comes from various sources, and only 1 percent of mercury emissions come from U.S. coal-fired power plants, whereas half comes from natural sources like geysers and volcanoes.

THE TRUTH: A great deal of mercury falls locally, creating hotspots with heavy mercury contamination downstream from mercury polluters. An ongoing Penn State University study, with eight years of data so far, shows that mercury levels are higher near local power plants. A site in Cresson, Cambria County, located near and downwind from several coal-fired power plants, had an average 47 percent higher wet deposition rate of mercury than a site in Wellsboro, Tioga County.

These Pennsylvania results follow a U.S. Environmental Protection Agency (EPA) study of mercury deposition around Steubenville, Ohio, showing that about 70 percent of the mercury deposition came from local and regional sources.

And cleaning up local polluters means significant reductions in local mercury levels. In Massachusetts, the state enacted the nation's toughest mercury emission laws for incinerators; seven years later, they measured a 32-percent average decrease in the level of mercury found in a signature freshwater fish caught in nine lakes in the northeastern corner of the state. A Florida Everglades study showed that mercury concentrations found in fish and wading birds there dropped by 60 percent to 70 percent due to local mercury emission reduction efforts.

Opponents to the strong state rule say: The Pennsylvania Department of Environmental Protection (DEP) Plan threatens jobs, may raise electric bills, and could significantly alter Pennsylvania's generating capacity.

THE TRUTH: Mercury pollution controls are available and very affordable, as a U.S. Department of Energy official [acknowledged on the public television show](#) "Pennsylvania Inside Out" on WPSU. On the show, Tom Feely III of the National Energy Technology Laboratory said, "There is existing technology that has already proven to be able to take mercury out... That technology is relatively inexpensive on a capital cost basis compared to a scrubber... We don't anticipate -- just looking at some back of the envelope calculations that we've done -- that there would be a significant increase in electric utility rates."

A [recent study](#) from the National Wildlife Federation details the costs of installing mercury pollution controls on Pennsylvania coal-fired power plants. The average monthly cost for residential customers would be at most \$1.08. In a [statewide poll](#) conducted by Terry Madonna Opinion Research, 80 percent of Pennsylvanians indicated they are willing to pay that additional cost if necessary in order to have a Pennsylvania mercury rule.

And any cost will not necessarily be passed on to customers. Because all Pennsylvania electricity suppliers must compete on the open market under electricity restructuring, each company must assume the cost of doing business. Mercury regulation may slightly reduce the already large profits of the companies.

Under the federal plan, and under legislation like SB 1201 or HB 2610, Pennsylvania power plants can choose to buy up mercury pollution credits from clean, modern plants in other states rather than take steps to cut pollution here at home. Pennsylvania power plants are the number one buyers of pollution credits under other cap-and-trade programs. This not only means there are no guarantees that we will see cleanups at Pennsylvania plants, but it means that jobs and energy dollars leave Pennsylvania. Under the proposed state rule, pollution controls must be installed at every Pennsylvania facility, keeping those skilled labor and maintenance jobs here. And because Pennsylvania participates in

an energy grid serving 13 states, our dirty plants will be at a competitive disadvantage to those elsewhere that will perform better due to upgrading. It is also important to note that Pennsylvania exports energy, that is, we produce more electricity in the state than we need.

Opponents to a strong state rule say: Senate Bill 1201 and House Bill 2610 would require an 86 percent reduction in mercury emissions by 2018. The DEP plan has no added public health benefit over this proposed legislation (which “implements” the federal Clean Air Mercury Rule). Without this legislation, Pennsylvania would be in violation of the federal rule.

THE TRUTH: Pennsylvania is not required to pass any additional legislation to “implement” the federal Clean Air Mercury Rule (CAMR). However, because Pennsylvania and 15 other states are challenging the federal rule as being illegal, and because Pennsylvanians believe the federal rule fails to adequately protect public health, the DEP has proposed the state-specific mercury reduction rule.

The Congressional Research Service conducted an [independent analysis](#) of the federal plan, and concluded that the reduction targets in CAMR will not be reached by the purported deadlines, but rather *might* be possible by 2030. On average, CAMR aims for just under 70 percent overall mercury reductions nationwide. In Pennsylvania, the 86 percent figure assumes that no banking or trading of mercury credits would occur, but this is highly unlikely, given that Pennsylvania power plants are number one in the nation for purchasing pollution credits. So under the federal plan, which is embodied in SB 1201 and HB 2610, mercury reductions would occur decades later than promised, and will come nowhere near the 90 percent reduction level mandated in the state-specific rule.

Opponents to a strong state rule say: Mercury emissions from Pennsylvania power plants are down 33 percent since 1999, as a result of co-benefits that have occurred at Pennsylvania power plants installing multi-pollutant control technology. DEP and EPA data indicates that by 2015, 90 percent of the generating capacity in Pennsylvania will have installed advanced pollution control technologies to further reduce pollution, including mercury.

THE TRUTH: Pennsylvania ranks second in the nation for toxic mercury pollution emitted to the air by coal-fired power plants. Pennsylvania has now moved ahead of Ohio and is behind only Texas, based on the [most recently available data](#). Pennsylvania also has the number two and number five worst plants in the country for mercury emission rates (pounds of pollution based on total energy output of the facility): Reliant’s Shawville plant (Clearfield County) and Allegheny Energy’s Armstrong Power Station (Armstrong County). The Keystone Power Plant (Armstrong County) ranks fifth worst in the nation for total pounds of mercury emitted, and based on total energy output, that makes Keystone the twelfth worst nationally for its mercury emission rate.

A [report issued by EPA’s Inspector General](#) Nikki L. Tinsley concludes that EPA management did not fully explore all mercury reduction options when creating the federal

Clean Air Mercury Rule, thus making CAMR “compromised and therefore, [the rule] may not represent the lowest emissions level that could be achieved.” The report details how EPA management pre-selected the emission reduction options to conform to the Clean Air Interstate Rule, which requires reductions in other pollutants such as oxides of sulfur and nitrogen, that contribute to smog and soot pollution. While it is true that there are co-benefits from installing pollution controls for those other pollutants, and that the Clean Air Interstate Rule must be implemented by 2015, additional technologies (that already exist and that are affordable) are needed to achieve a 90 percent reduction in mercury pollution. The federal rule does not go that far, however. The Pennsylvania rule mandates that a 90 percent reduction in mercury emissions must be reached by 2015 in all plants in Pennsylvania.

Opponents to a strong state rule say: A broad coalition of groups has expressed its strong support for SB 1201.

THE TRUTH: The coalition of groups and individuals in Pennsylvania supporting the state mercury rule and opposing harmful legislation like SB 1201 and HB 2610 is extensive in breadth and in number. To date, well over 100 faith, [sporting](#), health-affected, children’s, women’s, conservation, and labor organizations have [joined in their support](#) of the state rule and opposition to the federal plan. Medical and science experts from around Pennsylvania and beyond have [signed letters](#) stating their opposition to legislative efforts to block the state rule and to maintain the status quo. Faith leaders from a broad spectrum of faith perspectives have [joined together in support](#) of strong state action on mercury pollution.

A recent [statewide poll](#) conducted by Terra Madonna Opinion Research details that four out of five Pennsylvanians want a state rule that is more protective of health than the federal rule, and that is in place as soon as possible. The poll also reflects that an overwhelming majority of Pennsylvanians understands the health risks associated with mercury pollution from power plants.

Opponents to a strong state rule say: The DEP’s proposed mercury rule is unconstitutional.

THE TRUTH: Under the U.S. Commerce Clause, a rule cannot require unequal treatment for enterprises within a state, as compared to out-of-state enterprises. Pennsylvania’s proposed state-specific rule ensures identical treatment, requiring coal-fired power plants to meet the same standards regardless of whether they use bituminous or sub-bituminous coal. The state rule also requires all plants, despite their coal type, to meet the 90 percent mercury emission cap.

In contrast to the state proposal, the federal rule sets different standards for different coal types. The Pennsylvania Coal Association and the United Mine Workers Association strongly [criticized the federal rule in recent court filings](#), for creating unfair treatment of waste coal plants and putting Pennsylvania coal interests at a disadvantage. The organizations’ filings state the federal rule will “result in a vast wealth transfer from

bituminous coal users to sub-bituminous and lignite users,” and further will have “adverse and irreversible impacts on the Bituminous Coal Coalition member operations, mine production, mine workers and local economies dependent upon coal mining operations.” They also describe CAMR as illegal, arbitrary and capricious, wholly unwarranted and flawed, and inform the court that the federal rule will harm “producers of bituminous coal, workers in bituminous coal mines and local economies supported by bituminous coal mining.”

The federal so-called Clean Air Mercury Rule requires little or no mercury pollution reductions from plants that burn sub-bituminous coal mined in the West. At the same time, it imposes stricter requirements on plants that burn coal mined in states like Pennsylvania, Kentucky, Indiana, Illinois, Ohio, Virginia and West Virginia.

Opponents to a strong state rule say: There is no connection between “purported hotspots” of mercury deposition and increased health risk to local residents. This would require a population that eats significant quantities of locally caught fish.

THE TRUTH: Conrad (Dan) Volz, DrPH, MPH, scientific director of the Center for Healthy Environments and Communities at the University of Pittsburgh, has conducted extensive research on mercury contamination in fish and local fish consumption. In a recent press conference in support of the state rule, Dr. Volz stated: “There is evidence that certain subsections of the population in western Pennsylvania eat appreciable quantities of locally caught fish—far more than previously thought. This in combination with total mercury in water levels that are unknown in most rural Pennsylvania areas (but have been measured in New Jersey and can exceed 37 ppb in well water) could present a threat to developing fetuses and children.” The Pennsylvania Fish & Boat Commission has issued fish consumption advisories for every water of the Commonwealth due to pollution, and because of high amounts of mercury pollution in fish in many areas, people are advised to eat no more than one fish meal per month.

Data that has been collected for over eight years in a row by Penn State University at two mercury deposition stations located in Cresson (Cambria County) and Wellsboro (Tioga County) show that mercury levels are 47 percent higher at the Cresson station, which is located downwind of and close to a number of coal-fired power plants. The Wellsboro sampling station is a great distance from any plants.

These Pennsylvania results follow a U.S. Environmental Protection Agency (EPA) study of mercury deposition around Steubenville, Ohio, showing that about 70 percent of the mercury deposition came from local and regional sources. And cleaning up local polluters means significant reductions in local mercury levels. In Massachusetts, the state enacted the nation’s toughest mercury emission laws for incinerators; seven years later, they measured a 32-percent average decrease in the level of mercury found in a signature freshwater fish caught in nine lakes in the northeastern corner of the state. A Florida Everglades study showed that mercury concentrations found in fish and wading birds there dropped by 60 percent to 70 percent due to local mercury emission reduction efforts.

Opponents to a strong state rule say: The Senate Environmental Resources and Energy Committee held three extensive hearings with testimony from a wide range of experts and stakeholders.

THE TRUTH: The Department of Environmental Protection created a stakeholder process that lasted for months, comprised of representatives from all sides of the mercury issue (called the Mercury Workgroup). This extensive process included detailed presentations from a wide range of agency, industry, technology, science, and medical experts. Details about this process and all the materials presented can be found online at http://www.dep.state.pa.us/dep/deputate/airwaste/aq/regs/Mercury_Rule.htm. Out of this process, the DEP created a proposed state rule that seeks to protect public health, utilize existing mercury control technology, and to benefit Pennsylvania's economy.

The Senate hearings included testimony from 13 organizations/agencies. They included the Pennsylvania Department of Environmental Protection, United Mineworkers Association, International Brotherhood of Electrical Workers, Pennsylvania Coal Association, HealthRisk Strategies (Dr. Gail Charnley), Pennsylvania Department of Health, Annapolis Center for Science-Based Public Policy (Dr. Jack Snyder), Pennsylvania Chamber of Business and Industry, Clean Water Action, U.S. Environmental Protection Agency, Electric Power Generation Association, PennEnvironment, and the Pennsylvania Federation of Sportsmen's Clubs.

Repeated requests were made of the committee to include testimony from objective public health experts and from experts who could speak to the availability and effectiveness of mercury control technologies. Instead, the committee relied on the testimony of two industry-friendly representatives. Dr. Gail Charnley of HealthRisk Strategies and Dr. Jack Snyder are both involved with the Annapolis Center for Science-Based Public Policy. Charnley is on the Science and Economic Advisory Council, and Snyder is on the Board of Directors. The Center is funded primarily by the National Association of Manufacturers, and between 1998 and 2005 received almost \$700,000 in donations from ExxonMobil, for example. Charnley's career has focused on using risk-based approaches to environmental management and decision-making, primarily for industry interests. She served as the Director of Risk Management at the Weinberg Group, for example, "an international scientific and regulatory consulting firm that helps companies protect their products at every stage of its life... [helping] clients improve manufacturing processes, clear regulatory hurdles, and defend products in the courts and the media," (from the Weinberg Group's Web site).

Scores of Pennsylvania [health experts opposed](#) SB 1201 and support the Pennsylvania Mercury Rule. These include the Pennsylvania State Nurses Association, Women's Health and Environment Network, Pennsylvania Chapter of the American Academy of Pediatrics, Physicians for Social Responsibility, Pennsylvania Public Health Association, and the Healthy Children Project of the Learning Disabilities Association of America.