

The Threat to Scientific Integrity at EPA

COMMENTARY

Chemical industry influence pervasive at the agency in the last year

The “revolving door” and collusion between the regulated chemical industry and U.S. Environmental Protection Agency (EPA) regulators has reached new heights in the first year of the Trump Administration. With chemical industry insiders and advocates for dismantling EPA taking leadership positions at the agency, there is a clear breakdown in the use of independent science, a deference to industry interests, and a failure to take action to protect public health and ecosystems.



THE REVOLVING DOOR THREATENS ENVIRONMENTAL PROTECTION

The passage of the nation's environmental statutes empowered EPA with broad mandates to protect air, water, land, and people. However, EPA's failures in carrying out these mandates have been documented in reports by the U.S. Government Accountability Office (formerly the U.S. General Accounting Office), EPA's own Inspector General, and the media. Despite many dedicated employees, EPA's mission has been corrupted by the "revolving door"—former EPA officials and lawmakers taking lobbying positions with the industry that advance policies that weaken environmental regulations or create exemptions for polluters.¹

FORMER EPA STAFF, INDUSTRY CONSULTANT, NOW NOMINATED TO EPA POSITION

The Trump Administration's nominee for EPA Assistant Administrator for Chemical Safety and Pollution Prevention, Michael L. Dourson, PhD, has spent a good deal of his career helping companies resist constraints on their use of potentially toxic compounds in consumer products, which could present significant conflicts of interest.² His nomination is awaiting a Senate hearing, as of this writing.

Dr. Dourson's professional history provides an example of the "revolving door." He started as a staff toxicologist at EPA in 1980. By 1989, he headed a pesticides and toxics group, supervising scientists who support EPA's regulatory work. In 1995, Dr. Dourson started his consulting group, Toxicology Excellence for Risk Assessment (TERA), performing work for chemical companies, producing research and reports that often "downplayed the health risks posed by their compounds."³

When hired by Dow AgroSciences, the manufacturer of chlorpyrifos, Dr. Dourson and his researchers produced three papers claiming flaws in peer-reviewed studies linking delays

in fetal development with chlorpyrifos exposure.⁴ EPA Administrator Scott Pruitt overruled the findings of his agency's own scientists to reverse an effort to ban chlorpyrifos, claiming the science is "unresolved" and deciding it would push off any finding on the pesticide to 2022.

OTHER EXAMPLES OF THE REVOLVING DOOR

Former Louisiana Senator David Vitter sponsored legislation in 2016 to "reform" the federal Toxic Substances Control Act (TSCA) and subsequently joined a firm that lobbies

on behalf of industry, including the American Chemistry Council. Nancy Beck, formerly a senior director at the American Chemistry Council, became, in Spring 2017, the Deputy Assistant Administrator of EPA's Office of Chemical Safety and Pollution Prevention, a position that does not require Senate confirmation.

Nader Elkassabany, PhD, former branch chief of the Risk Assessment and Science Support Branch in the Antimicrobial Division in EPA's Office of Pesticide Programs, left EPA to join CropLife America as senior director of environmental policy, where he helps to manage the pesticide industry trade association's Environmental Risk Assessment Committee and its working groups. CropLife America has been an aggressive advocate for pesticide dependency.

Perhaps the highest profile example of the revolving door is Michael Taylor, JD, former vice-president for public policy at Monsanto, and current Deputy Commissioner for Foods and Veterinary Medicine, Food and Drug Administration (FDA). Mr. Taylor's appointment to FDA by the Obama administration in 2009 sparked outrage from environmentalists because of his ties to the biotech giant Monsanto. From 1998 until 2001, Mr. Taylor served as the vice president for public policy at the company, and is credited with paving the way for the explosion of genetically engineered (GE) crops in the marketplace.

DOCUMENTS SHOWING COLLUSION SURFACED IN 2017

In a lawsuit against Monsanto by cancer victims who link their non-Hodgkin's lymphoma to exposure to glyphosate-based herbicides—in particular, Monsanto's Roundup—a federal judge unsealed documents showing collusion between officials at EPA and Monsanto to fight a cancer classification for glyphosate. The documents were released in two actions—in March

and August—and have come to be called the “Monsanto Papers.” The documents include Monsanto’s internal emails and email traffic between the company and federal regulators and implicate Monsanto as the ghostwriter of research that was later attributed to academics.

The released files show that Monsanto was told about the IARC cancer classification by a deputy division director at the EPA, Jess Rowland, before the report was released, allowing the company to be prepared with a public relations assault on the finding before its publication.⁵ According to Monsanto’s internal emails, Mr. Rowland had promised to fend off efforts by the Department of Health and Human Services (HHS) to conduct a separate review of the chemical, which never ended up occurring. The documents show a refusal by both EPA and HHS to protect public health over industry interests and advance the science on issues such as carcinogenicity of chemicals.

The Monsanto papers add to evidence of collusion in “The Poison Papers” (<https://www.poisonpapers.org>)—a project of The Bioscience Resource Project (BRP) and the Center for Media and Democracy (CMD) that makes public more than 20,000 documents obtained through legal discovery in lawsuits against Dow, Monsanto, EPA, the U.S. Forest Service, the U.S. Air Force, and pulp and paper companies, among others. These papers show that both industry and regulators understood the dangers of many chemical products and worked together to conceal this information from the public and the press.

REAL-LIFE IMPACTS OF COLLUSION: Did Dow Chemical Influence the EPA Administrator’s Decision to Reverse Chlorpyrifos Ban?

EPA Administrator Scott Pruitt met privately with Dow Chemical’s CEO several weeks before reversing EPA’s tentative decision to ban chlorpyrifos. A copy of Mr. Pruitt’s schedule reveals he met with Dow CEO, Andrew Liveris, on March 9 at a Houston hotel and “twenty days later Mr. Pruitt announced his decision to deny a petition to ban Dow’s chlorpyrifos pesticide from being sprayed on food.”⁶ Of note is Dow Chemical’s contribution of \$1 million dollars to President Trump’s inauguration celebration.

EPA’s own chlorpyrifos risk assessment, which incorporates recommendations from a 2016 Scientific Advisory Panel (SAP), finds that children exposed to high levels of chlorpyrifos have brain damage, attention problems, attention-deficit/hyperactivity disorder problems, and pervasive developmental disorders.⁷ The SAP agreed with EPA that there is an association between prenatal exposure to chlorpyrifos and neurodevelopmental outcomes in children. After the 2016 review, EPA concluded that there is “sufficient evidence” that there are neurodevelopmental effects even at levels below the agency’s level of concern, and that current approaches for evaluating



chlorpyrifos’ neurological impact is “not sufficiently health protective.”

The influence of the industry is also evident in the action of the Trump Administration to ask a federal court to delay a prior settlement agreement that the National Marine Fisheries Service (NMFS) issue findings on the hazard that three highly toxic organophosphate pesticides pose to endangered species. The move is widely seen as being influenced by the chemical industry, in particular the new agrichemical conglomerate DowDuPont.

GLYPHOSATE IN FOOD SUPPLY REMAINS UNMONITORED

Despite the known risks of glyphosate exposure, the U.S. Department of Agriculture (USDA) first agreed to and then abandoned plans to monitor the U.S. food supply for the presence of glyphosate residues in March 2017. Meanwhile, independent testing of food commodities, from oatmeal products, including baby food, to honey, continues to find glyphosate residues. The federal government’s pesticide monitoring program is run jointly by USDA, FDA, and EPA.

EPA RESISTS SETTLEMENTS WITH LITIGANTS

In mid-October, EPA Administrator Scott Pruitt announced another action in his effort to remake the agency by issuing a directive that seeks to stop the practice—often referred to as “sue and settle”—of settling lawsuits with outside (often, environmental) groups. Ending the practice of “sue and settle” has long been high on the to-do lists of business groups and conservatives. Most environmental statutes contain a citizen suit provision to ensure that EPA takes appropriate timely action, and thus the practice of bringing pressure with

lawsuits has been an important tool for the public in ensuring accountability of federal agencies.

INDUSTRY INFLUENCE UNDERMINES PROTECTION FROM HORMONE-DISRUPTING CHEMICALS

Scientists at Rutgers University and North Carolina State University warn that inadequate federal testing, disproportionate industry influence, and subverted regulatory oversight threaten decades of progress on protecting people from hormone disrupting chemicals.⁸ They express the fear that EPA's Endocrine Disruptor Screening Program is facing elimination, and concern that toxics policy is being orchestrated and implemented by individuals with close ties to the chemical industry, including a former senior director of the American Chemistry Council, the main trade association for the chemical industry. Earlier this year, the National Academies of Sciences, Engineering, and Medicine (NAS) recommended to EPA a strategy to evaluate the evidence of adverse human health effects from low-dose exposure to endocrine disruptors. NAS believes that EPA's current process, which utilizes traditional toxicity testing, misses effects that occur at doses lower than those evaluated by EPA.⁹

OTHER INDUSTRY TACTICS

The revolving door and other forms of collusion may be among the most effective strategies of the industry, however other tactics are used to gain political influence. Front groups—industry representatives posing as public interest groups—are used to influence elected officials and sway public opinion.

Public Employees for Environmental Responsibility (PEER) found that scientists working with USDA do not have adequate protections from pressure and retaliation when researching issues that threaten the interests of powerful agrichemical corporations like Monsanto. The organization filed a petition for rulemaking with the agency in March, seeking to strengthen USDA's Scientific Integrity Policy and adopt best practices used in other federal agencies in order to prevent political suppression or alteration of studies.¹⁰

In a letter to the scientific journal *Critical Reviews in Toxicology*, scientists called for the retraction of a 2016 paper that refuted glyphosate's cancer risks after learning that the paper was secretly edited and funded by Monsanto, manufacturer of glyphosate. Contrary to the journal's conflict-of-interest disclosure statement, Monsanto directly paid at least two of the scientists who authored the paper, and a Monsanto employee substantially edited and reviewed the article prior to publication.

Finally, one of the most outrageous of industry's covert tactics was used by Syngenta Crop Protection. An investigative report in 2013¹¹ uncovered that the company launched a multi-million dollar campaign to discredit critics of its controversial herbicide atrazine, most notably Tyrone Hayes, PhD, whose research finds that the chemical feminizes male frogs.

CONCLUSION

As the chemical industry seeks to control the science and regulatory process that drives the public debate and restrictions on pesticide use, local communities and, in some cases, states are adopting standards that reject EPA pesticide decisions viewed as inadequate and not protective of public health and the environment. If the chemical industry is successful in introducing doubt into the scientific and community discussion on the hazards of pesticides, as it has tried to do with the glyphosate (Roundup), it only strengthens the resolve of local decision makers who embrace the precautionary approach, which seeks to avoid harm or uncertainty. As organizations like Beyond Pesticides advance management practices that do not require toxic chemical inputs, such as certified organic farming and landscape management, the ultimate question becomes, "Why do we need to use these chemicals if we can get the same results, or better results, without using them?" In this context, the community and state debate on land management is guided by those with expertise in organic practices that support soil biology and biodiversity as a means of preventing pests and nurturing ecosystems, plants, and crops that are resilient and less vulnerable to disease and infestation.

ENDNOTES

- 1 <https://ethics.harvard.edu/economy-influence-shaping-american-public-health-and-environment>.
- 2 <https://apnews.com/877205e5d2c04b3eb40984ff02201c79/EPA-nominee-once-helped-chemical-industry,-lobbyists>.
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- 5 Email exchange in Exhibit 43. Case 3:16-md-02741-VC Document 649-13 Filed 10/27/17. Available at: <https://usrtk.org/wp-content/uploads/2017/10/Email-EPA-Jess-Rowland-discusses-IARC-finding-before-it-is-made-public.pdf>.
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- 7 <https://www.epa.gov/ingredients-used-pesticide-products/revision-human-health-risk-assessment-chlorpyrifos>.
- 8 Barrett, E.S. and Patisaul, H.B., 2017. Endocrine disrupting chemicals and behavior: Re-evaluating the science at a critical turning point. *Hormones and behavior*.
- 9 National Academies of Sciences, Engineering, and Medicine. 2017. *Application of Systematic Review Methods in an Overall Strategy for Evaluating Low-Dose Toxicity from Endocrine Active Chemicals*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/24758>.
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- 11 Clare Howard, 2013. Pest Control: Syngenta's Secret Campaign to Discredit Atrazine's Critics. <https://100r.org/2013/06/pest-control-syngentas-secret-campaign-to-discredit-atrazines-critics>.