

**To:** Michigan Attorney General Bill Schuette

**From:** Michigan Scientists Joel Blum, Allen Burton, J. Tim Dvonch, Alfred Franzblau,  
Jerome Nriagu & 46 Additional Members of the Michigan Scientific Community

**Re:** Your Opposition to the Federal Mercury & Air Toxics Standards (MATS)

**Date:** June 9, 2016

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As university scientists and educators living and working in Michigan, we urge you to call off your fight against the federal Mercury and Air Toxics Standards (MATS), which was adopted by the U.S. Environmental Protection Agency to: (1) improve the quality of the air we breathe; (2) assure that local fish are safer to eat; and (3) protect and preserve the wildlife and natural spaces we love from harmful pollution originating in Michigan and elsewhere.

Scientific studies clearly demonstrate that mercury and other air toxic emissions are hazardous to human health. We are concerned that you are leading a national legal campaign against these standards, even now, as Michigan grapples with the ongoing tragedy in Flint related to lead -- another neurotoxin and heavy-metal pollutant.

On March 5, Chief Justice John Roberts rejected your request that the U. S. Supreme Court issue a stay on MATS. Yet, just over a week later, you requested that the U. S. Supreme Court overturn the D.C. Circuit Court's decision to allow MATS to remain in place while the U.S. Environmental Protection Agency reassesses the costs and benefits of the standard.

We urge you to call off your fight against MATS enforcement and to remove Michigan's name from the legal action against mercury and other air toxin limits. By seeking to block the rule, you are engaging in actions that could have deleterious results for Michigan.

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As scientists, we know the negative impacts that mercury and other air toxics covered by MATS can have on the health of humans, wildlife and ecosystems. As scientists who live in Michigan, these impacts affect us and you personally. Here are just a few scientific findings to consider.

**Human Health:** Our children are most vulnerable to these impacts, with fetal exposures to mercury resulting in deleterious impacts to language, memory, visual-motor skills, and attention. In adults, exposure to mercury can damage the nervous system, with newer research showing possible impacts on the immune and cardiovascular systems. Most of mercury's harmful effects on human health come from consuming contaminated fish. Once deposited into watersheds and surface waters, mercury is partially converted to methylmercury, which is consumed and biomagnified up the food chain.

**Wildlife & Ecosystems in Which We Live & Recreate:** Ecologically-relevant and sub-lethal concentrations of methylmercury can affect the growth, survival, and reproduction of fish, birds, and other animals. Large predatory fish, particularly those found in Michigan's inland waters, such as walleye, northern pike and bass are found to have the highest levels of mercury.

Recreational anglers and their families, including tribal groups and others consuming these fish, can accumulate harmful amounts of methylmercury. There is also increasing and compelling evidence that mercury deposition can impact the terrestrial ecosystem, namely songbirds, bats, and other insectivores.

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Michiganders have long understood the harms to public health caused by mercury and other air toxics. Reflecting the findings of scientists and concerns of public health officials, the Michigan state government has taken some helpful actions. The Michigan Department of Community Health, Michigan Department of Environmental Quality and Michigan Department of Natural Resources have collaborated in issuing statewide fish advisories for mercury that apply to nearly every lake and river in Michigan. Moreover, the Michigan Department of Environmental Quality Mercury Strategy adopted rules going into effect in 2015 to reduce mercury emissions from coal-fired power plants in our state.

We commend the state's efforts, but these actions fall short of addressing out-of-state sources of mercury and air toxics that harm Michigan's people and animals. Most (greater than 50%) of the mercury deposited in our state comes from coal-fired power plant emissions, with a substantial amount coming from coal-fired power plants in other states. Enforcement of the U.S. EPA's MATS provides an important path to protecting the air and water in our state by limiting the emissions from coal-fired power plants that are beyond our state borders but deposit harmful mercury in Michigan.

We, Michigan university scientists, urge you to support U.S. EPA's Mercury and Air Toxics Standards in the interests of improving public health, protecting wildlife, preserving natural beauty, and supporting the economy of the state we call home.

Sincerely,

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**Also Signed By:**

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