

Ozone Facts:

'Secret Science' is Bad Science

The term "secret science" may sound theatrical, but it's simply the shorthand given for science that does not reveal its underlying data to the public – thereby preventing experts in the scientific community from performing rigorous independent review. An open review process can corroborate original findings or challenge them – and from a scientific point of view, either outcome is desirable because [testing conclusions](#) is the heart of the scientific method, and progress itself.

Yet when it comes to the issue of ozone, the U.S. Environmental Protection Agency (EPA) is not sharing critical data, despite repeated requests from the public, the scientific community, businesses – [and even the U.S. Congress](#) – to make it public. Compounding the problem, the EPA is now about to issue new regulations based on this non-public, non-reviewed "secret science." It's estimated that these revisions – justified by what may be unsound research or unverified conclusions – will cost U.S. businesses up to [\\$140 billion annually](#). To put this in perspective – [the cost of these regulations](#) is equal to the entire annual economic activity of [Jamaica, Nicaragua, Mongolia, and Luxembourg combined](#). The ripple effect of that price tag will potentially damage U.S. competitiveness and U.S. employment for years to come.



EPA's Scientific Gamble



When EPA calculates the benefits of the Ozone NAAQS, the lion's share of benefits come from the reduction of particulate matter (PM2.5) and [not from the reduction of ozone](#). EPA calls these reductions "co-benefits," a bonus benefit, if you will, that accrues from implementation of the regulation. While counting benefits from a substance not directly regulated by the rule seems suspect on its face, there is significant controversy attached to the integrity of the PM benefits number itself.



Essentially, EPA has refused to "show their work" and let scientists outside of their inner circle verify their [research on the health benefits of reducing PM2.5](#). At the heart of the controversy are two studies: The taxpayer-funded "[Harvard Six Cities Study](#)" and the "[American Cancer Society's Cancer Prevention Study II](#)." These studies are critically important to EPA's regulatory effort as the agency uses the two studies, and their progeny, to establish an association between fine-particulate emissions and mortality.

The Ozone Issue

Ozone-forming emissions [have been cut in half since 1980](#) and are expected to drop by another 36 percent in the next few years. In some parts of the country, air quality is already at or approaching background or natural levels.

Despite the immense progress in ozone reduction, EPA is currently considering revising the ozone standards again, by October 1, 2015, with new National Ambient Air Quality Standards (NAAQS) for Ozone. However, most of the health benefits cited by the EPA as the reason for the further lowering of ozone limits are based on "[secret science](#)."



EPA has received [extensive criticism](#) in the scientific community for their secrecy. As Lamar Smith, Chairman of the House Committee on Science, Space and Technology [explained](#), the National Research Council has cautioned against using the data as it would be of “little use for decision-making” due to the outdated nature of the information (it is nearly three decades old) and dwindling relevance to today’s population risk and profile. He also pointed out that a number of factors affecting the surveyed population’s health status have changed since the studies, ranging from decreased smoking to reductions in cardiovascular mortality rates.



Compounding these concerns is EPA’s refusal to let independent scientists verify the findings. The House Science Committee and Senate Environment and Public Works Committee have repeatedly requested the data from EPA, but EPA has refused, forcing the House Committee to issue a [subpoena](#) to obtain data. The EPA has defied the subpoena arguing that doing so would jeopardize [patient privacy](#). However, large sets of data routinely have [personal information removed](#) so that the information can be reviewed.



More recent studies have not cured these defects, as they rely on some of the very same datasets as the original authors. This is the case for the [2009 ozone study in the New England Journal of Medicine](#), the Jerrett study.

“The EPA’s previously proposed Ozone standard came with a price tag of up to \$90 billion per year, by EPA’s own estimation. In 2011, President Obama pulled back on the 2010 proposal due to high costs and the potential of a detrimental impact to American businesses. Now the EPA is proposing an equally aggressive standard while failing to even be advised about the potential cost of lowering the standard.”

Senator James Inhofe

Chairman of the Environment and Public Works Committee



Return to Solid Science

Lowering the ozone standard to 65-70 parts per billion, as the 2015 regulations propose, would cost up to \$140 billion per year in compliance costs. [As Chairman Lisa Murkowski points out](#), “EPA’s proposed tightening of ozone standards threatens to put large swaths of the country into non-attainment and could be the costliest regulation in US history, which would be devastating to the economy.”

It’s time for the EPA, a taxpayer-funded agency, to allow the research community access to its “science.” We simply can’t afford not to.

“We do not believe the staggering economic costs of a lower standard have improved since 2011, [...] Rather, the EPA’s regulatory impact analysis is intentionally misleading in its incorporation of additional proposed regulations ... which significantly impact forward year ozone forecasts and obfuscate the cost of compliance.”

Sen. James Inhofe and **Sen. John Thune** asserted in a letter to EPA