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Erasing Lives: The EPA's Crooked Scheme Could Cause Thousands to Lose Their Lives



FROM LEFT: JUSTIN COOK FOR EARTHJUSTICE, DARCY PADILLA CHRIS KNIGHT

"EPA is sentencing entire segments of the population to a poisoned death," said Caroline Armijo (left) of N.C. Read her story, and those of Nicole Horseherder of Ariz., and Tom Sedor of Penn.

Environmentalists and power companies have been engaged in a David-and-Goliath battle since the landmark Clean Air Act was passed in 1970.

High-priced attorneys and wealthy lobbyists on one side, seeking to avoid the cost of pollution-control technology.

Determined environmentalists on the other, with far less money but tons of grit, fighting to literally save human lives and protect the planet.

For decades, oil-burning and coal-burning power plants won the battle and largely avoided restrictions on emissions of hazardous air pollution, which the Clean Air Act regulated. Finally, in 2012, power plants were one of the very last industries to have to bring their hazardous air pollution under control after the

U.S. Environmental Protection Agency's Mercury & Air Toxics Standards (MATS) went into effect following nearly 20 years of litigation.

The plants began drastically reducing mercury and other air pollution linked to breathing illnesses, heart disease and cancer, among other illnesses, in response to the Mercury & Air Toxics Standards, saving up to 11,000 lives each year.

Eleven thousand real, human lives.

Now, the Trump administration is trying to undermine those hard-fought protections and undo decades of environmental progress.

This report provides an overview of how we got here, the near 20-year battle to regulate power plants,

the strategy underway to overturn the Mercury & Air Toxics Standards, and the backstory of who is driving this fight and benefits. The report also includes personal stories of people living near power plants who stand the most to lose if the proposal to withdraw the findings is finalized.

The Rigged Proposal

When Donald J. Trump became president and appointed Andrew Wheeler as head of the U.S. Environmental Protection Agency, Wheeler, a former lobbyist for the coal industry, sought to gut the Mercury & Air Toxics Standards from the inside.

He proposed that the EPA withdraw the findings — made under both Clinton and Obama administrations — that regulating these plants' hazardous emissions was "appropriate and necessary." This key determination had led to federal courts requiring regulation of power plants' emissions.

Wheeler claimed that reducing power plants' toxic pollution is not worth the cost to industry, despite the thousands of lives that would be saved.

To make that claim, he used a cost-benefit analysis that would be laughable but for the fact that it puts human lives at risk. Wheeler pretended that the health benefits of the Mercury & Air Toxics Standards are only \$4 million to \$6 million.

To reach that figure, he counted only a portion of the lost earnings attributable to decreased I.Q. from the



CLIFF OWENS / AP IMAGES

EPA Administrator Wheeler's proposal not only jeopardizes thousands of lives — it could set a dangerous precedent.

STATE	PREMATURE DEATHS PREVENTED	PER CAPITA RATE OF PREMATURE DEATHS PREVENTED
Tex.	1,200	4.12
Fla.	730	3.37
Ill.	570	4.48
Ohio	560	4.79
Penn.	530	4.14
Ga.	490	4.61
N.C.	480	4.19
N.Y.	440	2.26
Mo.	410	6.67
Mich.	410	4.09
Tenn.	370	5.41
Ala.	360	7.35
S.C.	330	6.41
N.J.	320	3.59
Okla.	300	7.60
Va.	300	3.49
Ind.	290	4.32
La.	290	6.23
Ark.	250	8.26
Miss.	240	8.03
Md.	220	3.63
Wis.	220	38.44
Ky.	210	4.68
Iowa	160	5.00
Kan.	160	5.05
Minn.	150	2.65
Colo.	140	2.42
Mass.	130	1.87
W.V.	96	5.36
Conn.	90	2.52
Neb.	72	3.70
Ariz.	35	0.48
Del.	32	3.28
Wash.	31	0.40
R.I.	29	2.70
S.D.	27	3.03
N.H.	25	1.83
N.M.	24	1.00
Utah	22	0.68
Me.	20	1.49
N.D.	19	2.49
D.C.	15	2.11
Calif.	14	0.03
Ore.	12	1.00
Nev.	10	0.03
Vt.	10	1.59
Mont.	8	0.74
Id.	6	0.04
Wyo.	6	1.00

Premature deaths annually prevented by the Mercury & Air Toxics Standards, by state. Data unavailable for Hawaii, Alaska, and U.S. Territories. Sources: U.S. EPA, U.S. Census Bureau

consumption of recreationally caught freshwater fish containing mercury emitted into the air by power plants — a tiny sliver of the actual health benefits.

In fact, EPA's own analysis found the Mercury & Air Toxics Standards would prevent between 4,000 and 11,000 premature deaths each year, as well as many thousands of hospitalizations and missed days of work and school.

The money value of these benefits, again by EPA's own calculations, was approximately \$90 billion per year — a figure 10,000 times higher than the \$4 million to \$6 million Wheeler used in his attempt to discredit the Mercury & Air Toxics Standards.

Most of these monetized benefits are due to reductions in fine particulate matter — also referred to as “soot” — that would be realized as a result of the steps that power plants took to reduce mercury, lead, arsenic, and other pollutants that are listed as hazardous in the Clean Air Act. Wheeler never denied that the Mercury & Air Toxics Standards will save up to 11,000 lives per year.

Instead, he claims we should ignore this fact because, in his view, it doesn't matter.

Wheeler argues the only benefits that count are the monetized benefits of controlling mercury. Because the soot that would take these people's lives is not mercury, he claims discretion to ignore it when calculating the Mercury & Air Toxics Standards' costs and benefits.

So this proposal that would withdraw the finding that it's appropriate and necessary to regulate mercury and hazardous air pollutants is illogical from the perspective of protecting public health.

It's an illegal bid to save a small number of coal corporations money, sacrificing public health to prop up coal burning. Meanwhile, up to 11,000 lives hang in the balance.

This attempt to cook the books not only jeopardizes thousands of lives, but it could set up a dangerous precedent that changes how the EPA counts health benefits in the future, and potentially lead to a weakening of many other federal environmental protections.



DARCY PADILLA

The coal-fired Navajo Generating Station looms behind four-year-old Anthony's family home on the Navajo Nation, near Page, Ariz.



CHRIS KNIGHT

Tom Sedor

Northampton County, Penn.

“Why wouldn’t you want clear air?”

In the state of Pennsylvania, the EPA predicted that without the Mercury & Air Toxics Standards, 530 people would suffer premature death every year.

Sedor and the Northampton Generating Plant.

TOM SEDOR’S 18-YEAR-OLD GRANDSON will never have the ability to live on his own. He has severe autism that Tom believes is linked to the pollution that has poured from the Northampton Generating Plant in Pennsylvania for decades.

“It’s a big burden on the family,” says Sedor, of caring for his grandson. “He’s nonverbal. He can’t function or dress himself. He’s potty-trained but sometimes you have to help clean him.”

Sedor, 77, is aware of the scientific evidence that points to mercury pollution and particulate matter as factors that increase the likelihood of autism.

A cluster of children with autism lived close to his grandson’s home. A neighbor’s child in the property adjacent to where his grandson grew up also suffered from severe autism. Three other children in a one-block area were on the spectrum. And about a dozen kids with some degree of autism lived within a quarter-mile radius of his grandson’s home.

“I’m not an epidemiologist,” said Sedor. “But there’s got to be an environment that triggers it. It [autism] didn’t really exist in my family or the other family.”

In 2006, researchers from the University of Texas found that for every 1,000 pounds of mercury released by power plants, there was a 3.7 percent increase in autism rates. A later Harvard University study found that women in areas with high levels of mercury, diesel, exhaust, lead, manganese, nickel, and methylene chloride were twice as likely to give birth to



COURTESY OF TOM SEDOR

Sedor with his grandson.

male babies with autism. Sedor’s other three grandchildren have asthma, which is also linked to air pollution. The disease has limited their ability to participate in sports.

A FORMER STEELWORKER, Sedor spent the last years of his working life helping displaced workers find new employment after the closure of Bethlehem Steel, the plant where he formerly worked.

He has devoted years during his retirement to reducing pollution in Northampton County while trying to hold polluters accountable. Sedor is a member of both the local Sierra Club chapter and an environmental group called *Clean Air Action*.

He’s glad the Northampton Generating Plant operates less than it used to and seems to burn less coal. But it is far from the only major source of pollution in the area. Other polluters include a cement plant and businesses that burn plastics and tires. In addition, the power plant loads coal ash waste on trucks to dump offsite.

Sedor has written many letters calling on state officials to improve conditions in the community and spoken up numerous times at city council meetings calling for ordinances to reduce noise and air pollution.

NEWS THAT WHEELER wants to gut the Mercury & Air Toxics Standards was upsetting. “It will not be wise to roll it back. It’s completely wrong,” he said.

Sedor said the financial benefits from reducing healthcare costs definitely outweighs the cost of technology used to comply with the Mercury & Air Toxics Standards.

“The science tells you [mercury and particulate matter] are bad,” he said. “Why wouldn’t you want clear air?” ■

The History of the Fight Over The Mercury & Air Toxics Standards

The free pass to pollute that existed for the powerful coal and oil industry from 1970 to 2012 reflects the power of an industry that could spend huge sums lobbying and did not want to pay the cost of controlling hazardous pollution if it meant a reduction in executives' huge profits.

Power plants even got a special carve-out from the 1990 Clean Air Act, which required all other major industries to clean up. The special deal for power plants required EPA to do a study and make a finding that regulation is "appropriate and necessary" before setting standards for the power industry.

Throughout the 90s, industry leaders were still enjoying the special treatment their lobbying dollars paid for at the expense of human lives.

A significant step forward happened in December of 2000 when President Bill Clinton was weeks from leaving office.

He backed the EPA's finding that it was "appropriate and necessary" to regulate mercury and hazardous air pollution from power plants. That finding led to a listing of all power plants that would have to be regulated under the air toxics program, which led to a legal obligation for EPA to



DATA: U.S. EPA

In 2011, EPA released the locations of the more than 580 power plants likely covered by the Mercury & Air Toxics Standards.



CHRIS JORDAN-BLOCH EARTHJUSTICE

Neighborhoods — including homes, churches, parks — are located directly adjacent to coal- and oil-fired power plants, like the Elrama Power Plant in Washington, County, Penn., seen here in Apr. 2011. The plant closed the following year.

issue air toxics standards for power plants within two years.

But it would take nearly a decade for the protections of the Mercury & Air Toxics Standards to become law, given the influence of industry and the pro-polluter strategy of President George W. Bush.

When Bush took office in 2001, he tried to reverse the course set by Clinton. Rather than meet its obligations, the Bush administration delayed issuing standards while it tried to get Congress to amend the Clean Air Act to exempt power plants. Earthjustice pushed to keep the amendment from passing and then sued on behalf of community, environmental and public health groups in 2001 to force the EPA to follow through on setting standards.

Earthjustice won that case, but the Bush administration continued dragging its feet and did not act to develop a rule. The EPA did not propose mercury and hazardous air pollution regulations for the industry until 2011, after Earthjustice sued the Obama administration because the EPA had missed its deadline.

The fight still wasn't over. The Obama administration finally adopted the Mercury & Air Toxics Standards in 2011, but the coal industry sued to overturn the protections. The case went

all the way to the U.S. Supreme Court, then back to the Obama administration, which reaffirmed the rule. The life-saving protections took effect in 2016.

Before the Mercury & Air Toxics Standards was established, coal plants accounted for half of the manmade emissions of mercury and the majority of many other hazardous pollutants.

Mercury is a neurotoxin that causes brain and nervous-system damage and decreased I.Q. and reasoning ability in children. In adults, mercury pollution causes heart disease; muscle weakness; and impairment of speech, hearing, and walking ability.

In the years since it was adopted, the Mercury & Air Toxics Standards has already reduced the mercury emitted by coal plants by 80 percent, according to the EPA's analysis.

The Mercury & Air Toxics Standards also reduced the harmful emissions of lead, arsenic, and chromium-6, the cancer-causing substance that was the subject of the film *Erin Brockovich*.

When the Mercury & Air Toxics Standards became law, the worst polluters faced a hard choice: Shut down, or install pollution-control technology that would dramatically reduce the toxic and hazardous substances they pushed into the air.

By 2017, most of the power plant industry, which had initially opposed the Mercury & Air Toxics Standards, was in compliance and supported the standards, including the Edison Electric Institute, a consortium of electric utilities.

But the National Mining Association, a trade organization that represents coal companies, has consistently been a fierce opponent of the regulation.

Some states and the coal industry are still fighting in court to limit the Mercury & Air Toxics Standards' protections. However, those cases have been placed on hold, pending the outcome of the EPA's reconsideration of the health benefits of the Mercury & Air Toxics Standards.



GETTY IMAGES

Bob Murray, CEO of Murray Energy.

The Payback

Bob Murray, CEO of Murray Energy, and a handful of other coal operators have been working to eradicate the Mercury & Air Toxics Standards.

Murray is one of the five largest coal operators in the U.S. He has been a fierce critic of the Mercury & Air Toxics Standards and sued to eliminate it. He was also a major Trump donor, giving \$300,000 toward his inauguration and \$1 million to a pro-Trump political action committee.

Just five weeks after Trump took office, Murray sent a list of anti-environmental rollbacks — eventually obtained by and published in the *New York Times* — to Vice President Mike Pence, calling on the Trump administration to gut the Mercury & Air Toxics Standards along with easing restrictions on greenhouse gases and mine-safety requirements.

Murray was also a client of the lobbying firm Faegre Baker Daniels LLP, where Wheeler was a principal until 2017. Murray paid Wheeler's firm \$3 million in lobbying fees to pursue his energy and anti-environmental agenda before Wheeler became EPA administrator.



DARCY PADILLA

Nicole Horseherder

Apache-Navajo Counties, Ariz.

“We looked to the Mercury & Air Toxics Standards as a guiding blueprint for the Navajo Nation to adopt its own pollution standards that would be just as stringent.”

In 2016, EPA estimated that 35 people in Arizona would lose their lives each year without Mercury & Air Toxics Standards protections.

NICOLE HORSEHERDER WEARS MANY HATS: public health activist, community leader, and mother, to name a few. But if you ask her, she'll tell you that she's "a farmer, first and foremost."

Horseherder has lived in traditional Navajo territory all her life. She was born and raised in Black Mesa in northeastern Arizona. Her daily routine as a dry farmer is a testament to the physically demanding lifestyle of the Navajo. With no access to indoor plumbing or gas heat, clan members must chop their own wood, haul water out of wells, and grow their own crops.

Such intense manual labor becomes increasingly difficult when coupled with respiratory problems such as asthma, which has become pervasive throughout the Navajo Nation. "Myself, two of my children, my mother and aunt have asthma," Horseherder said.

HEALTH ISSUES DUE to poor air quality have not always plagued the community, Horseherder says.

But due to the development of the Navajo Generating Station, a massive coal plant that emits almost a third of Arizona's emissions from energy generation, the region's air has become contaminated with toxic pollutants like mercury and arsenic since the 1970s, severely endangering public health. Access to emergency medical care is scarce on the reservation. "The nearest clinic is almost an hour away, but it's not equipped to handle emergencies," said Horseherder.

Because two of her children suffer from asthma, Nicole has had to drop everything and drive an hour and a half to the nearest emergency room when they have suffered a severe attack. Life on the reservation is already difficult and dangerous, but coupled with an increase in toxic pollutants in the air and water, it can be deadly.

THAT IS WHY the Mercury & Air Toxics Standards are so important to Nicole. As the Executive Director of the Navajo

activist organization *Tó Nizhóní Ání*, she has worked to divest Indigenous communities from their longstanding reliance on coal.

"*Tó Nizhóní Ání* — which means 'Sacred Water Speaks' — followed the development and implementation of the Mercury & Air Toxics Standards very closely," Horseherder said. "We looked to the Mercury & Air Toxics Standards as a guiding blueprint for the Navajo Nation to adopt its own pollution standards that would be just as stringent."

Unfortunately, to this day, the Navajo Nation Environmental Protection Agency, founded in 1995 as a regulatory body to protect human health and the environment, has not released a single standard to mitigate air pollution.

When pressured to take action, Navajo Nation EPA Director Oliver B. Whaley said that the standards do exist, but refused to release them to the public. With no pollution control regulations of their own, the Navajo community's reliance on strong federal oversight like the Mercury & Air Toxics Standards has become that much more vital.

Like many coal plants across the country, the Navajo Generating Station has been scheduled to shut down at the end of the year. And thanks to the work of groups like *Tó Nizhóní Ání*, the plant will not be revived by a new owner. While this is a huge win for public health, it does not prevent the air pollution from active coal plants even hundreds of miles away from travelling downwind and damaging already fragile communities.

If the Mercury & Air Toxics Standards were to be weakened or rolled back entirely, it would have devastating consequences for the Navajo Nation. ■

Lives in the Balance

In 2011, when the EPA did its initial cost-benefit analysis, the health benefits of the Mercury & Air Toxics Standards were valued at \$90 billion, which is an assessment of the combined savings from preventing up to:

- 11,000 deaths,
- 4,700 heart attacks,
- 5,700 hospital and emergency room visits,
- 130,000 asthma attacks,
- and more than 540,000 days of missed work.

A full 99.9 percent of the calculated health benefits — more than \$89.9 billion — were from reductions in soot.

Under Wheeler's rigged proposal, the monetized health benefits drop from \$90 billion to between \$4 million and \$6 million. And the compliance

costs — which EPA still estimates at \$9.6 billion, even though the actual costs are lower — have been made to appear too high to be justified under federal law.

By undermining its own rule in this way, EPA is basically inviting the coal industry to sue to invalidate the protections.

Historically, when the EPA decides that the nation needs better controls of a harmful pollutant to protect public health and seeks to regulate that substance, it generally leads to reductions in other toxic substances that are captured by required pollution-control technology.

Wheeler thinks of soot reduction as a "co-benefit" of the Mercury & Air Toxics Standards, and therefore not worth considering in the cost-benefit analysis, even though the rule saves as many as 11,000 lives a year by cutting soot emissions. The EPA's logic is that other federal regulations exist to reduce soot.

THE MERCURY & AIR TOXICS STANDARDS PROTECT YOU FROM:

- LEAD** (Icon: fetus): Anemia, high blood pressure, impaired kidney function, brain damage, infertility, mental retardation in children
- MERCURY** (Icon: brain): Brain and nervous system damage, reduced IQ, impaired cognitive ability and speech, muscle weakness, autism
- HYDROGEN CYANIDE** (Icon: skull): Parkinson's disease, hallucinations, cardiac arrest, death
- BENZENE** (Icon: drop): Leukemia, anemia, irregular menstrual cycles
- ARSENIC** (Icon: As element symbol): Skin cancer, bladder cancer, lung cancer
- HYDROGEN FLUORIDE** (Icon: lungs): Chronic lung disease, blindness, bone loss, skin damage
- HYDROGEN CHLORIDE** (Icon: head profile): Hypochromic anemia, glaucoma, cataracts, Reactive Airways Dysfunction Syndrome (RADS)
- CHROMIUM-6** (Icon: kidneys): Lung cancer, nasal cancer, sinus cancer, kidney damage, liver damage, occupational asthma

The Mercury & Air Toxics Standards protect humans from pollutants that can cause significant harm to health.

DATA: CDC, OSHA, NIH

Wheeler's decision to erase the monetized health benefits of soot defies the EPA's stated mission to protect public health and the environment. It also violates EPA practice and guidance from the Office of Management and Budget, which analyzes the costs and benefits of all proposed regulations and recommends that all health benefits be included in the cost-benefit analysis of a proposed regulation.

Across the board, Wheeler has demonstrated that he's far more focused on protecting polluter profits than protecting public health. He has shown a steadfast commitment to rolling back protections from air pollution, water pollution, endangered species and the greenhouse gases that drive climate change.

The Trump administration is operating dishonestly, pretending that limiting pollution that kills people and causes great harm does not actually cause that harm.

If Trump's EPA is successful, people will die to boost the profits of coal barons and our air will be less healthy.

And if the EPA succeeds in skewing the formula used to calculate health benefits, it may try to use the same maneuver — counting all the costs but only a tiny subset of the benefits — to justify weakening other environmental protections throughout the United States.

If the EPA finalizes its reconsideration claiming that the costs to industry outweigh the health benefits, Earthjustice and its partners will challenge the agency's rigged analysis in federal court. 🌍

Read this report online at earthjustice.org/lives



CHRIS JORDAN-BLOCH / EARTHJUSTICE

The coal-fired Cheswick Generation Station in Penn.



JUSTIN COOK FOR EARTHJUSTICE

Caroline Armijo

Greensboro, N.C.

“By doing away with the Mercury & Air Toxics Standards, EPA is sentencing entire segments of the population to a poisoned death.”

In 2016, EPA estimated that 480 people would lose their lives in North Carolina each year if the Mercury & Air Toxics Standards did not exist, reaffirming its initial analysis from 2011.

CAROLINE RUTLEDGE ARMIJO grew up with the backdrop of the Duke Energy Belews Creek Power Station, a massive two-unit coal-fired power plant that has been one of Stokes County, N.C.’s largest employers since it opened in 1974.

While the power plant has taken steps to reduce its emissions with scrubber technology and adherence to the Mercury & Air Toxics Standards, residents living nearby have experienced chronic and severe illnesses from these plants that will never go away.

“Growing up I suffered from asthma and bronchitis, like many of the kids in the area,” said Armijo. Breathing illnesses are not the only illnesses that she believes are linked to harmful power-plant emissions.

“A friend of mine has had five miscarriages, another had 11, and one woman’s baby was born with a hole in her back and had missing digits,” Armijo said.

Mercury is a neurotoxin that can harm pregnant people and damage the growing brains and nervous systems of fetuses, according to the EPA. Particulate matter, another deadly pollutant, is linked to lung cancer, aggravates asthma, and can lead to heart attacks and premature death, the World Health Organization has reported. Exposure to particulate matter is also linked to miscarriage.

ARMIJO’S FAMILY HAS lived in Stokes County for nine generations. Armijo was born in Raleigh, moved to Germanton and Chapel Hill, and then settled in Greensboro after spending several years in Washington, D.C.

Since 2010, she has been a vocal public health advocate, educating her community about the dangers of coal ash through the activist groups Residents for Coal Ash Cleanup and Alliance of Carolinians Together (ACT).

It angers Armijo that the EPA wants to get rid of the Mercury & Air Toxics Standards, despite the thousands of lives the federal standard saves each year. “By doing away with the Mercury & Air

Toxics Standards, EPA is sentencing entire segments of the population to a poisoned death,” she said.

A MULTITUDE OF POLLUTANTS from the Duke Energy plant are linked to illnesses suffered in the community.

Armijo believes the pollutants have caused a high frequency of such abnormal health conditions, especially in the area of Belews Lake, a nearby lake created in 1973 by Duke Energy as a home for the Belews Creek Steam Station, a cooling station for the power plant.

The lake is a recreational hotspot, especially in the warmer months, when families swim, sail, and relax in the water. The power station’s pollutants, including mercury, arsenic, and lead, have leaked into the groundwater for over 40 years while contaminating the nearby Dan River that 300,000 neighboring residents rely on for drinking water.

“A friend of mine who lives in what used to be Duke Energy employee housing, just minutes away from the power station, developed a brain tumor before discovering the presence of radon in her tap water. The residents who lived there before her also suffered from neurological illnesses. The impact of these health conditions is debilitating and affects all aspects of your life,” Armijo said.

“After my cousin was diagnosed with a brain tumor, he was unable to drive for six months due to the side effects of his anti-seizure medication,” Armijo said. “Instances like that are so common here that they go unaddressed.”

For communities like Armijo’s that are predominantly people of color, protecting the Mercury & Air Toxics Standards is a life or death issue. ■