Environment Committee Agenda

July 31, 2024

Welcome & Introductions	Chairwoman Julianne Kurdila, Cleveland-Cliffs, Inc.
Public Policy Report	James Lee, OMA Staff
Presentation	Jeff Rose and Dan Longbrake, Battelle
Counsel's Report	Frank Merrill, Bricker Graydon LLP
Guest Speaker	Bob Hodanbosi, Ohio EPA

Our Meeting Sponsors!

2024 Environment Committee Calendar
Meetings begin at 10 a.m.

Wednesday, October 30

OMA Environment Committee - Jul 2024

Name	Company	Location
Kristin Aldred	Stericycle, Inc.	Bannockburn, IL
Thomas Andersen	Cenovus Energy	Lima, OH
Ryan R. Augsburger	The Ohio Manufacturers' Association	Columbus, OH
Jenny Avellana	DuPont - Circleville	Circleville, OH
Jennifer Banks	Hi-Tek Manufacturing, Inc.	Mason, OH
Greg Bennett	Owens Corning	Granville, OH
Leah E. Blinn	Civil & Environmental Consultants, Inc.	Moon Township, PA
Michael E. Born	Shumaker, Loop & Kendrick, LLP	Toledo, OH
Joe Clark	Prospira America	Upper Sandusky, OH
Conor Collins	Simon Roofing & Sheet Metal Corporation	Columbus, OH
Mickey Croxton	Plaskolite	Columbus, OH
John Eckstein	Honda Development & Manufacturing of America, LLC	Marysville, OH
Tom Evans	The Ohio Manufacturers' Association	Columbus, OH
Greg Faith	Summers Rubber Company	Mansfield, OH
Shane A. Farolino	Roetzel & Andress	Akron, OH
Madeline Fleisher	Owens Corning	Granville, OH
Lisa Garcia	Energy Transfer, Sunoco LP	Harrisburg, PA
Allison Glasgow	The Ohio Manufacturers' Association	Columbus, OH
Cory Gonya	Nutrien	Lima, OH
Tonja Gray	Crown Equipment Corporation	New Bremen, OH
Saee Gunjal	Illuminate USA	Columbus, OH
Kelley Hand	BSI	Columbus, OH
Ron Hansen	GT Environmental Inc.	Columbus, OH
Eric Heis	Illuminate USA	Columbus, OH
Kevin Hoggatt	Intel Corporation	Columbus, OH
Matthew F. Johnston	Worthington Enterprises	Columbus, OH
Ryan Jones	Brilex Industries, Inc.	Youngstown, OH
Kailah Joy-Alford	Campbell Soup Company	Camden, NJ
Sarah Kuhnell	Worthington Enterprises	Columbus, OH
Julianne Kurdila	Cleveland-Cliffs, Inc.	Cleveland, OH
Jay Lawniczak	Charter Steel	Cleveland, OH
Leticia Leao	Ultium Cells	Warren, OH
James Lee	The Ohio Manufacturers' Association	Columbus, OH
Jennifer Lehman	Campbell Soup Company	Camden, NJ
Timothy Ling	Plaskolite	Columbus, OH
Jeffrey Linstedt	Whirlpool Corporation Findlay Operations	Findlay, OH
Armand Massary	ArtiFlex Manufacturing LLC	Wooster, OH
Andrew G. McCorkle, C.P.G., P.G.	Civil & Environmental Consultants, Inc.	Worthington, OH
Frank Merrill	Bricker Graydon LLP	Columbus, OH
Christine M. Morgan	Jones Day	Atlanta, GA
Beth Mullen	McWane Ductile-Ohio, A Division Of McWane, Inc.	Coshocton, OH
Peggy Mullins	National Machine Co. dba NMG Aerospace	Stow, OH
Jane M. Neal	AMG Vanadium LLC	Cambridge, OH
Tom R. Nelson	Yoder Lumber Company, Inc.	Millersburg, OH
Jay O'Bryant	Vistra	Columbus, OH
Michael Oconnor	Smithers-Oasis Company	Kent, OH
Gary Pasheilich	Roetzel & Andress	Columbus, OH
Mitchell Peter	Plaskolite	Columbus, OH
Edward J. Pfau	Verdantas	Dublin, OH
Danyelle Lynne Phelps	Owens Corning - Granville	Granville, OH
Kenneth Brice Poland	The Ohio Manufacturers' Association	Columbus, OH
Ryan Preas	MW Metals Group	Dayton, OH
Mike Purcell	GBQ Partners LLC	Columbus, OH
Amy Rasmussen	Modula	Franklin, OH
Mike Rectanus	BSI Group America	Columbus, OH
Carissa Rexroth	MW Metals Group	Dayton, OH

OMA Environment Committee - Jul 2024

Name	Company	Location
Christy Rideout Schirra	Bricker Graydon LLP	Columbus, OH
Rene Rimelspach	American Honda Motor Co. Inc.	Marysville, OH
Dennis Rowbotham	G R T Utilicorp, Inc.	Wooster, OH
Gary Lee Schade	DSV Solutions LLC	Little Hocking, OH
Jennine Seebach	United Surface Finishing	Canton, OH
Tim Shrewsburg	B A S F Coatings Technical Support Center - Whitehouse	Whitehouse, OH
Christopher N. Slagle	Bricker Graydon LLP	Columbus, OH
Traci Spencer	TechSolve - SW Ohio MEP	Cincinnati, OH
Duane Steelman	Cleveland-Cliffs, Inc.	Cleveland, OH
Chris Tindera	Charter Steel	Cleveland, OH
Christopher Ward	Calfee, Halter & Griswold LLP	Columbus, OH
Raymond Wayne	Heritage Thermal Services	East Liverpool, OH
Adam Weiser	Advanced Fiber Technology	Bucyrus, OH
Kelydra Welcker	Syensqo	Marietta, OH
Matthew W. White	Edison Welding Institute	Columbus, OH
Lauren Winegardner	Nutrien	Lima, OH
Karen Ann Winters	Squire Patton Boggs	Columbus, OH
Camille Yancey	Bricker Graydon LLP	Columbus, OH

Total Participants 74

Jeffrey Rose – Bio

Jeffrey Rose serves as the Vice President of Government Affairs and Public Policy for Battelle's Applied Science and Technology Organization. Jeff is responsible the development and execution of outreach, advocacy, and strategy before Congress, federal agencies, and elected officials. Jeff works closely with senior leaders within the business to develop and advance Battelle's budget, policy and legislative priorities.

Prior to joining Battelle in June of 2018, Jeff served two terms running New Hampshire state agencies as a cabinet-level appointee. Jeff's agencies were responsible for the economic development, travel & tourism, parks & recreation, forestry & land management, and cultural resources within the Granite State. Jeff earned a reputation for working effectively with both sides of the political aisle, having successfully served in both Republican and Democratic administrations.

Jeff spent nine years working for BAE Systems Electronic Solutions Sector based in Nashua, New Hampshire in a variety of government relations and public affairs roles. Jeff began his career working for Members of Congress over eight years – working in both the House and Senate.

Jeff is a graduate from Marist College with degrees in Political Science and Communications. He is married and is the proud father of a college sophomore.

Daniel W. Longbrake

Daniel Longbrake joined Battelle in January 2021 as the Commercial Business Lead for PFAS and Environment. He is responsible for advancing Battelle's tools, technologies, and services by developing and executing go-to-market strategies and nurturing client relationships, positioning Battelle as a trusted partner to secure long-term mutually beneficial business relationships with Battelle's commercial customers.

Mr. Longbrake has close to 35 years of experience in the environmental field and has held national leadership positions related to business development and sales, business operations and technical project management. His environmental experience spans multimedia investigation and remediation; RCRA permitting, closure and corrective action; CERCLA RI/FS and RD/RA; transactional due diligence related to mergers, divestitures & acquisitions; and, environmental, health and safety compliance/permitting.

Prior to joining Battelle, Daniel worked for TRC from 2011 to 2021. Mr. Longbrake held a variety of roles with increasing responsibilities that included leading the go-to-market strategy for PFAS, establishing TRC's national account management program, and developing the format for sales and business development processes. In those positions, Daniel led mutil-functional teams and provided leadership in goal setting and executing strategy, tactics, and actions to achieve sales and financial performance goals.

Before joining TRC, Mr. Longbrake worked for several environmental consulting and engineering firms. During that time, Daniel held business development leadership, operational leadership, and principal technical oversight roles.

Daniel holds a Bachelor of Science degree in Geology from Allegheny College in Meadville, Pennsylvania.

Bob Hodanbosi

Chief, Division of Air Pollution Control

Bob Hodanbosi became chief of the Division of Air Pollution Control (DAPC) in September 1992. His current duties include being responsible for the air pollution control program for the state of Ohio and development of the programs needed to comply with the Clean Air Act. Prior to the current position, Bob held several earlier positions within Ohio EPA, including at the Northeast District Office.

Bob received his master's degree in chemical engineering at the Cleveland State University, and a bachelor's in central engineering at the Cleveland State University and is a registered professional engineer in Ohio.

TO: **OMA Environment Committee**
FROM: **James Lee**
RE: **Environment Public Policy Report**
DATE: **July 31, 2024**

Overview

The OMA has been engaging on a wide range of environmental activity at both the state and federal levels this quarter.

Legislative initiatives from state lawmakers have slowed down significantly following the passing of the state budget in the summer of 2023 and the recent short stint of legislation that accompanied the 2024 capital budget process. Slow activity is likely to remain as political squabbling between House and Senate leadership has placed the legislature in gridlock. New issues begin to emerge as the Ohio EPA is gearing up for a proposal in next year's budget cycle that will increase air permit fees that will require approval from the legislature.

On the state regulatory front, downgraded Ozone designations for northeast Ohio are on the horizon, impacting industry in the area with new emission requirements.

Unfortunately, federal EPA activity continues to ramp up. President Biden's EPA continues to take an aggressive anti-business approach, implementing numerous burdensome regulations that threaten America's manufacturing competitiveness. That pace is likely to accelerate following the president's recent announcement that he will not be seeking a second term. The OMA continues to publicly pushback on overzealous regulations, which have already increased costs to businesses by $350 billion, a 25 percent increase from the last year of Obama's second term in office.

OMA's Editorial Highlighting Manufacturers' Leadership in Environmental Stewardship

The OMA was recently featured in a Cleveland Plain Dealer editorial, which highlighted the significant contributions of Ohio's manufacturers to the state economy and their leadership in environmental stewardship. The editorial presented data showing the industry's remarkable reductions in water and air pollution through innovative technologies, as well as its leading position in recycling practices among all economic sectors. You can read the full article in today's materials.

Environment Legislation

Ohio EPA Proposed Air Permit Fee Increases

The Ohio EPA has opened conversations to stakeholders to discuss a potential increase in air permit fees to support the Division of Air Pollution Control's (DAPC) staffing operations and remain compliant with US EPA standards. The EPA has not raised it fees since being adopted over thirty years ago in the legislature, leading to budget shortfalls that will require the US EPA Region 5 to administer Ohio's air program if revenues do not increase. Ohio EPA notes that their proposed fee structure is lower than neighboring states who have also been prompted to raise their fees in recent years.

The Ohio EPA has proposed the following fee structure to generate 7 million in additional revenue:

1. **Title V facilities**
   - Additional base fee of $5,000 per year
   - The annual emission-based fee structure will remain the same.

2. **Synthetic Minor facilities**
   - Additional base fee of $5,000 per year
   - 50% increase to the current annual emission-based fee structure

3. **Permit To Install (PTI) Fees**
   - 50% increase of current PTI fee structure

Senate Bill 200: Carbon Capture

Senators Tim Schaffer and Al Landis introduced a placeholder bill in Senate Energy and Public Utilities Committee stating the their intent to move legislation to establish a comprehensive regulatory framework to ensure the safe and secure deployment of carbon capture and storage technologies in Ohio. The proposed legislation aims to regulate CCS technologies and carbon dioxide storage in geological formations, potentially granting Ohio regulatory authority over such operations.

While formal language has not been released to the public, proponents of the legislative concept testified in support of the effort to implement policies that encourage innovation and the development of CCS technology to drive economic growth and reduce greenhouse gas emissions, highlighting the critical impact on Ohio's industrial sectors by providing new avenues for companies to operate competitively while reducing their environmental impact and creating jobs.

The OMA will keep members informed on the potential impacts to manufacturers when a formal sub bill is introduced.

Senate Resolution 296: Opposing Biden's Greenhouse Gas Emissions

Senators Rob McColley and Bill Reineke have introduced a senate resolution condemning the Biden administration's regulations targeting greenhouse gas emissions from coal and natural gas-fired powerplants. The resolution criticizes the proposals for exceeding the US EPA's regulatory authority and highlights the threats to the US economy by imposing unachievable emission reduction timelines for greenhouse gases, while also requiring the adoption of new technologies that are not yet commercially available, including carbon capture. The Resolution was passed and adopted by the Ohio Senate.

Potential Bond Measure for Long Term H2Ohio Funding coming in 2025

Governor DeWine has signaled soft support for a long-term funding source for H2Ohio programs to sustain the initiative following his tenure as governor. The Program is a multi-agency water quality initiative aiming to reduce phosphorus and nutrient runoff, restore Ohio wetlands and rivers, and improve drinking water quality. The Program has successfully reduced phosphorus runoff in Lake Erie by 20 percent, halfway to achieving the program's 40 percent goal, spawning the governor's support for continued funding. Stakeholders are considering a potential statewide ballot measure to establish long-term bond funding to support these programs in a future election.

Solid Waste Fees Defeated

The OMA continues to monitor Senate Bill 119, which aimed to raise solid waste fees for Ohio manufacturers in response to concerns about out-of-state waste in Seneca County. Proposed by Senator Reineke, the bill sought to deter waste export by increasing state fees from $4.75/ton to $8.50/ton, impacting construction debris fees as well. This would cost Ohio over $150 million annually and hinder business growth. After opposition from the OMA and testimony by Tim Ling,

Senator Reineke agreed to amend the bill, removing the fee hikes—a significant victory for Ohio manufacturers. The bill received a fourth hearing in the House but is unlikely pass.

ESG Investing

Senate Bill 6, a bill barring state funds from investing based on environmental, social or governance practices, has passed the Senate and is currently awaiting House action. Under this proposed legislation, the board that governs specific funds will not be allowed to adopt a policy under which the board makes investment decisions with the primary purpose of influencing any social or environmental policy.

State Regulatory Activity

Cleveland Ozone Nonattainment

The OMA has been engaging on forthcoming ozone attainment rules that will impact the Cleveland area. The area is failing to meet required ozone standards set for August 2024 based on monitoring data from 2021-2023. If this trend continues, Cleveland will be reclassified to a more serious nonattainment level, triggering stricter Clean Air Act rules that will directly impact manufacturers.

In March, the OMA made comments on Ohio EPA's proposed rules, which can be found in today's meeting materials. The OMA hosted an informational webinar with Ohio EPA staff on May 29 outlining next steps for the state's rule out of these new regulations that can be found on the OMA's website.

US EPAs Good Neighbor Rule Paused in Ohio due to Yost's Successful Challenge

In June, the U.S. Supreme Court granted a stay against the U.S. EPA's so-called "Good Neighbor Plan," temporarily blocking its implementation in Ohio. In their decision, the court ruled that the emissions-reductions standards set by the plan were likely to cause "irreparable harm" to nearly half of all U.S. states.

The rule significantly expands federal oversight of interstate air emissions. Ohio Attorney General Dave Yost joined Indiana and West Virginia in the suit to successfully obtain stay on the rule which will cost manufacturers and industrial producers an estimated $910 million in yearly compliance costs. Manufacturers of cement, iron and steel, glass, and chemicals will be severely impacted by new regulations. Multiple justices on the court have publicly stated their skepticism of the rule and are set to issue an opinion on its constitutionality in a separate case before the court.

The OMA issued a statement on the block, pointing out the unattainable and damaging standards the rule would have put in place, and thanking Ohio Attorney General Dave Yost for leading the charge to challenge the rule. Bricker Graydon has produced a memo for OMA members, outlining the Good Neighbor Plan's impact on Ohio manufacturers which can be found in today's environment materials.

Lucas County and Toledo Sue USEPA Over Maumee Watershed TMDL General Permit

Lucas County and the City of Toledo have filed a lawsuit against the U.S. Environmental Protection Agency (US EPA). The lawsuit alleges that the EPA knowingly violated the Clean Water Act by approving the total maximum daily load (TMDL) plan to restore the western basin of Lake Erie. This legal action is part of a broader effort to combat harmful algal blooms in Lake Erie, which have been a persistent environmental issue. The county commissioners argue that the TMDL plan, which is a regulatory component of the Clean Water Act intended to address the cleanup of impaired waters, fails to meet the legal standards necessary to prevent the pollution

that leads to these algal blooms. They are particularly concerned about the runoff from “mega farms” and other non-point sources, which they believe is a significant contributor to the problem. The OMA advocated for the northwest region’s manufacturers during the drafting of the TMDL plan, pushing back against inequitable policy proposals unfairly targeting point sources, which are not responsible for the major sources of pollution that come from non-point sources like agricultural runoff.

New Nutrients Implementation of Water Quality Standards Rule
Ohio EPA is considering a new rule to determine if streams and rivers are impaired by excessive nutrients, using a weight of evidence approach for consistency. A draft version will be available for comment in fall 2024.

In June, the OMA submitted comments supporting this approach and emphasized using the 2015 Stream Nutrient Assessment Procedure (SNAP) for the proposed Nutrient ESO. The OMA also raised concerns about the 2018 framework for large river rulemaking in developing the Nutrient Implementation Standards rule. Both comments can be found in today’s materials.

H2Ohio PFAS Rivers Survey
The Ohio EPA has announced plans to utilize H2Ohio Funds for a comprehensive statewide river survey focused on PFAS contamination. This initiative positions Ohio as the first state in the country to embark on such an extensive survey. Although the Governor has clarified that this effort is not a prelude to immediate regulations and defers to the federal government for remediation guidelines, concerns over data collection remain as the results could be weaponized as a precursor to future regulatory actions from succeeding administrations or the legislature.

Federal Regulatory Activity and OMA Action

PM2.5 Standard
In a devastating blow to manufacturers, the Biden administration finalized the US EPA’s PM 2.5 rule, lowering the National Ambient Air Quality Standards for fine particulate matter to 9 micrograms per cubic meter. Lowering this standard will force manufacturers to comply with unattainable emissions requirements, cost as much as $197 billion in lost U.S. economic activity, and result in a loss of 974,000 jobs nationwide.

The OMA has made numerous efforts to oppose the rule through public comments and coalition letters to federal agencies, congress, and the white house. Upon release of the final rule, President Ryan Augsburger issued as statement opposing the rule as a disaster for manufacturers in Ohio.

In June, the National Association of Manufacturers (NAM) filed the opening brief in litigation opposing the rule. The OMA will keep its members apprised of the efforts to fight this rule in the courts. The OMA hosted an informational webinar with Ohio EPA staff on May 29 outlining next steps for the state’s rule out of these new regulations that can be found on the OMA’s website.

Biden Administration Publishes “Wish List” for Upcoming Regulations
The Biden Administration recently unveiled a “wish list” of regulations to add to the regulatory onslaught coming out of Washington. The list includes the U.S. EPA’s rule on greenhouse gas emissions from existing natural gas power plants, the last of its rules on implementing the 2016 amendments to the Toxic Substances Control Act, and the final version of a far-reaching update to hazardous air pollutant reporting requirements. The entire list can be found on the Regulation Information website: https://www.reginfo.gov/public/do/eAgendaMain

White House Rolls Out Plan for Plastic Pollution

The Biden Administration recently rolled out a new plastics action plan. The plan, similar to the notorious PFAS Strategic Roadmap released at the birth of the administration, lays out a detailed outline of priority regulations impacting manufacturers' product design, use of raw materials and chemistry, and recycling practices. The approach is not limited to the U.S. EPA but a large series of federal regulatory agencies. The plan's outline is included in today's meeting materials.

US EPA Reinserts Nuisance Rule

U.S. EPA issued a proposed rule in February to reverse its prior November 2020 final action removing Ohio's air nuisance rule from the Ohio State Implementation Plan (SIP). The proposed rule follows a 6th Circuit decision remanding the 2020 removal action back to the EPA for further consideration.

The OMA supported the November 2020 final action and filed an amicus brief in the 6th Circuit matter, urging the court to uphold the EPA's decision. The current proposed rule would determine that the prior November 2020 action was in error and correct that action by reinstating the air nuisance rule back into the SIP.

The rule is a direct threat to manufacturers, making it easier for environmental activists to target companies with frivolous lawsuits. The OMA has made formal comments to the US EPA opposing the rule. Contact James Lee at jlee@ohiomfg.com if you wish to read the comments. Staff will keep members informed of future actions to oppose the reinstatement of this rule.

SEC Finalizes Scaled Back Climate Disclosure Rule

The Securities Exchange Commission (SEC) finalized its proposed climate disclosure rule that will institute broad, sweeping climate reporting obligations for publicly traded companies. The mandates reporting on complex climate-related information — including greenhouse gas emissions — regardless of whether the information has an impact on the company's financial performance, potentially exposing industry to unfeasible reporting requirements, frivolous litigation and public relations attacks from environmental activists.

Though the rule still imposes many burdensome reporting requirements on manufacturers, the industry can celebrate a silver lining in the rule in its final version, as the agency dropped its proposed Scope 3 reporting requirements that would force manufacturers to track and disclose all emissions within their supply chain. This was a main point of contention from the business community, which the OMA has publicly opposed. In addition to the Scope 3 change, the SEC exempted smaller public companies from Scope 1 and Scope 2 emissions reporting and delayed the rule's effective dates. The final rule also is more narrowly focused on so-called "material" information (data investors need to make informed decisions) than what had been proposed previously.

A memo on the rule from Bricker Graydon is available in today's meeting materials.

PFAS Drinking Water Standards

The Biden administration recently finalized its excessively stringent PFAS Drinking Water Standards rule that will require utilities to reduce PFAS compound levels to the lowest level they can be reliably measured. The already exceptionally low standards will be reduced from 70 parts per trillion to 4 parts per trillion. The rule will lead to significant cost increases throughout the supply chain impacting not only manufacturers but the US economy as a whole.

The OMA has engaged on this rule through multiple comments to federal agencies and alerted state regulators of its detrimental impact since the rule was proposed in 2023. In the weeks prior to finalization, The OMA wrote to the Biden White House asking the administration to rescind their unattainable drinking water standards that fail to provide benefits to public health and threaten Ohio's manufacturers with inordinate compliance burdens and costs. That letter can be found in today's Environment materials.

Additional PFAS Regulations

Actions on PFAS from federal and state policy makers have been making headlines. Manufacturers should be keeping up with multiple developments including:

- The Recent publication of US EPA's final rule designating PFOA and PFOS hazardous substances under CERCLA. The rule is the agency's first-ever use of CERCLA § 102 to designate hazardous substances – and in a recent announcement the US EPA announced their enforcement discretion policy essentially stating that they will not target public entities and agriculture – suggesting their focus for enforcement is set solely on manufacturers (See Beveridge & Diamond Article in today's materials).
- The US EPA's TSCA rule broadening scope mandated reporting requirements on the presence of 1,462 PFAS chemicals in their processes and products dating back to 2011.
- Proposed TRI rules that would Categorize all PFAS as chemicals of special concern (COCS), eliminate exemptions for reporting trace amounts of PFAS and mandate suppliers to inform purchasers of any product containing COCS, regardless of quantity or concentration.
- Extensive new PFAS Air Emission reporting requirements proposed under the US EPA's Air Emissions Reporting Requirements (AERR)
- Incoming proposed rules from the US EPA that that would require the investigation and clean-up of certain PFAS at facilities that manage hazardous waste
- Finalized Automatic Additions of Seven PFAS compounds required for TRI reporting in 2024 (due July 1 2025 – see article in today's materials for more information).
- The DeWine Administration's efforts to implement a statewide survey of Ohio's rivers for PFAS contamination.
- The DeWine Administration's use of Battelle's PFAS Annihilator to destroy stockpiled firefighting foam containing PFAS. Battelle's technology has been patented to effectively destroy and remediate PFAS compounds in wastewater to non-detectible levels.

AERR Revisions

The OMA made comments in opposition to the US EPA's proposed revisions to the Air Emissions Reporting Requirements (AERR). The proposed revisions will significantly impact manufacturers by increasing compliance costs, introducing uncertainty in reporting, and mandating the collection of hazardous air pollutants (HAPs). This will place serious financial burdens on manufacturers, particularly small businesses, potentially leading to increased litigation and compromising the accuracy of emissions data. Additionally, the revisions include substances like PFAS in their requirements without providing sufficient toxicity data, potentially opening reporting to the nearly 15,000 PFAS compounds that exist in the supply chain.

According to the EPA's own estimates, the proposed Air Emissions Reporting Requirements will have a compliance cost of over $3 billion and impact 120,000 facilities, of which 43,000 are small businesses.

Methylene Chloride Ban

The US Environmental Protection Agency has finalized its ban on specific uses of methylene chloride.

The OMA submitted comments opposing the proposed ban which takes a throw-the-baby-out-with-the-bath-water approach by extending the ban to commercial and industrial entities, including manufacturers, who have been safely using methylene chloride for specific critical functions for decades. There is no viable alternative for manufacturers to methylene chloride for certain adhesive production.

Though the finalized rule imposes significant chemical and safety regulatory burdens on manufacturers, the OMA's comments, which garnered national media attention, were effective in securing certain carveouts for manufacturers that allow continued use of methylene chloride as an adhesive for acrylics and polycarbonate, with select exemptions being granted allowing continued industrial use of Methylene chloride for the next 5 years.

You can find the OMA's comments in this section's meeting materials.

Drum Reconditioning Rules

The OMA submitted comments to the US EPA to protect the "RCRA empty" exemption, which has recently come under scrutiny from the federal agency following its Drum Reconditioner Damage Case Report published in the fall of 2022. The agency has issued advanced notice of proposed rulemaking as they look to reexamine current drum management and reconditioning practices.

The exemption, since its inception in 1980, has been a major RCRA policy success story that has enabled widespread container reuse, as opposed to "single-use" of these containers. Reopening this "RCRA empty" container exemption risks inhibiting this successful sustainability effort, "destroying" legitimate container reconditioners, and causing a shift away from container reuse towards single-use containers – a regrettable step backwards in sustainability. Alternatively, The OMA is recommending the agency examine industry best practices to address concerns for public health, rather than implementing onerous regulations that will harm sustainability efforts.

Draft National Strategy to Prevent Plastic Pollution

The OMA submitted comments in July opposing the EPA's draft strategy to reduce post-consumer materials in waterways and oceans. The agency's proposed rule solely targets plastics and overlooks other postconsumer materials, which fails to adequately address sea-based sources of pollution, diverging from Congress's intent outlined in the Save Our Seas Act. Moreover, the rule is duplicative, burdensome, and unnecessary as existing Stormwater NPEDS permits already adequately regulate plastic pollution during the production process.

The OMA recommended expanding the draft strategy's scope to incorporate a holistic approach to pollution that balances industry's needs and will produce a meaningful environmental impact.

NESHAP Iron and Steel Rule

The US EPA recently finalized its proposed National Emission Standards for Hazardous Air Pollutants targeting Iron and Steel facilities. The rule will come at a negative cost to the industry, but the US EPA removed numerous mandates that Cleveland-Cliffs CEO, Lourenco Goncalves deemed "technically and economically unfeasible." The rule also drew criticism from US Senator

Sherrod Brown who joined a bipartisan group of colleagues from Ohio’s neighboring states to oppose the rule that threatened potential outsourcing of Ohio’s steel industry.

During the public comment period, OMA Environmental Counsel, Frank Merrill, testified before the US EPA challenging the rules initial emission standards and regulatory language. The OMA’s concerns centered on the EPA's cost estimates and projected benefits, highlighting the industry's already stringent regulatory landscape. In response, the OMA advocated for evidence-based, technically justified regulations rather than relying on assumptions that the agency has failed to support. Merril’s testimony can be found in today’s meeting materials. The OMA was joined by Cleveland Cliffs and US Steel in their opposition.

Environment Legislation
Prepared by: The Ohio Manufacturers' Association
Report created on July 26, 2024

HB33 **FY24-25 OPERATING BUDGET** (EDWARDS J) To make operating appropriations for the biennium beginning July 1, 2023, and ending June 30, 2025, to levy taxes, and to provide authorization and conditions for the operation of state programs.

Current Status: 1/24/2024 - Consideration of Governor's Veto; Senate Overrides Veto, Vote 24-8

State Bill Page: https://www.legislature.ohio.gov/legislation/legislation-summary?id=GA135-HB-33

HB469 **CREATE RIVER COMMISSION** (ROBB BLASDEL M, JONES D) To create the Ohio River Commission of Ohio.

Current Status: 6/25/2024 - House Economic and Workforce Development, (First Hearing)

State Bill Page: https://www.legislature.ohio.gov/legislation/legislation-summary?id=GA135-HB-469

HR33 **TRAINS - HAZARDOUS MATERIALS** (ROBB BLASDEL M, MCNALLY L) To urge the United States Congress to pass legislation requiring railroad companies to inform local and state government officials when trains carrying potentially hazardous materials travel through their respective jurisdictions.

Current Status: 3/23/2023 - **ADOPTED BY HOUSE**; Amended on Floor, Resolution Vote 94-1

State Bill Page: https://www.legislature.ohio.gov/legislation/legislation-summary?id=GA135-HR-33

SB6 **ESG POLICIES-STATE ENTITIES** (SCHURING K) Regarding environmental, social, and corporate governance policies with respect to the state retirement systems, Bureau of Workers' Compensation, and state institutions of higher education.

Current Status: 6/18/2024 - House Financial Institutions, (Second Hearing)

State Bill Page: https://www.legislature.ohio.gov/legislation/legislation-summary?id=GA135-SB-6

SB119 **WASTE DISPOSAL LAW CHANGES** (REINEKE W) To make changes to the laws governing the transfer and disposal of solid waste and construction and demolition debris, including increasing certain fees.

Current Status: 5/1/2024 - House Energy and Natural Resources, (Fourth Hearing)

State Bill Page: https://www.legislature.ohio.gov/legislation/legislation-summary?id=GA135-SB-119

SR36 **URGE CONGRESS-TRAIN LEGISLATION** (RULLI M) To urge the United States Congress to pass legislation requiring railroad companies to inform local and state government officials when trains carrying potentially hazardous materials travel through their respective jurisdictions.

Current Status: 3/8/2023 - Referred to Committee Senate Transportation

State Bill Page: https://www.legislature.ohio.gov/legislation/legislation-summary?id=GA135-SR-36

Environment

White House Rolls Out Plan for Plastic Pollution
July 26, 2024

The Biden Administration recently rolled out a new plastics action plan. The plan, similar to the notorious PFAS Strategic Roadmap released at the birth of the administration, lays out a detailed outline of priority regulations impacting manufacturers' product design, use of raw materials and chemistry, and recycling practices.

The approach is not limited to the U.S. EPA but a large series of federal regulatory agencies. *7/23/2024*

House Energy Chair Demands Transparency from EPA on PFAS Classification
July 19, 2024

House Energy and Commerce Committee Chair Cathy McMorris Rodgers (R-WA) and Environment, Manufacturing, and Critical Materials Subcommittee Chair Buddy Carter (R-GA) this week sent a letter to the U.S. Environmental Protection Agency (EPA) demanding additional details regarding the agency's efforts to designate additional PFAS substances as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

On April 17, the EPA designated two of the nearly 14,000 PFAS substances, perfluorooctanoic acid and perfluorooctanesulfonic acid, as "hazardous substances" under CERCLA.

The letter demands the EPA explain their reasoning and release details to the public on how these chemicals are determined to be hazardous and asks if they will be transparent to the public in future designations. *7/15/2024*

Biden Administration Publishes "Wish List" for Upcoming Regulations
July 12, 2024

The Biden Administration last week unveiled a "wish list" of regulations to add to the regulatory onslaught coming out of Washington.

The list includes the U.S. EPA's rule on greenhouse gas emissions from existing natural gas power plants, the last of its rules on implementing the 2016 amendments to the Toxic Substances Control Act, and the final version of a far-reaching update to hazardous air pollutant reporting requirements.

The entire list can be found on the Regulation Information website. *7/10/2024*

OMA Issues Statement on Temporary Halt of "Good Neighbor" rule by SCOTUS
June 27, 2024

The Supreme Court of the United States this week temporarily blocked the Environmental Protection Agency's "Good Neighbor Plan" by a 5 to 4 vote.

In their decision, the court ruled that the emissions-reductions standards set by the plan were likely to cause "irreparable harm" to nearly half of all U.S. states.

The OMA issued a statement on the block, pointing out the unobtainable and damaging standards the rule would have put in place, and thanking Ohio Attorney General Dave Yost for leading the charge to challenge the rule. 6*/27/2024*

Ohio EPA Shifts Resource Exchange Platform
June 21, 2024

The Ohio Environmental Protection Agency (Ohio EPA) has shifted its Materials Marketplace to a new platform. The marketplace is a free online materials exchange for waste, byproduct, surplus, and expired materials.

Click here to learn more. 6*/12/2024*

Ohio EPA to Hold Outreach Meeting on Expected Reclassification to Serious Ozone Nonattainment
June 17, 2024

The Ohio Environmental Protection Agency (Ohio EPA) is hosting a virtual meeting on Thurs. June 27 discussing the U.S. EPA's Cleveland area reclassification to Serious Ozone Nonattainment. This virtual outreach is available to all potentially impacted facilities in the Cleveland area to increase understanding and answer questions. 6*/12/2024*

NAM Files Opening Brief in PM 2.5 Suit
June 17, 2024

The National Association of Manufacturers (NAM) this week filed the opening brief in litigation opposing the U.S. EPA's proposed PM 2.5 National Ambient Air Quality Standards rule that would impose unattainable new standards on the nation's manufacturers. The NAM estimates the new rule threatens manufacturers with nearly $200 billion in nationwide compliance costs while potentially killing nearly 1 million jobs. The OMA hosted a webinar with the Ohio EPA last month, detailing the rule's compliance challenges, impactful regulations, and timeline for state implementation of the new rule. Contact OMA staff to view the webinar. 6*/12/2024*

25 Ohio Companies Leading U.S. in Carbon Footprint Reduction
June 17, 2024

USA Today recently published a list of U.S. based companies leading the charge in reducing their carbon footprint. Twenty-five Ohio companies topped the list, including manufacturers The Goodyear Tire & Rubber Company, The J.M. Smucker Company, The Lincoln Electric Company, Worthington Enterprise, Materion, Mettler Toledo, and Timken Steel. To make the list, those companies with more than $50million in revenue must have reduced their carbon intensity (carbon emissions divided by revenue) by at least 3% year-to-year. 6*/12/2024*

Ohio's Manufacturers at the Forefront of Environmental Stewardship
June 7, 2024

Last week, an op-ed from OMA's James Lee was featured in Cleveland.com, highlighting the advancements Ohio's manufacturers have made in propelling the state economy, while also leading the charge in environmental stewardship and responsibility. *5/31/2024*

US EPA Finalizes Rule Adding Seven Additional PFAS to TRI
May 23, 2024

The United States Environmental Protection Agency (EPA) last week finalized a rule adding seven new PFAS chemicals to the Toxic Release Inventory (TRI). These PFAS, which are added to the TRI automatically upon review from the EPA, must be added to reports for Year 2024. *5/22/2024*

State of Ohio Accepting Project Applications for 2024 Wetland Grant Program
May 10, 2024

The Ohio Department of Natural Resources (ODNR) is currently accepting applications for the 2024 Statewide Wetland Grant Program, as part of Governor DeWine's H2Ohio initiative. This program aims to fund high-quality natural infrastructure projects that will enhance water quality and reduce nutrient runoff across the state. The grant offers up to 100% funding for eligible projects, with a minimum funding request of $50,000, and no maximum cap. In 2023, ODNR allocated $8.2 million in H2Ohio grants to support 12 new wetland projects in 11 Ohio counties, benefiting a variety of grantees including non-profits, park districts, and local entities. *5/6/2024*

Ohio EPA Proposes Increase to Air Permit Fees
May 10, 2024

The Ohio EPA is considering increases to air permit fees that would support the Division of Air Pollution Control's (DAPC) staffing operations in order to remain compliant with U.S. EPA standards. Fees have remained unchanged for 30 years. Ohio EPA notes that their proposed fee structure is lower than neighboring states who have also been prompted to raise their fees in recent years. Synthetic Minor permits will see the most significant increases in fees. Members interested in working with OMA staff on this issue should complete this form. *5/9/2024*

Toledo and Lucas County Commissioners Sue U.S. EPA
May 3, 2024

Lucas County and the City of Toledo have filed a lawsuit against the U.S. Environmental Protection Agency (US EPA). The lawsuit alleges that the EPA knowingly violated the Clean Water Act by approving the total maximum daily load (TMDL) plan to restore the western basin of Lake Erie. This legal action is part of a broader effort to combat harmful algal blooms in Lake Erie, which have been a persistent environmental issue. The county commissioners argue that the TMDL plan, which is a regulatory component of the Clean Water Act intended to address the cleanup of impaired waters, fails to meet the legal standards necessary to prevent the pollution that leads to these algal blooms. They are particularly concerned about the runoff from "mega farms" and other non-point sources, which they believe is a significant contributor to the problem. The OMA advocated for the northwest region's manufacturers during the drafting of the TMDL plan, pushing back against inequitable policy proposals unfairly targeting point sources, which are not responsible for the major sources of pollution that come from non-point sources like agricultural runoff.

US EPA Finalizes Methylene Chloride Rule
May 3, 2024

This week, the US Environmental Protection Agency (US EPA) finalized its rule on methylene chloride banning its commercials use under the 2016 Toxic Substances Control Act. Methylene chloride, typically used as a paint stripper, would still be allowed in certain "critical" uses in the military and industrial processing. The OMA submitted a letter which received national attention urging the US EPA to allow these acceptations as methylene chloride is critical as an adhesive in manufacturing acrylics and polycarbonates. 4*/30/2024*

OMA Joins Other Trade Associations Opposing US EPA's Reinsertion of 'Air Nuisance' Rule

April 26, 2024

The OMA joined other trade associations this week opposing the US EPA's proposal to reinstate the Air Nuisance rule into Ohio state regulations. The rule would allow activist citizens to target manufacturers with frivolous lawsuits. The OMA backed the repeal of this rule, which was rescinded by the Trump administration in 2020. *4/24/2024*

US EPA Finalizes PFAS Drinking Water Rule

April 26, 2024

Last week, the US EPA finalized their rule on PFAS limits for drinking water. The EPA stated that it will focus enforcement on "parties who significantly contributed to the release of PFAS chemicals into the environment, including parties that manufactured PFAS or used PFAS in the manufacturing process…" while ignoring entities such as community and municipal water systems and publicly owned landfills, airports, and treatment works. *4/24/2024*

SUBSCRIBER

Ohio's manufacturers at the forefront in pursuit of environmental stewardship: James Lee

Updated: May. 31, 2024, 5:45 a.m. | Published: May. 31, 2024, 5:45 a.m.

By Guest columnist, cleveland.com and The Plain Dealer

COLUMBUS, Ohio -- Manufacturing is the foundation of Ohio's economy and the greatest contributor to the state's GDP, to the tune of $133 billion, providing high-paying employment opportunities to nearly 700,000 Ohioans of all education levels.

These jobs pave the path to the middle class and lay the foundational building blocks for growing economic prosperity in communities throughout the state. Manufacturers understand that these strengths mean little, however, if they come at the expense of the places we live.

Contrary to aging stereotypes of smokestacks and wasteful byproducts, manufacturing's success today has not come at the expense of our state's air, water, or soil. Rather, Ohio's manufacturers are leading the charge in reducing air emissions, water discharge pollution, and pioneering recycling efforts – all while providing economic benefits for their employees and surrounding communities.

James Lee is the director of public policy for the Ohio Manufacturers' Association, specializing in environmental policy. ohio manufacturer's association

Let's look at the facts:

One of the most notable achievements of Ohio's manufacturing industry is its remarkable progress in reducing air emissions. Through billions of dollars in investments toward innovative technologies, manufacturers have significantly lowered their carbon footprint, improved air quality, and safeguarded public health. From investing in cleaner energy sources to implementing energy-efficient practices, Ohio's manufacturers have demonstrated their commitment to combating climate change while maintaining their competitive edge.

Since 1988, industrial investments in air quality have contributed to a nearly 90% reduction in total air emissions, according to the Ohio Environmental Protection Agency, as noted in our 2024 "Ohio Manufacturing Counts" report. Since 1980, per the same source, Ohio has seen a 60% reduction in carbon monoxide emissions and a nearly 90% reduction in nitrous oxide and particulate matter. Sulfur dioxide emissions have also seen a reduction of over 95%.

But Ohio's manufacturers are not resting on their laurels.

Earlier this year, steel manufacturer Cleveland-Cliffs, glassmakers O-I Glass and Libbey Glass, and ketchup titan Kraft Heinz were among the recipients of a $6 billion investment from the U.S. Energy Department for decarbonization efforts. This commitment from the manufacturing industry to further advance environmental stewardship is projected not just to slash emissions by up to 99%, but also create thousands of jobs.

Intel Corp., which is constructing a $28 billion production facility in central Ohio, dubbed the Silicon Heartland, is emblematic of other leading technology manufacturers, setting a goal of achieving net zero greenhouse gas emissions by 2040. The Intel campus just east of Columbus will use 100% renewable electricity and achieve net positive water worldwide by 2030.

In addition to mitigating air and water pollution, Ohio's manufacturing industry has emerged as a leader in recycling efforts. Manufacturers have implemented comprehensive recycling programs to reduce waste and promote circular economies, turning industrial byproducts into valuable resources.

In fact, according to the Ohio EPA, Ohio's industrial recycling practices far outpace that of any other competing business sector, with manufacturers leading the way in reducing and recycling 53% of materials in 2021 as compared to 28% by residential and commercial users. Examples include innovative product packaging, recycling scrap materials, and repurposing production waste.

Ohio's manufacturers are driving innovative environmental solutions across the supply chain to the benefit of us all. While many might first associate manufacturing with family-sustaining careers and other economic benefits, it is important to remember the positive environmental impact the industry provides for our communities, and part ways with outdated misperceptions to the contrary. Ohio manufacturers' commitment to reducing environmental impact is a testament to the transformative power of innovation and collaboration.

James Lee is the Director of Public Policy for the Ohio Manufacturers' Association, specializing in environmental policy. Previously, Lee served on the legislative affairs team for the Ohio Department of Development in the DeWine administration and worked in various roles for the Ohio House of Representatives.

Have something to say about this topic?

* Send a letter to the editor, which will be considered for print publication.

* Email general questions about our editorial board or comments or corrections on this editorial to Elizabeth Sullivan, director of opinion, at esullivan@cleveland.com

Around the Web

March 5, 2024

VIA ELECTRONIC MAIL (DAPC-comments@epa.ohio.gov)

Attn: Mr. Paul Braun
Ohio EPA Division of Air Pollution Control
P.O. Box 1049
Columbus, OH 43216-1049

RE: Public Notice – Request for Comment Ohio Administrative Code (OAC) Chapters 3745-110, 3745-21 and 3745-31: Cleveland Nonattainment Area Reclassification to Serious Ozone Nonattainment

Dear Mr. Braun:

Pursuant to Ohio EPA's public notice of draft rules revising OAC Chapters 3745-110, 3745-21 and 3745-31, The Ohio Manufacturers' Association (OMA) is hereby providing Ohio EPA with written comments.

The OMA is dedicated to protecting and growing manufacturing in Ohio. The OMA represents over 1,400 manufacturers in every industry throughout Ohio. For more than 100 years, The OMA has supported reasonable, necessary, and transparent environmental regulations that promote the health and well-being of Ohio's citizens. The OMA appreciates the opportunity to comment on Ohio EPA's draft rules. The OMA has members that are impacted by these rules.

The OMA understands that Ohio EPA is updating the rules as required by the Clean Air Act for serious ozone nonattainment areas and urges Ohio EPA to ensure the draft rule changes align but do not exceed those federal requirements. The OMA would furthermore request that the agency condition the applicability of all rule changes on the serious nonattainment designation going into effect.

The OMA further offers a few more specific suggestions regarding the various proposed rules.

Suggested Changes and Requested Points of Clarification to Draft Rules

OAC 3745-110-02(A)(1)(b), which lowers the NOx applicability threshold from 100 TPY to 50 TPY, does not condition this change on the actual designation of serious nonattainment in the Cleveland area. To ensure these changes only occur based on a designation of serious nonattainment, the OMA requests that Ohio EPA conditions these changes on such a designation.

Similarly, OAC 3745-21-11(A), 3745-21-12(A)(1)(a), 3745-21-14(A)(1)(a), 3745-21-16(A)(1)(a), and 3745-21-21(A) lower the requirements threshold for VOC RACT for various facilities, but does not condition these changes on the actual designation of serious nonattainment in the Cleveland area. The OMA requests that these changes be conditioned on such a designation, as is consistent with the NSR applicability standards contained in OAC 3745-31-21(B).

Further, OAC 3745-110-03(J)(3) previously allowed that BAT in a permit issued five years prior to the rule effective date would satisfy RACT. This has been changed in the draft rules to five years prior to submission of a RACT study. Given the one-year timeframe for submission of a RACT study that the rules provide for, this makes the requirement more stringent by potentially shortening this timeframe from five to four years. The OMA requests that the proposed rule be rewritten to stay consistent with prior rules and redefine this timeframe to five years.

Additionally, the OMA notes that Ohio EPA has made several additions to 31-01(M)(3)(g)-(h). The OMA would request that these draft changes more closely follow statutory language in the Clean Air Act to ensure consistency and for greater clarity.

Lastly, OAC 3745-110-03(K) exempts certain sources from RACT requirements and NOx emissions limitations. The OMA requests clarification from Ohio EPA regarding the applicable burden of proof required for an emitter to demonstrate one of its sources meets an exemption.

The OMA would like to thank Ohio EPA for the opportunity to comment and to participate in this rulemaking process. If EPA has any questions regarding the foregoing, please do not hesitate to contact me at (614) 224-6834. We look forward to working with Ohio EPA on this and any future stages of this rulemaking.

Sincerely,

James Lee
Director of Public Policy Services

cc: Julianne Kurdila, Committee Chair
Christine Rideout Schirra, Esq.

PROTECTING & GROWING
OHIO MANUFACTURING

For Immediate Release

The OMA Issues Statement on SCOTUS Halt of 'Good Neighbor' Rule

COLUMBUS, Ohio – The Ohio Manufacturers' Association President Ryan Augsburger today issued the following statement on the temporary block of the Environmental Protection Agency's 'Good Neighbor Plan' by the U.S. Supreme Court:

"The decision by the Supreme Court today is a win for manufacturers across the country against the onslaught of unobtainable standards being pushed out of Washington.

The 'Good Neighbor Plan' sets a scientifically unobtainable air emissions standard that threatens to hamstring Ohio's competitiveness, job growth, and the livelihoods of communities with only a negligible benefit to the environment.

Ohio manufacturing leaders commend Attorney General Dave Yost for his leadership in challenging the unreasonable regulations before the highest court to defend Ohioans from higher costs and lost jobs."

###

The Ohio Manufacturers' Association is Ohio's largest statewide business association comprised solely of manufacturers. Established in 1910, the OMA's mission is to protect and grow Ohio manufacturing. It represents manufacturers of all sizes in every subsector of the industry. Manufacturing is Ohio's largest economic sector, employing approximately 690,000 Ohioans and contributing more than $133 billion annually to the economy. Visit ohiomfg.com, or follow us on LinkedIn, Twitter, Facebook, and YouTube.

Tom Evans
Director, Communications and Marketing
(614) 557-0937
tevans@ohiomfg.com

August 7, 2023

VIA Electronic Mail (epa.dswcomments@epa.ohio.gov)

Ohio EPA
Division of Surface Water – Permits Processing Unit
P.O. Box 1049
Columbus, OH 43216-1049

Re: **OHP000001 - Comments of the Ohio Manufacturers' Association on Ohio EPA's Proposed Draft of the Maumee Watershed Nutrient TMDL Total Phosphorus General NPDES Permit**

Dear Mr. Brumbaugh:

The Ohio Manufacturers' Association (OMA) appreciates the opportunity to provide these written comments on Ohio EPA's July 7, 2023, proposed draft of the Maumee Watershed Nutrient TMDL Total Phosphorus General NPDES Permit (Draft GP). The OMA submits these comments in accordance with the deadline of August 7, 2023, as set forth in the Public Notice (#186080).

The OMA is dedicated to protecting and growing manufacturing in Ohio. The OMA represents over 1,400 manufacturers in every industry throughout Ohio. For more than 100 years, The OMA has supported reasonable, necessary and transparent environmental regulations that promote the health and well-being of Ohio's citizens. The OMA appreciates the opportunity to comment on Ohio EPA's Maumee Watershed TMDL GP Framework. Ohio EPA's development and implementation of the Maumee Watershed Nutrient TMDL is of great interest to The OMA, as the TMDL and the associated General Permit have the potential to significantly impact The OMA's members, some of whom are NPDES permit holders (whether direct or indirect dischargers) located within the Maumee watershed and, specifically, within the initial list of dischargers expected to be covered by the GP.

The OMA presents the following comments regarding the proposed Maumee TMDL Draft GP:

<u>Support for the General Permit as an Essential Element of the Maumee TMDL:</u>

Based on the information set forth in the final Maumee TMDL dated June 30, 2023, the GP concept appears to be a workable and necessary tool to meet the proposed Maumee Watershed TMDL wasteload allocation (WLA) without imposing an undue and

unreasonable burden on NPDES-permitted dischargers. The OMA notes that the GP is an essential element of the TMDL and that without the GP, the TMDL would impose an unnecessary and unfair hardship on NPDES-permitted dischargers. Subject to these comments, The OMA generally supports the proposed GP as critical to TMDL implementation.

Prior Comments of The OMA

The OMA appreciates OEPA's consideration of our June 7, 2023 comment letter. To the extent the comments were not addressed in the July 7th proposed GP, The OMA incorporates the comments by reference.

* * *

The OMA would like to thank Ohio EPA for the opportunity to comment and to participate in this stakeholder process. We look forward to working with Ohio EPA as these comments are taken into consideration and at any future stages of this process.

Sincerely,

James Lee
Ohio Manufacturers' Association
Director, Public Policy Services

cc: David Brumbaugh, OEPA (David.brumbaugh@epa.ohio.gov)
Julianne Kurdila, Committee Chair
Christine Rideout Schirra, Esq.

June 7, 2023

VIA Electronic Mail (david.brumbaugh@epa.ohio.gov)

Mr. David Brumbaugh
Ohio EPA Division of Surface Water
P.O. Box 1049
Columbus, OH 43216-1049

Re: **Comments of the Ohio Manufacturers' Association on Ohio EPA's Preview Draft of the Maumee Watershed Nutrient TMDL Total Phosphorus General NPDES Permit**

Dear Mr. Brumbaugh:

The Ohio Manufacturers' Association (OMA) appreciates the opportunity to provide these written comments on Ohio EPA's May 3, 2023, preview draft of the Maumee Watershed Nutrient TMDL Total Phosphorus General NPDES Permit (Draft GP).

The OMA is dedicated to protecting and growing manufacturing in Ohio. The OMA represents over 1,400 manufacturers in every industry throughout Ohio. For more than 100 years, The OMA has supported reasonable, necessary and transparent environmental regulations that promote the health and well-being of Ohio's citizens. The OMA appreciates the opportunity to comment on Ohio EPA's Maumee Watershed TMDL GP Framework. Ohio EPA's development and implementation of the Maumee Watershed Nutrient TMDL is of great interest to The OMA, as the TMDL and the associated General Permit have the potential to significantly impact The OMA's members, some of whom are NPDES permit holders (whether direct or indirect dischargers) located within the Maumee watershed and, specifically, within the initial list of dischargers expected to be covered by the GP.

The OMA presents the following comments regarding the proposed Maumee TMDL Draft GP:

1. Support for the General Permit.

Based on the information detailed in Ohio EPA's presentations, the draft Fact Sheet and the Draft GP, the GP concept appears to be a workable approach to meeting the proposed Maumee Watershed TMDL wasteload allocation (WLA) without imposing an undue and unreasonable burden on NPDES-permitted dischargers. Subject to these comments and to the future opportunity to comment during the formal public comment period on the GP, The OMA generally supports the development of the draft GP.

2. Preliminary Comments on Draft GP.

While The OMA generally support the Draft GP, we offer the following comments to help refine and improve the Draft GP:

a. **Compliance Required 4/5 years.** The OMA requests that the Fact Sheet be revised to reflect the discussion in Ohio EPA's April 18th OEPA stakeholder call detailing the basis for evaluating compliance on a "4 out of 5 years" basis during each GP permit cycle. The OMA agrees that this type of compliance review appropriately reflects the variability predicted under Annex 4 and related nutrient attainment analysis.

b. **Total Phosphorus Load Calculation/Median versus Average** (page 6 of GP). We anticipate that since each individual permit will establish a discharger's sampling requirements, there may need to be some flexibility in (or further rational for) the methodology for calculating the TP load. We request clarification in the Draft Fact Sheet on how TP values should be calculated under the Draft GP.

c. **Pollution Prevention Obligations in Part V.W** (Part V.W, page 14 of GP). Pollution prevention is not a required component of the point source allocation under the TMDL and should not be included in the GP. Pollution prevention requirements are appropriately managed, if and as needed and authorized by law, through individual NPDES permits. In fact, for most dischargers covered by the Draft GP, Pollution Prevention concepts are already prescribed in individual permits and the Draft GP language would cause duplication and potential conflict, in addition to being beyond the scope of the TMDL. The OMA therefore believes that it is unreasonable and confusing to include pollution prevention requirements in the Draft GP and we request that this language be removed from the Draft GP. The OMA generally supports the comments of the Maumee Coalition on this issue as well.

d. **Changes to Allowance for Future Growth** (Part IV.B.2). A change to the Allowance for Future Growth should be subject to not only notice but also to a public comment period in accordance with Ohio's administrative procedures.

The OMA looks forward to the opportunity for discharger stakeholder input on the proposed GP and associated Fact Sheet when Ohio EPA issues these documents for public comment. The OMA reserves the right to comment further on the Maumee TMDL GP in future comment periods.

The OMA would like to thank Ohio EPA for the opportunity to comment and to participate in this drafting process. We look forward to working with Ohio EPA as these comments are taken under consideration and at any future stages of this process.

Sincerely,

James Lee
Director, Public Policy Services

cc: Julianne Kurdila, Committee Chair
Christine Rideout Schirra, Esq.

June 28, 2024

VIA Electronic Mail (dsw_rulecomments@epa.ohio.gov)

Rule Coordinator
Ohio EPA, Division of Surface Water
P.O. Box 1049
Columbus, OH 43216-1049

Re: **Comments of the Ohio Manufacturers' Association on Ohio EPA's Early Stakeholder Outreach – New Implementation of Water Quality Standards Rule (OAC 3745-2)**

Dear Ohio EPA:

Pursuant to Ohio EPA's Early Stakeholder Outreach for the *New Implementation of Water Quality Standards Rule* dated May 2024 (the Nutrient Implementation Standards ESO or Nutrient ESO), the Ohio Manufacturers' Association (OMA) is hereby providing Ohio EPA with written comments regarding Ohio EPA's Nutrient ESO in accordance with the associated June 28, 2024, deadline for comments.

The OMA is dedicated to protecting and growing manufacturing in Ohio. The OMA represents over 1,400 manufacturers in every industry throughout Ohio. For more than 100 years, The OMA has supported reasonable, necessary and transparent environmental regulations that promote the health and well-being of Ohio's citizens. The OMA appreciates the opportunity to comment on Ohio EPA's Nutrient Implementation Standards ESO. Members of the OMA have the potential to be significantly impacted by new implementation standards for nutrients in surface water, either as holders of individual NPDES direct discharger permits or as businesses that discharge through municipal wastewater systems that would ultimately have to comply with the rule. To this end, OMA participated in both the 2014/2015 Stream Nutrient Assessment Procedure (SNAP) technical advisory group (TAG) and in the 2018 stakeholder process for the Nutrient Standards for Large Rivers ESO, both predecessors to the current Nutrient ESO.

The OMA presents the following comments regarding the Nutrient Implementation Standards ESO:

1. General Support for Weight of Evidence Approach.

Subject to our further comments in this letter and to future input in the stakeholder and rulemaking process, OMA supports Ohio EPA's proposed use of a "weight of evidence" approach to evaluate the impacts of nutrients on streams. OMA's support is evidenced

by its participation in the 2015 SNAP TAG and development of the associated proposed rule outline and decision matrix incorporated into SNAP. The weight of evidence approach reflects the complex confounding factors that influence the extent to which certain nutrients at certain loadings will impact a given stream and is essential to ensuring a rule based on sound science and addressing real (versus theoretical) impairments. OMA also supports development of the rule as an implementation rule to support decision-making regarding potential stream impairments in Ohio, so long as the implementation rule does not artificially identify "impaired" waters based on arbitrary adoption of unduly stringent target parameters.

2. Importance of the 2015 SNAP, Rule Outline and Flow Charts.

The OMA believes that Ohio EPA should rely upon the 2015 SNAP (and resulting rule outline and implementation flow charts for point and nonpoint sources) as the guiding force for the current proposed Nutrient ESO. The SNAP resulted from a robust and thorough stakeholder process that represented the expertise and feedback of a wide range of interested parties: agency representatives, environmental, industry, municipal and agricultural groups, academic advisors and water consultants, to name a few. The stakeholders developed a workable, effective and efficient rule framework, with appropriate target conditions and ranges, that would be protective of Ohio's streams while minimizing the risk of artificially identifying water bodies as impaired and the resultant unreasonable costs to address such an artificial designation.

OMA incorporates by reference its prior feedback in the SNAP process, which is referenced in the Nutrients ESO[1] and requests that the SNAP serve as the primary framework for the new Nutrient Implementation Standards rulemaking.

3. Concerns Regarding 2018 Large River Nutrient Standards ESO

The Nutrient Implementation Standards ESO indicates that Ohio EPA will be considering the 2018 large river rulemaking in developing the Nutrient Implementation Standards rule. The OMA has serious concerns regarding certain elements of the 2018 proposed framework and we hereby incorporate by reference OMA's October 26, 2018, "*Comments on Ohio EPA's Early Stakeholder Outreach – Nutrient Water Quality Standards for Ohio's Large Rivers (OAC 3745-1-36)* and we have attached a copy of these comments as Attachment 1.

The OMA specifically requests that Ohio EPA incorporate each of these important comments into the Impairment Standards rulemaking. The OMA also reserves the right

[1] Nutrient Technical Advisory Group: ***epa.ohio.gov/divisions-and-offices/surface-water/reports-data/nutritient-technical-advisory-group-tag*** (Nutrient ESO at 2.).

to provide further comment based on its continued review of new information and analysis referenced in the Nutrient Impairment Standards ESO and as may be provided by Ohio EPA or stakeholders in the rulemaking process.

4. Response to Ohio EPA's ESO Questions.

The comments presented in this letter generally respond to the questions that Ohio EPA presents in the Nutrient Impairment Standards ESO. As to Ohio EPA's request for feedback on the impact of the proposed rule on business in Ohio, the OMA believes that generally, if the rule is drafted in a scientifically-sound and reasonable manner that reflects stakeholder input and is designed to identify *actual* nutrient impairments, Ohio business and residents will likely benefit. However, if the rule unnecessarily regulates nutrients that are not actually causing impairments to Ohio waters or imposes inefficient or arbitrary compliance requirements, such an over-reaching rule will harm not only businesses by imposing unnecessary and potentially exorbitant cost on industry but will also harm municipalities and by extension all residents of Ohio.

5. Request for a Robust Stakeholder Process to Support Rule Development.

The OMA requests that Ohio EPA adopt a stakeholder process, similar to the SNAP TAG, to allows the agency to capture the significant expertise and experience of multiple stakeholder groups in development of a defensible and workable implementation rule. We believe that, as with the 2015 TAG, engaging the stakeholders in the development process will likely generate a widely acceptable, protective and cost-effective rule and will reduce the risk of a failed rulemaking.

We further request that the stakeholder process begin as soon as possible, before the rule framework is developed. Ohio is fortunate to have, and should take advantage of its, many informed, interested and thoughtful stakeholders who bring to the table a tremendous amount of expertise and perspective on the issue of nutrients and water quality. For a successful stakeholder process, the underlying data and analyses that will be used in the new implementation procedures should be presented to the stakeholders so that they can fully understand the assumptions and potential limitations, particularly with respect to large rivers.

* * *

OMA requests that Ohio EPA incorporate these comments into the Nutrients Implementation Standards rule development, and we look forward to further discussion with Ohio EPA and other stakeholders regarding this important rulemaking through a stakeholder process for rule development and implementation. We believe that the small stream nutrient TAG process resulted in a scientifically-sound, protective and cost-effective rule framework and that the most efficient and protective approach to this rulemaking will be one that carries over the strong attributes of the small stream SNAP framework.

The OMA would like to thank Ohio EPA for the opportunity to comment and to participate in this rulemaking process. We look forward to working with Ohio EPA as these comments are taken into consideration and to providing additional feedback throughout this rulemaking process.

Sincerely,

James Lee
Director, Public Policy Services

Enclosure: Attachment 1
cc: Julianne Kurdila, Committee Chair
Christine Rideout Schirra, Esq.

October 26, 2018

VIA Electronic Mail (dsw_rulecomments@epa.ohio.gov)

Rule Coordinator
Ohio EPA, Division of Surface Water
P.O. Box 1049
Columbus, OH 43216-1019

Re: **Comments on Ohio EPA's *Early Stakeholder Outreach – Nutrient Water Quality Standards for Ohio's Large Rivers (OAC 3745-1-36*)**

Dear Sir/Madam:

The Ohio EPA Division of Surface Water published an Early Stakeholder Outreach (ESO) for Nutrient Water Quality Standards for Ohio's Large Rivers (OAC 3745-1-36) in August 2018, with comments requested by September 26, 2018. This deadline was subsequently extended to October 26, 2018. The Ohio Manufacturers' Association (OMA) appreciates the opportunity to provide Ohio EPA with the enclosed written comments on this proposed rule framework for addressing the complex issue of nutrient impacts in large river systems.

OMA represents more than 1,200 manufacturers in every industry throughout Ohio and includes many members who directly or indirectly discharge to receiving waters in Ohio or who engage in business operations impacted directly or indirectly by the regulation of nutrients. For more than 100 years, OMA has supported reasonable, necessary and transparent environmental regulations that promote the health and well-being of Ohio's citizens. OMA participated in one of the April 2018 public discussion sessions regarding this ESO framework and reviewed the support materials provided by Ohio EPA, and we present these comments in furtherance of our long history of support for scientifically sound, reasonable and protective regulation.

OMA requests that Ohio EPA incorporate the enclosed comments into the ESO rule framework, and we look forward to further discussion with Ohio EPA and other stakeholders regarding this important rulemaking through a stakeholder process for rule development and implementation. We believe that the small stream nutrient TAG process resulted in a scientifically-sound, protective and cost-effective rule framework and that the most efficient and protective approach to this rulemaking will be one that carries over the strong attributes of the small stream SNAP framework.

If Ohio EPA has any questions regarding the foregoing, please do not hesitate to contact me or OMA's environmental counsel, Frank Merrill at Bricker & Eckler LLP (614) 227-8871).

Sincerely,

Rob Brundrett
Director, Public Policy Services

cc: Frank L. Merrill, Esq.
Julianne Kurdila, OMA Environment Chair

OUTLINE
Comments of The Ohio Manufacturers' Association
on Ohio EPA's Early Stakeholder Outreach –
Nutrient Water Quality Standards for Ohio's Large Rivers (OAC 3745-1-36)

A. BACKGROUND AND OMA'S INTERESTS IN THE RULEMAKING

B. GENERAL RESPONSES TO ESO NOTICE QUESTIONS

C. GENERAL COMMENTS

1. Inconsistencies Between Proposed Rule and Technical Basis
   a. *Technical Basis does not Demonstrate Need*
   b. *Definition of "Large River" for this rulemaking*
   c. *Base Flow*

2. Concerns with Technical Basis for Proposed Eutrophication Standards
   a. *Data Show Proposed Thresholds Not Associated with Impairment*
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   c. *D.O. Range Not an Impairment Threshold*
   d. *Concerns Regarding Scientific Basis for BOD_5 Standard*
   e. *Concerns Regarding the Scientific Basis for TKN Standard*
   f. *Concern Regarding Use of TSS as an Indicator of Eutrophication*
   g. *Concerns Regarding Scientific Basis for TP Target*
   h. *Data from Lower Great Miami River Show Proposed Criteria Not Necessary*
   i. *Summary of Concerns Regarding Box Model Eutrophication Standards.*

3. Conformance with SAB and EPA Guidance Necessary
   a. *SAB Concerns Must Be Addressed*
   b. *EPA Guidance Must Be Considered*
   c. *Additional Analyses Needed for Criteria Derivation*

D. ADDITIONAL COMMENTS

1. Administrative Review of Decisions

2. Implementation of Box Model in NPDES and TMDL Scenarios

3. Economically Reasonable and Technically Feasible Permit Limits

4. Request for Stakeholder Group to Participate in Rule Development

E. CONCLUSION

Comments of The Ohio Manufacturers' Association
on Ohio EPA's Early Stakeholder Outreach –
Nutrient Water Quality Standards for Ohio's Large Rivers (OAC 3745-1-36)

The Ohio Manufacturers' Association (OMA) respectfully submits these comments for consideration by the Ohio Environmental Protection Agency (Ohio EPA or OEPA) as part of the Early Stakeholder Outreach process and as it moves towards further evaluation, development and implementation of this potential rulemaking.

A. BACKGROUND AND OMA'S INTERESTS IN THE RULEMAKING

The Ohio EPA Division of Surface Water published an Early Stakeholder Outreach for Nutrient Water Quality Standards for Ohio's Large Rivers (OAC 3745-1-36) in August 2018, with comments requested by September 26, 2018. This deadline was subsequently moved to October 26, 2018. Ohio EPA provided a general description of, and background materials related to, the nutrient water quality rulemaking in the following four documents:

- Early Stakeholder Outreach Fact Sheet (ESO Fact Sheet) (http://www.epa.ohio.gov/dsw/dswrules.aspx)
- Eutrophication endpoints for large rivers in Ohio, USA. Miltner, R. 2018. Environ. Monit. Assess (2018) 190:55 (http://www.epa.ohio.gov/Portals/35/rules/large%20river%20paper.pdf.)
- Presentation Slides (Overview of a Proposed Eutrophication Standard for Ohio's Large Rivers) (http://www.epa.ohio.gov/Portals/35/rules/Large%20River%20Eurtrophication%20Presentation.pdf.)
- A map of Ohio's large rivers (http://www.epa.ohio.gov/Portals/35/rules/Ohio's%20Large%20rivers.pdf.)

Ohio EPA also presented information related to this Early Stakeholder Outreach in its April 2018 Stakeholder sessions. With this ESO, OEPA is seeking input from public on the rule framework and, in order to secure specific feedback from the public, OEPA invites commenters to respond to a specific list of questions.

OMA very much appreciates the opportunity to comment on this proposed rule framework for addressing the complex issue of nutrient impacts in large river systems. OMA represents over 1,400 manufacturers in every industry throughout Ohio and includes many members who directly or indirectly discharge to receiving waters in Ohio or who engage in business operations impacted directly or indirectly by the regulation of nutrients. For more than 100 years, the OMA has supported reasonable, necessary and transparent environmental regulations that promote the health and well-being of Ohio's citizen. OMA participated in one of the April 2018 public discussion sessions regarding this ESO framework and reviewed the support materials provided by Ohio EPA, and we present these comments in furtherance of our long history of support for scientifically sound and reasonable regulation.

The first section of these comments presents our high-level responses to each of Ohio EPA's targeted ESO questions. The remaining sections of these comments further expand on these responses and provide our additional comments regarding the proposed framework presented in the Nutrient Water Quality Standards for Large River ESO.

B. GENERAL RESPONSES TO ESO NOTICE QUESTIONS

The following presents OMA's general responses to the ESO Notice questions, which responses are further discussed in later sections of these comments.

- *Is the general regulatory framework proposed the most appropriate? Should the Agency consider any alternative framework?*

Response: Subject to the comments provided below, we support the use of a box model concept similar to the one presented in the Ohio EPA Presentation Slides, where nutrients are looked at for management decision-making in waters that have been designated as impaired for biological criteria. (ESO Presentation at 11) With that general support in mind, we have concerns regarding the selected indicators and their respective values, and the proposed framework needs to more clearly define the process for determining whether nutrient impacts cause the biological impairment. Impairment is the driving regulatory framework for the Clean Water Act and the Ohio Water Pollution Control Act, and the complex issue of the nutrient causal link to impairment should be addressed in the manner developed for the stream nutrient assessment procedures (SNAP). The SNAP was developed by OEPA with stakeholder input from a wide range of water quality experts and evaluates possible nutrient causes using the box model based on the impairment status (that is, based on whether the river meets applicable water quality standards, such as DO, IBI, etc).

- *Are there considerations the Agency should take into account when drafting this rule?*

Response: The proposed rule should be based on attainment of Ohio's adopted biocriteria for Fish IBI, MIWB, and macroinvertebrate ICI. If the waters of the state achieve their respective biocriteria, independent nutrient criteria should not be independently imposed. Further, the technical concerns outlined in these comments should be addressed in any proposed rulemaking to address nutrients as a causal factor in rivers that experience nonattainment due to biological impairment.

- *Is there any information or data the Agency should be aware of when developing program concepts or rule language?*

Response: See the comments below regarding additional information or data the Agency should consider in adopting numeric nutrient criteria. In particular, we reiterate that OEPA should engage a stakeholder group to provide information, data and further expert support in developing these rules.

- *Ohio EPA would especially like to hear information regarding the following from stakeholders who may be impacted by this program:*

- *Will this regulatory effort have a positive impact on your business? Please explain how.*
- *Will this regulatory effort have an adverse impact on your business? If so, please identify the nature of the adverse impact (for example, license fees, fines, employer time for compliance).*

Response: As indicated above, Ohio manufacturers will be adversely impacted if the proposed rule framework is adopted without modification in accordance with these comments. Specifically, the rules as contemplated would potentially impose significant infrastructure costs on direct dischargers to meet new (and unnecessary) nutrient criteria. The rules would also impact indirect dischargers, who would bear the brunt of infrastructure costs incurred by POTWs or other direct discharges to comply with the rules. Further, these rules will directly and indirectly impact the agricultural industry and operations.

C. GENERAL COMMENTS

As noted above, we support the approach of a Box Model that assess whether large rivers may be impaired due to nutrients where those waters that are not in attainment of biological criteria (Index of biotic integrity (fish), modified index of well being (fish), and Invertebrate Community Index). These trophic indices provide important information on the overall health of a resource and whether the aquatic life objectives of the CWA are attained. Where these are met, further nutrient causal review should be unnecessary or, similar to the SNAP, used in only very limited situations. Where an impairment of biological criteria (nonattainment of use) does exist, such status merely describes what exists at a location; they do not explain why the extant condition is present. Trophic Indices are affected by literally dozens if not hundreds of factors, natural and man-induced. In situations where the habitat has been greatly altered compared to "unaffected" conditions, seeking to ascribe an impact to a particular parameter (such as nutrients) is fraught with uncertainty and should be undertaken in a manner consistent with these comments and our prior work on the SNAP. The cost of erroneously presuming nutrient control will "fix" the problem is enormous.

While OMA agrees that nutrient regulation is appropriate where it is confirmed that nutrients are a primary factor causing adverse impacts on aquatic resources (i.e., impairment or threatened impairment), the approach presented in the Miltner (2018) paper has the potential to result in either "eutrophication" unreasonably being equated to "impairment" and in a "default" causal presumption between certain nutrient indicators and an actual impairment. Either of these outcomes would have significant cost implications without providing a nexus to improving the use attainment for the State's rivers. OMA's primary concerns with the proposed approach are further discussed in detail below.

1. Inconsistencies Between Proposed Rule and Technical Basis

The rule proposal is introduced in the Early Stakeholder Outreach and is described as follows:

> Ohio Administrative Code (OAC) rule 3745-1-36 is a new rule intended to contain Ohio's standards for eutrophication endpoints in Ohio's Large River Assessment

> Units. Large rivers are those that drain over 500 mi^2. This new rule will establish nutrient standards using the following parameters:
>
> - Sestonic Chlorophyll
> - 5-day Biological Oxygen Demand (BOD5)
> - 24-hour Dissolved Oxygen Range (D.O.)
> - Total Kjeldahl Nitrogen (TKN)
> - A screening value for Total Suspended Solids (TSS) for sites where chlorophyll data are lacking
>
> In addition, a target phosphorus concentration is being considered for river segments that are over-enriched as demonstrated by the standard.

The target endpoints for these parameters are presented in the Presentation Slides in the Box Model[1] and the proposed TP target. The technical basis for the proposed eutrophication parameters and endpoints is presented in Miltner (2018). A review of the technical basis and the proposed nutrient water quality standards for Ohio's large rivers shows several inconsistencies that must be addressed before any final rulemaking. These inconsistencies are discussed below.

a. *Technical Basis does not Demonstrate Need*

The Early Stakeholder Outreach (ESO) identifies this proposal as nutrient water quality standards. OAC 3745-1-02 B (26) defines criteria as "elements of water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular use." Thus, the proposed endpoints are supposed to be necessary to protect a designated use. As discussed in Miltner (2018), the use to be protected appears to be aquatic life use. No information is provided to show that aquatic life uses will be protected if the criteria are achieved or that aquatic life uses will be impaired if the criteria are exceeded. Further, the Box Model in the presentation indicates that the parameter will be triggered for review only where biological impairment is occurring (which we assume to mean nonattainment of the biological criteria supporting aquatic life use). For clarity, the rule will need to clearly identify that any nutrient management endpoints are triggered only in cases where a target river experiences nonattainment due to biological impairment caused by nutrients.

Further to this point, the discussion in Miltner (2018) provides an assessment suggesting that the proposed rule is not necessary:

> Also noteworthy is the observation that within the group free from legacy stressors, over 85% of summary biological index scores generally met established goals (i.e., numeric biocriteria) despite showing sensitivity across the enrichment continuum. (Miltner (2018) at 15)

[1] As a point of clarification, the Box Model distinguishes "Enriched" and "Over Enriched" and characterizes "Over Enriched" as an "acute condition". Criteria for other parameters identify acute conditions as causing lethality and it is not clear if this is the intended meaning in the proposed Box Model.

Specifically, a review of the data within the group free from legacy stressors suggests that the proposed criteria are not necessary to protect aquatic life uses. Comment Table 1 summarizes the median parameter values for sites free from legacy stressors in comparison with the corresponding aquatic life criteria values. Although the biometrics are met, the proposed eutrophication criteria for TP, chlorophyll-a, BOD_5 and TSS are exceeded. This observation highly suggests that the proposed criteria are not necessary to protect aquatic life uses and if imposed as criteria, would result in significant compliance costs without corresponding benefit.

Comment Table 1: Median Concentrations Reported for Legacy-free Sites

Group	TP (mg/L)	Chl-a (µg/L)	BOD_5 (mg/L)	D.O. Range (mg/L)	TKN (mg/L)	TSS (mg/L)	Bio-Metric
Fish Sites	0.238	48.2	2.9	-	0.68	28.7	IBI = 50.0 MIWB = 10.2
Bug Sites	0.226	20.7	2.7	5.7	0.75	27.3	ICI = 46.0
Proposed Criteria	0.130	< 30	<2.5	<6.5	≥ 0.75	~ 20	IBI ≥ 40 MIWB ≥ 8.4 ICI ≥ 36

b. *Definition of "Large River" for this rulemaking*

The ESO identifies large rivers as river that drain over 500 mi^2. The technical basis for the ESO and the proposed endpoints (Miltner, 2018) was based on an evaluation of streams with drainage areas ranging from 1,823 km^2 to 20,849 km^2 and states that "For the purpose of this study, large rivers are defined as those with drainage areas greater than 1800 km^2. 1,800 km^2 is equivalent to approximately 695 mi^2. It would seem that the proposed rule, if adopted, should define large rivers as those with drainage areas greater than 1800 km^2 (695 mi^2).

c. *Base Flow*

As discussed above, the Box Model characterizes over enrichment (Acute Condition) for sestonic chlorophyll and BOD_5 concentration under base flow conditions, and the TP target is specified as a seasonal average under summer base flow conditions. The technical basis for these criteria (Miltner, 2018) is silent on river flow, so the basis for specifying that any assessment is constricted by a specific amount of flow in the river is unknown.

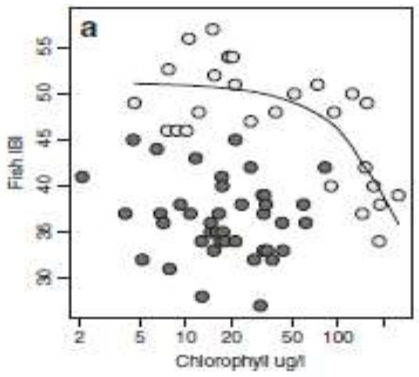
2. <u>Concerns with Technical Basis for Proposed Eutrophication Standards</u>

a. *Data Show Proposed Thresholds Not Associated with Impairment*

Miltner (2018) suggests a threshold relationship between chlorophyll and Fish IBI as follows:

> Scatter plots of the biological indicators over various water quality parameters help reveal the nature of the relationships (Figs. 4 and 5). For example, the fish IBI superficially shows no relationship with either CHL, TSS, or BOD5 (Fig. 4), but when coded according to the groups identified in the ordination, a threshold response over CHL and

TSS is apparent for the reduced set. These responses suggest a high likelihood of biological impairment when gross levels of enrichment (i.e., ~ 100 µg/l) are indicated by CHL. (at 8)



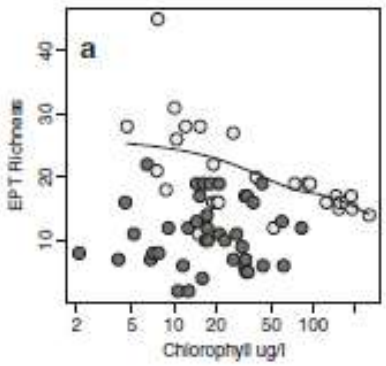
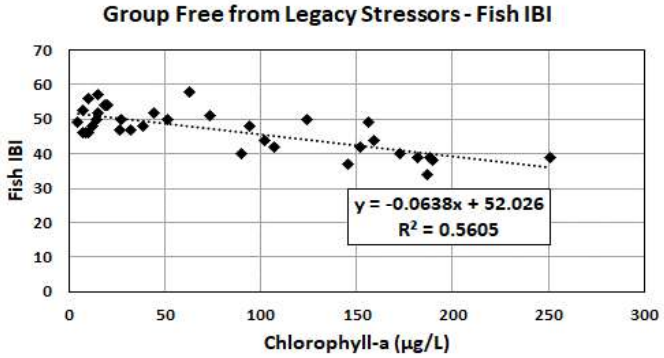


Figure 4. Plot of Fish IBI scores against chlorophyll **Figure 5**. Plot of EPT Richness against chlorophyll.

These plots are presented suggesting a causal relationship between chlorophyll and the measured biological metric (either Fish IBI or EPT richness). Notwithstanding that no such cause and effect relationship has been demonstrated, the coded data on its face show that a chlorophyll threshold of 30 µg/L is not necessary to protect aquatic life use. Chlorophyll levels above 50 µg/L support Fish IBI scores in excess of 45, which meet the OEPA bio criteria standards for these waters (OAC 3745-1-07). (Miltner (2018) identifies the IBI bio-criterion for these waters as 40).

In preparation of these comments, the data for Fish IBI scores in large rivers without legacy pollution were re-evaluated using the data sets available on the OEPA website. When these data are plotted using Cartesian coordinates in lieu of log-transformed values for chlorophyll-a, we get the following relationship (Comment Figure 1):

Comment Figure 1

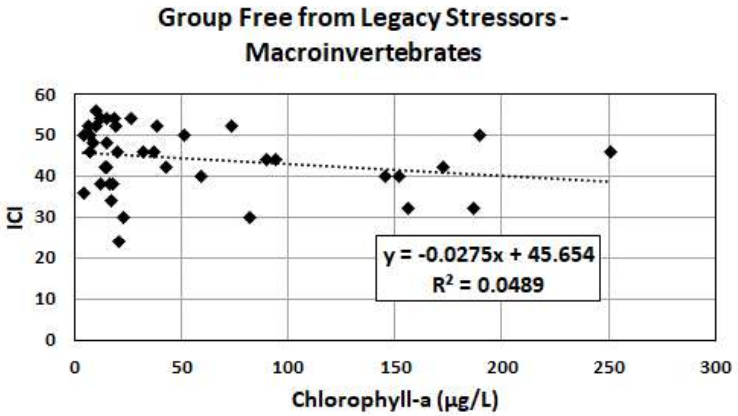


Assuming, *arguendo*, that this is a cause-and-effect relationship, the use of Cartesian coordinates yields a linear relationship with a very good fit ($R^2 = 0.56$). This fit shows that the relationship between Fish IBI and chlorophyll-a is linear and does not exhibit a threshold response. The suggested response in Miltner (2018), claiming a threshold response, was an artifact of the log

transformation, which compressed the x-axis. Moreover, this relationship shows that the Fish IBI score is not exceeded until chlorophyll-a concentrations exceed 150 µg/L if we accept the OEPA hypothesis that chlorophyll-a concentration causes aquatic life impairment to fish. Consequently, there is no scientifically defensible basis to claim that chlorophyll-a concentrations in excess of 30 µg/L cause aquatic life use impairment.[2]

A similar evaluation was conducted for invertebrate ICI scores, for which OEPA has bio-criteria. This relationship shows that the invertebrate ICI response is nearly flat and the coefficient of determination (R^2) indicates that chlorophyll-a explains less than 5% of the variability in the data. Based on this metric, we would conclude that chlorophyll-a does not have any material effect on macroinvertebrates. (Comment Figure 2).

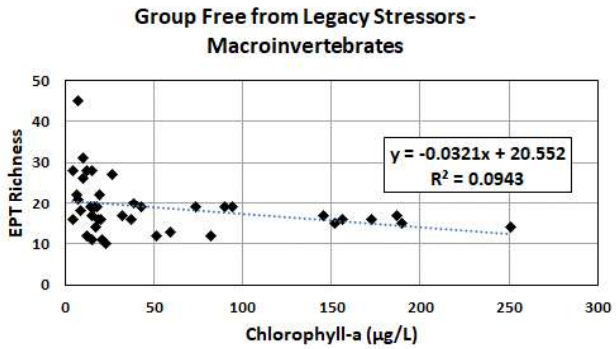
Comment Figure 2



A similar plot of EPT Richness versus chlorophyll-a concentration shows EPT Richness response is virtually flat for chlorophyll-a concentrations above 50 µg/L. Below 50 µg/L, EPT Richness is highly variable. The overall relationship also has a poor R^2, explaining less than 10% of the variability in the data. (Comment Figure 3)

Comment Figure 3

[2] As a point of clarification, the sestonic chlorophyll "Over Enriched" condition in the Box Model indicates that the frequency of occurrence must be exceeded in "multiple observations" to represent an acute condition. The definition of "multiple observations" is the type of issue that should be explored with stakeholder input during rule development.



b. *Concerns with TSS Component*

Miltner (2018) develops the proposed eutrophication criteria using an evaluation that relies on TSS data as a proxy for chlorophyll measurement, as follows:

> However, because TSS has been collected more routinely and from a greater array of sites than CHL, and TSS and CHL show a strong linear association (see Table 2), the large sample size between TSS and TP (and other enrichment indicators) may provide the power to detect trends not apparent in the CHL-TP relationship. Keeping in mind that TSS represents suspended sediment, algae, and other organic matter, TSS cannot be used as a direct proxy for CHL without some adjustment. To adjust for the suspended sediment component, TSS was regressed against Al and Fe, and the residuals considered as a rough proxy for chlorophyll, with cases that are overpredicted (i.e., as indicated by positive residuals) reflecting relatively higher chlorophyll concentrations, and case with negative residuals indicating relatively higher concentrations of inorganic sediment. Thus, the binary split in residuals offers a nonarbitrary way to partition nutrient concentrations and enrichment response variables like TKN, BOD5, and chlorophyll. Partitioning the latter helps to identify eutrophication benchmarks, and partitioning nutrient concentrations may help identify nutrient targets for use in managing eutrophication. (at 4-5)

This approach was used to increase the sample size for subsequent data evaluation to visualize the distribution of the data within the over-predicted and under-predicted groups. Although this method may be non-arbitrary, it does not mean that it is appropriate for numeric nutrient criteria development. The relationships used to develop the residuals is not exact, and minor deviations that would result in classifications are likely irrelevant.

The binary split was then used to compare the upper 95% confidence interval from the underpredicted bin to the lower 95% confidence interval from the overpredicted bin as a basis for evaluating more enriched conditions and setting thresholds in the Box Model. As noted above, more enriched does not mean impaired. Consequently, these comparisons are not appropriate for setting numeric nutrient criteria. Moreover, we have never seen this type of analysis used as the basis for establishing water quality criteria. The administrative record needs to include justification as to the relevance of such comparisons for establishing threshold concentrations necessary to support a designated use. An independent scientific peer review should be

conducted to determine whether this approach is appropriate for numeric nutrient criteria development before it is used as the basis for the proposed large river eutrophication standards.

On a more fundamental basis, we object to using TSS as a proxy if chlorophyll-a data are not available for a site. OEPA must use the right data to make an assessment regarding nutrient-related use impairment, in accordance with USEPA guidance.[3] It is inappropriate to substitute TSS if chlorophyll-a data are lacking.

c. *D.O. Range Not an Impairment Threshold*

The Box Model identifies a 24-hour D.O. Range of < 6.5 mg/L as acceptable, with a D.O. range of ≥ 7 mg/L a chronic impairment.[4] The basis for this magnitude is identified in Miltner (2018) as a rapid increase in BOD_5 (See Table 6, at 13) and an observed decrease in biological metrics.

> [A]s the 24-h range in DO increased, biological measures tended to decline monotonically up to a point of ~ 7 mg/l, after which the relationship was flat or highly variable. (Miltner (2018) at 10)

BOD_5 is not an aquatic life impairment indicator recognized by USEPA, or any State. Similarly, D.O. Range is not recognized as an impairment metric in Ohio's water quality standards or in EPA guidance. In addition, a decline in biological measures does not necessarily indicate that impairment of the use has occurred. Moreover, the relationship used to develop this endpoint (Miltner (2018) Figure 6b) presents a stressor-response evaluation presuming a causal relationship without any consideration of confounding factors or a consideration of variability or confidence in the assessment.

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[3] Since 1985, EPA has had a well-defined procedure for developing water quality criteria when it published the document entitled "Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses" USEPA 1985 (PB85-227049; hereafter "Guidelines"). The Guidelines establish a number of very specific scientific thresholds that must be met to establish criteria that meet Section 304(a) mandates, including the following

- Water quality criteria must ensure use protection "with a small probability of considerable overprotection or under-protection." (*Guidelines* @ 5)
- It is not enough that the criterion is the best estimate given the available data. Criteria should be derived "only if adequate appropriate data are available to provide reasonable confidence that it is a good estimate." (*Guidelines* @ 5)
- Criteria must be based upon studies showing a clear dose/response relationship to determine effect concentration. Data from confounded studies (i.e., results that are influenced by factors other than the pollutant of concern) should not be used. (*Guidelines* @ 15, 16, 21)
- All decisions should be based on a thorough knowledge of aquatic toxicology and criteria decisions must be altered if there is a substantial probability of over or under protection of aquatic organisms and their uses. (*Guidelines* @ 18)
- Based on "all available laboratory and field information," it must be determined that proposed criteria are "consistent with sound scientific evidence." If not, another criterion should be derived. (*Guidelines* @ 57)

[4] The Box Model as drafted indicates that an acceptable 24-hour D.O. range is <6.5 mg/L and an enriched or over enriched range is ≥ 7 mg/L. The status for D.O. ranges within 6.5 - <7.0 mg/L is not defined.

As illustrated in Figure 6 from Miltner (2018), D.O. Range is not associated with any aquatic life impairment. Observed Fish IBI scores are highly variable and do not fall below the threshold for impairment (Fish IBI < 40). In fact, the data show that a D.O. Range > 15 mg/L (double the proposed threshold) supports Fish IBI values from 45 – 50. These observations suggest D.O Range is not a stressor. Similarly, the relationship between EPT Richness and D.O. Range is flat.

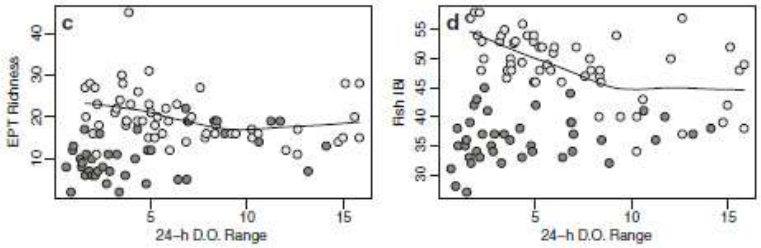
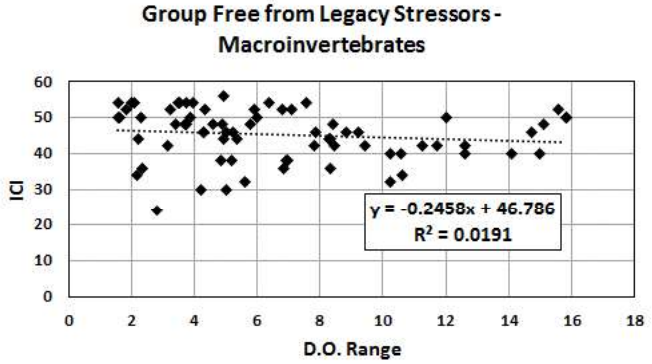


Figure 6 from Miltner (2018) at 10.

The data for Macroinvertebrate ICI scores in large rivers without legacy pollution were evaluated using the data sets available on the OEPA website. When these data are plotted, we get the following relationship. (Comment Figure 4)

Comment Figure 4



This relationship shows that the invertebrate ICI response to D.O. Range is virtually flat (the regression explains less than 2% of the variability in the data), and some of the highest ICI scores coincide with the highest D.O. Range. Based on this metric, we would conclude that D.O. Range does not have any material effect on macroinvertebrates and that D.O. Range should not be used to assess aquatic life use attainment or the cause of nonattainment, except in the limited circumstances in connection with other causal factors.

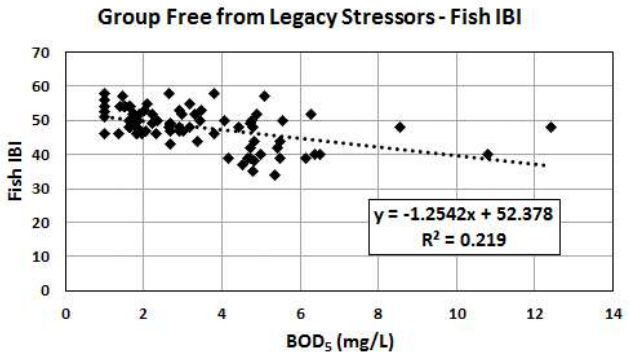
d. *Concerns Regarding Scientific Basis for BOD_5 Standard*

The ESO materials present an "acceptable" threshold BOD_5 value of <2.5 mg/L that is based on statistical evaluations of the TSS data partitions, as follows:

> Distributions of confidence intervals from the subsamples suggests that a concentration of 2.5 mg/L forms a reliable benchmark separating less enriched from more enriched. (Miltner (2018) at 10).

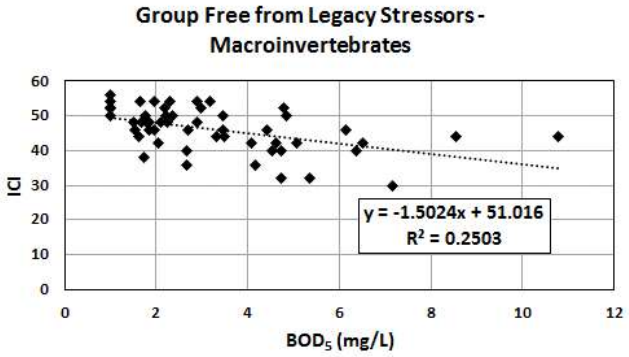
When the data for various biological metric scores in large rivers without legacy pollution were plotted against BOD_5 using the data sets available on the OEPA website, the relationships show BOD_5 is not an appropriate stressor, and the proposed criteria are not scientifically defensible.[5] (Comment Figure 5)

Comment Figure 5



With respect to Fish IBI, the coefficient of determination is relatively low and the data show that uses are attained, even at the highest measured concentrations of BOD_5. These data show that 2.5 mg/L is not an appropriate threshold. Moreover, the lack of impairment at the highest concentrations confirms that this parameter is not an appropriate stressor in evaluating the cause of non-attainment of biological criteria (see Box Model, "with biological impairment"). These same observations are also evident when Macroinvertebrate ICI Score is plotted against BOD_5. (Comment Figure 6)

Comment Figure 6



Moreover, the measurement of BOD_5 covaries with the measurement of chlorophyll and should not act as a stand-alone parameter for assessing whether waters are impaired by nutrients.

Further, the report states that "BOD5, CHL, TKN, and TSS, being indicators of suspended organic matter, were all positively correlated with each other." (Miltner (2018) at 5). If BOD_5 is an indicator of chlorophyll concentration, chlorophyll should be used as the appropriate metric to indicate eutrophication because chlorophyll is a direct indicator of nutrient

[5] To reiterate for clarity, enrichment is not the same as impairment and does not (and cannot) serve as the basis for establishing numeric nutrient criteria. This applies to all parameters identified in the Box Model.

enrichment while BOD_5 can be elevated without nutrient enrichment (e.g., due to point source loads of organic materials).

e. *Concerns Regarding the Scientific Basis for TKN Standard*

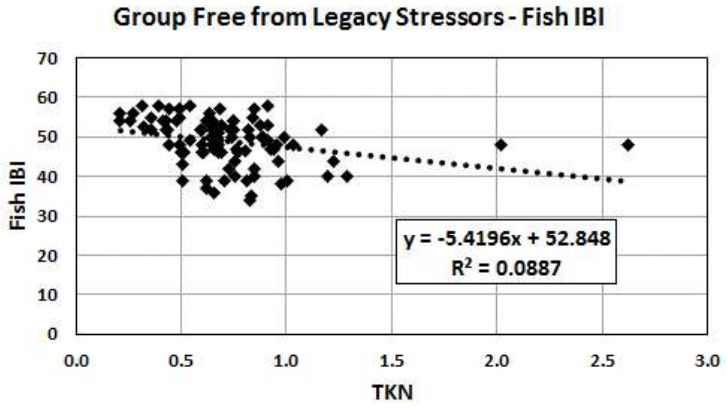
The ESO materials present a threshold TKN value of <0.75 mg/L that is based on statistical evaluations of the TSS data partitions:

> Results for TKN suggest that concentrations exceeding 0.7 mg/L are generally characteristic of a more enriched condition, but the wide range in the lower 95th intervals from the overpredicted bin subsamples suggests that TKN may not be a reliable stand-alone proxy for over-enrichment. (Miltner (2018) at 9).

As with BOD_5, the measurement of TKN covaries with the measurement of chlorophyll and should not act as a stand-alone parameter for assessing whether impairment of a river is caused by nutrients. Similarly, if TKN is an indicator of chlorophyll concentration, chlorophyll should be used as the appropriate metric to indicate eutrophication because chlorophyll is a direct indicator of nutrient enrichment while TKN can be elevated without nutrient enrichment (e.g., due to point source loads of organic contaminants and/or ammonia-nitrogen). Finally, the evaluation concluded that TKN is not a reliable indicator because of the excessive variability in the data. Consequently, TKN should not be included as a parameter for assessing eutrophic cause of impairment in Ohio's large rivers.

As a final note, a regression of Fish IBI against TKN concentration shows that the relationship explains less than 10% of the variability ($R^2 = 0.09$) and waters with TKN concentrations greater than 2.0 mg/L support aquatic life uses. (Comment Figure 7)

Comment Figure 7



f. *Concern Regarding Use of TSS as an Indicator of Eutrophication*

The Box Model identifies ~ 20 mg/L as a general screening level for inspection of data sets lacking chlorophyll observations and Table 6 from Miltner (2018) identifies > 25 mg/L as a screening level when hydrograph is stable. Notwithstanding the inconsistency between the technical study recommendation and the final value included in the Box Model, it is

inappropriate to use TSS as an indicator parameter for assessing eutrophic impairment in Ohio's large rivers. As presented in the Box Model and in Miltner (2018), TSS was used as a proxy for chlorophyll when data on chlorophyll are lacking. The only appropriate approach is to collect the appropriate data on chlorophyll.

Data presented, comparing biological metrics with TSS concentration, show that the aquatic life impairment threshold (IBI Fish < 40) is attained even when TSS concentrations exceed 100 mg/L. (See, Figure 4b from Miltner (2018), at 9). Miltner (2018) indicates that the data exhibit a threshold response, which served as the basis for selecting 20 mg/L as the impairment threshold. However, as with chlorophyll-a, this threshold effect is an artifact of the logarithmic scale used to plot the data. When the data are plotted using Cartesian coordinates there is no threshold. (Comment Figure 8). Moreover, this analysis shows that aquatic life uses for fish are not impaired for TSS concentrations up to 40 mg/L and concentrations in excess of 100 mg/L do not cause impairment of the fish biocriteria. Consequently, use of TSS as an eutrophication parameter is not supported.

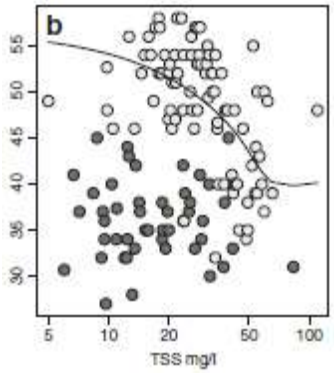


Figure 4. Fish IBI versus TSS (Miltner (2018) at 9)

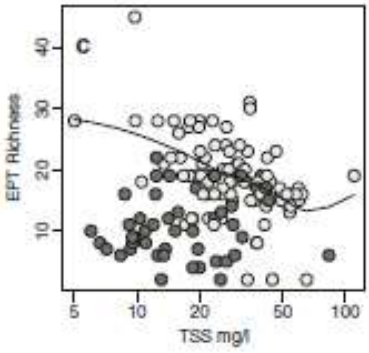
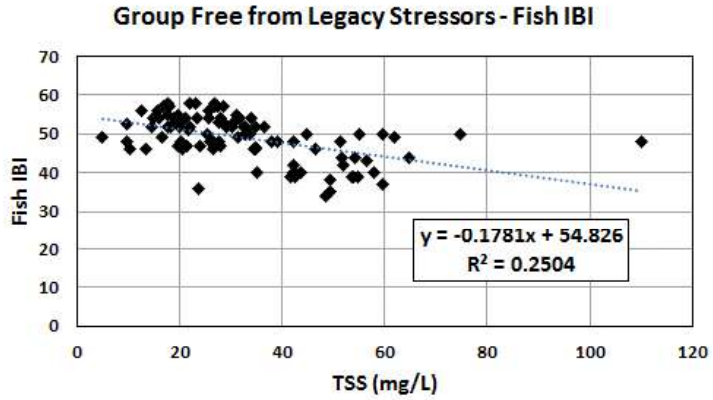


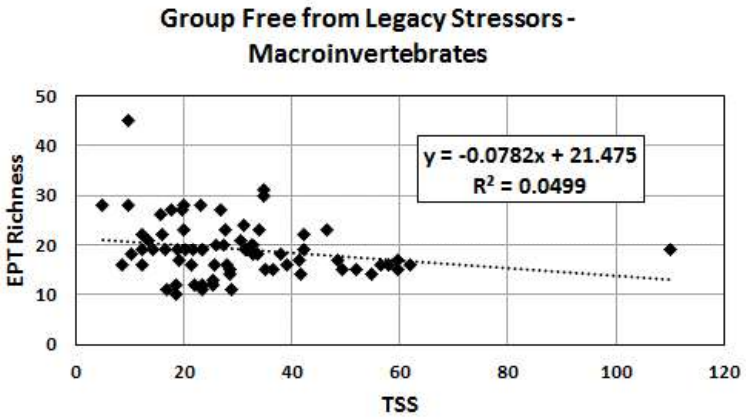
Figure 5. EPT Richness versus TSS (Miltner (2018) at 9)

Comment Figure 8

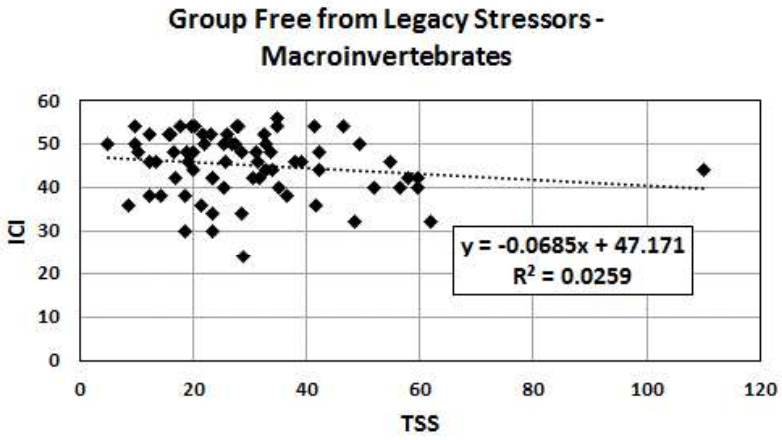


Similar observations can be made for the macroinvertebrate metrics. The relationship between EPT Richness and TSS concentration (Comment Figure 9) is relatively flat and explains less than 5% of the variability in the data. Similarly, the relationship between ICI and TSS (Comment Figure 10) explains only 2.5% of the observed variability and the waters are not impaired for this biocriterion at TSS concentrations well above 20 mg/L.

Comment Figure 9



Comment Figure 10



Furthermore, the Box Model presents the TSS threshold as 20 mg/L without a specified averaging period. No data are provided to suggest that instantaneous TSS concentrations have any bearing on aquatic life health or serve as an indicator of eutrophication.

g. *Concerns Regarding Scientific Basis for TP Target*

The Presentation Slides identify a TP target of ~ 130 µg/L (seasonal average; summer base-flow conditions). The basis for this value and how it is supposed to be used is contained in Miltner (2018).

> Partitioned by whether the residuals from the regression of TSS on Al + Fe were under- or overpredicted, CHL concentrations average between 36 and 43 µg/l higher in the overpredicted bin compared to the underpredicted bin (Fig. 7a). Similarly, BOD5 concentrations average between 1.85 and 2.14 mg/l higher in the overpredicted relative to the under (Fig. 7b). TKN concentrations average between 0.08 and 0.13 mg/l higher in the overpredicted bin, and TP concentrations average between 0.02 and 0.05 mg/l higher (Figs. 6d and 7c). Conversely, inorganic nitrogen concentrations average lower in the overpredicted bin by 0.13 to 0.42 mg/l.

> Comparing the TP concentration at the upper 95% confidence interval from the underpredicted bin to the lower 95% interval from the overpredicted bin (Table 5) suggests that ~ 150 µg/l may demarcate a boundary between less enriched and more enriched. Distributions of respective upper and lower 95th confidence intervals from the 10 random subsamples for TP indicate that a mean concentration of ~ 130 µg/l would generally reflect the less enriched condition (Fig. 8). (Miltner (2018) at 8-9)

As discussed above, the TP target was selected as the lower 95th percentile confidence limit of the mean TP concentration for the group of data that fell into the under-predicted bin, where data were grouped based on a regression of TSS on aluminum + iron. This has nothing to do with use attainment and its relevance to criteria development is unknown.

Moreover, the data presented in Table 5 of Miltner (2018) show that the under-predicted data bin has a corresponding eutrophication parameter concentrations (for Chlorophyll-a and BOD_5) far below those claimed to be necessary for use attainment, as summarized below (Comment Table 2). If the proposed criteria for Chlorophyll-a and/or BOD_5 were scientifically defensible, these data would indicate that the proposed TP target is unnecessary or overprotective.

Comment Table 2 – Comparison of Proposed Criteria to Confidence Interval around Mean

Parameter	Box Model	Underpredicted Bin Mean	
		Lower 95th %ile	Upper 95th %ile
TP	~ 130 µg/L	130 µg/L	157 µg/L
Chlorophyll-a	< 30 µg/L	10.9 µg/L	18.6 µg/L
BOD5	< 2.5 mg/L	1.42 mg/L	1.63 mg/L

Data from Table 5 with legacy sites excluded (Miltner (2018) at 12)

Elsewhere in the technical report, OEPA claims that the relationship between chlorophyll concentration and TP is dependent upon the amount of DIN present.

> [T]he raw association between TP and CHL does not account for nitrogen levels, a necessarily important consideration (Dodds and Smith 2016). When nitrogen levels are considered, a positive association between TP and CHL is evident, especially for sites categorized as having sites with relatively low DIN (< 810 µg/l) levels and low TP concentrations (Fig. 9). Interestingly, the TP-CHL response for these sites roughly approximates the response boundaries for high response rivers as defined by Mischke et al. (2011). It is also worth noting that the DIN:TP ratio for these sites tends toward nitrogen limitation; the median ratio for these sites is 7. This is not to suggest that large rivers in Ohio are nitrogen limited on balance, rather that considerable demand for both nitrogen and phosphorus occurs when algal production is high. (Miltner (2018) at 12)

This line of reasoning is misleading. The lack of a relationship showing chlorophyll concentrations increasing with TP concentration (as noted earlier in the document; See, Miltner (2018) at 4) can be attributed to multiple factors. The measurement of TP includes dissolved

forms that may stimulate plant growth, particulate forms that are not available for algal growth, and the phosphorus already present in the algae. Without knowing the fraction of TP that is not available for algal growth, general conclusions regarding a TP-CHL response cannot be easily drawn.

Similarly, the comment concerning positive associations between TP and CHL for sites when nitrogen levels are considered is misplaced. The scatter plot in Figure 9 shows chlorophyll versus TP for different bins of dissolved inorganic nitrogen (DIN) concentration. DIN is readily available to support algal growth. The fact that DIN is present with the measured concentration of chlorophyll-a suggests that nitrogen is not limiting for any of the DIN groups (DIN half-saturation constants are on the order of 0.05 mg/L). Moreover, DIN should not be compared with TP to characterize whether a nutrient is limiting. Either DIN should be compared to dissolved inorganic phosphorus or TP should be compared with total nitrogen (TN) to account for the nitrogen uptake that has already taken place.

Finally, the report claims that, using the relationships contained in Figure 9, the target TP concentration of 130 µg/L is necessary to ensure that the Large River Eutrophication targets are achieved.

> Relative to the relationships apparent in Fig. 9, a target of 130 µg/l TP would be needed to reduce maximum CHL concentrations to less than 100 µg/l. Given that a TP concentration of 130 µg/l corresponds to a CHL concentration of 23 µg/l as predicted from equation 2 in Van Nieuwenhuyse and Jones (1996), that level should be generally protective in the rare cases where background concentrations of nitrogen are not elevated. (Miltner (2018) at 15)

The statement above indicates that the TP target was based on the regression analysis for the low-DIN group from the Ohio large rivers database (to meet the acute value) and the regression presented in Van Nieuwenhuyse and Jones (1996) to meet the chronic value. Notwithstanding that the chlorophyll-a targets are not linked to aquatic life use impairment, the stressor-response evaluations presented by the two regressions are subject to a high degree of variability and their use as predictive tools cannot be assessed without a consideration of all the factors identified in EPA's guidance on the use of regression evaluations to derive scientifically valid endpoints. (See Section C.3of these comments for specific considerations that are required).

h. *Data from Lower Great Miami River Show Proposed Criteria Not Necessary*

The Great Miami River is one of the rivers identified in Miltner (2018), and a water body that would be subject to the proposed numeric nutrient criteria. OEPA conducted detailed biological and water quality studies of the Lower Great Miami River in 2010. (Biological and Water Quality Study of the Lower Great Miami River and Select Tributaries. OEPA. May 12, 2012. Technical Report EAS/2012-5-7).

This study characterized sestonic chlorophyll-a, BOD_5 and TSS in the river from river mile 80 to its confluence with the Ohio River. Figure 10 from the document (at 47) presents the concentrations of these parameters with distance downstream. Chlorophyll-a concentrations

below Miamisburg (River Mile 64.72) are elevated, with all concentrations exceeding 40 µg/L, and several above 100 µg/L. TSS levels typically exceed 40 mg/L, particularly below river mile 50. BOD_5 concentrations are variable, but typically exceed 5 mg/L below river mile 50. As illustrated, all of these parameters exceed the proposed numeric nutrient criteria thresholds for the listed parameters.

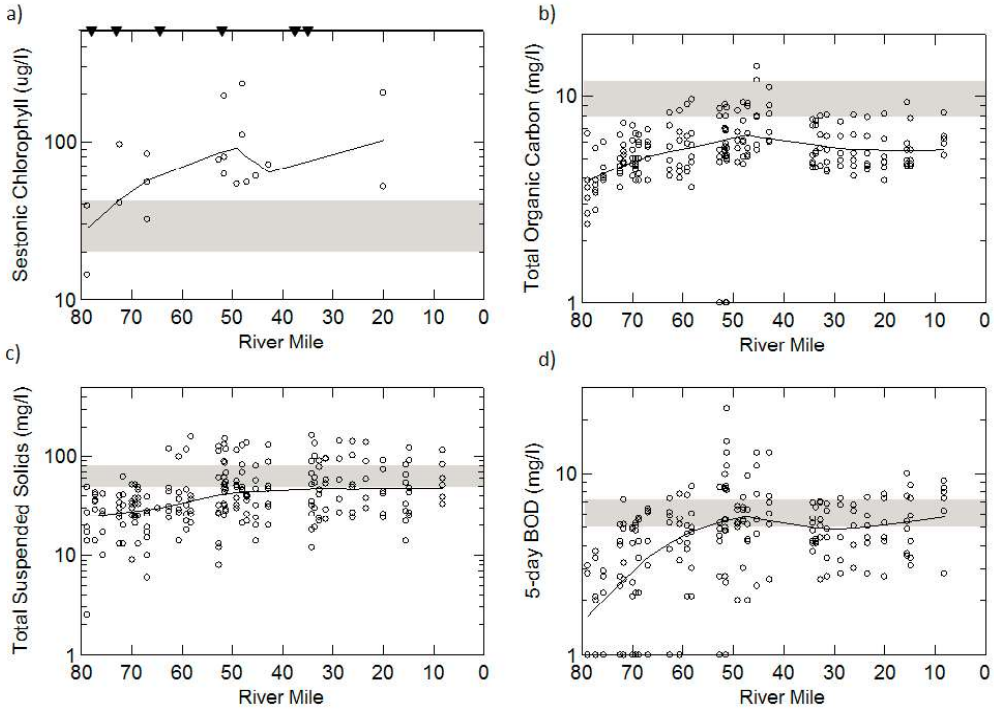


Figure 10. Longitudinal profiles of key water quality indicators for the lower Great Miami River: a) sestonic chlorophyll, b) total organic carbon, c) total suspended solids, and d) 5-day biochemical oxygen demand. The shaded region in each plot depicts the upper range of concentrations typical for large rivers not grossly polluted. For sestonic chlorophyll, the range is defined by literature sources, especially Van Nieuwenhuyse and Jones (1996), and Heiskary et al. (2010). For the remaining parameters, the ranges are defined by the 75th-90th percentiles of values of statewide reference sites for large rivers as given in Ohio EPA (1999). The inverted triangles arrayed along the top margin in (a) denote the locations of low-head dams. Lines drawn through the data points are from Locally Weighted Sequential Smoothing (LOWESS), with a bandwidth of "=0.5. (Technical Report at 47)

Figure 11 from the Technical Report provides information on the TP concentration in the river. The average TP concentration is at or exceeds 0.20 mg/L through most of the main stem of the river.

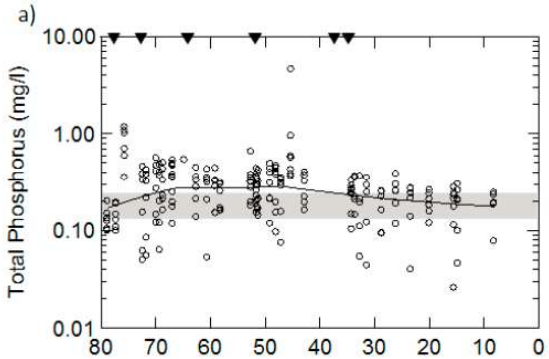


Figure 11 (Technical Document at 48)

Figure 12 (Technical Report at 49) shows high D.O. range, but no low D.O. below water quality standards.

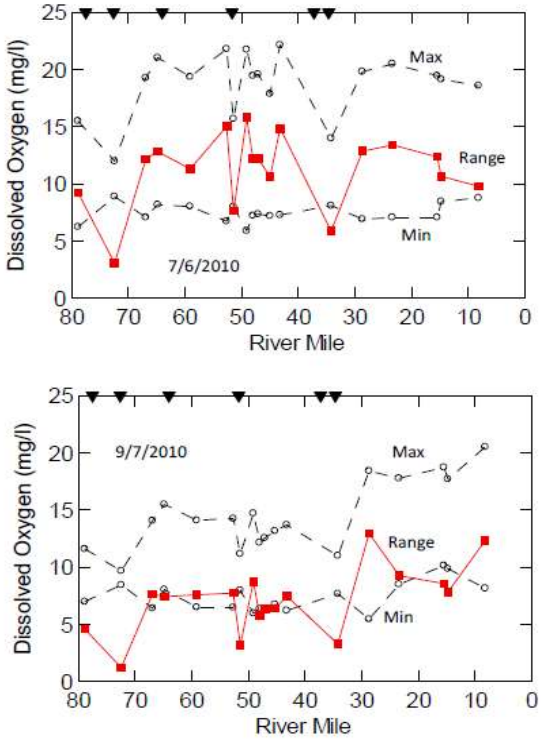
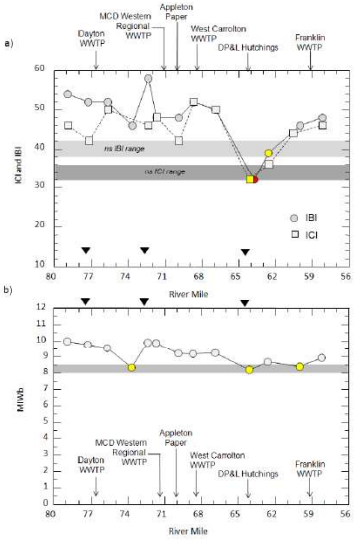


Figure 12 (Technical Report at 49)

Figures 32 and 33 of the Report present information on bio-criteria compliance from river mile 80 to 40. These data show that the fish and macroinvertebrate metrics are achieved in this area, even though the proposed numeric nutrient criteria exceed the enrichment thresholds, again indicating that these proposed Enrichment indicators can be above the proposed standards without negatively impacting biological parameters.



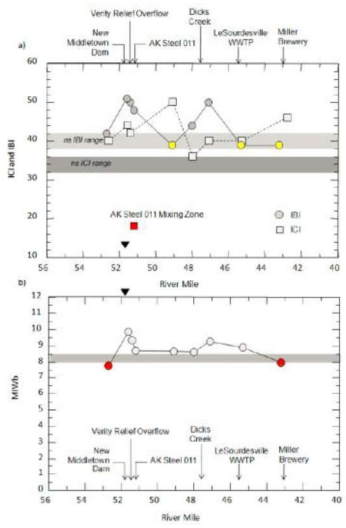


Figure 32 (Technical Report at 116) **Figure 33** (Technical Report at 117)
These results clearly indicate that the proposed Large River Eutrophication Criteria are not necessary to restore (or protect) aquatic life uses. In the case of the Lower Great Miami River, a stretch of 40 miles exceed the proposed criteria for sestonic chlorophyll-a, BOD_5, D.O. Range, TSS, and TP concentration. Even though virtually all of the proposed criteria are exceeded by large margins, the river is not impaired for aquatic life based on a consideration of OEPA's bio-criteria.

i. *Summary of Concerns Regarding Box Model Eutrophication Standards.*

As discussed above, we have significant concerns with the proposed eutrophication standards. An independent evaluation of the data for the non-legacy sites suggests that the proposed standard for chlorophyll-a should be much higher than the proposed threshold of 30 µg/L and it is not apparent that the eutrophication standards should include parameters such as BOD_5, TKN, or TSS. Data for the Lower Great Miami River confirm that the proposed standards are not necessary to ensure aquatic life use attainment or compliance with the existing bio-criteria for these waters.

3. Conformance with SAB and EPA Guidance Necessary

The use of regression analyses to develop numeric nutrient criteria was the subject of a U.S. EPA SAB peer review[6] and a U.S. EPA Guidance Document[7]. Since the proposed eutrophication standard for Ohio's large rivers is based, in part, on regression analyses to derive the draft numeric nutrient criteria, it would seem appropriate that the documentation supporting the proposed standard reference and follow the SAB Report and U.S. EPA Guidance Document. Miltner (2018) does not reference the EPA guidance. A new Technical Support Document needs to be prepared to demonstrate that the methodologies utilized by OEPA to support the proposed standard conforms to the guidance and comments of the SAB which precisely addressed what demonstrations are needed to develop scientifically defensible criteria.

The approach presented in the Miltner (2018) includes an assessment of the eutrophication parameters with respect to aquatic life use impairments. (See, Figure 4 which plots Fish IBI versus chlorophyll, TSS, and BOD_5; Figure 5 which plots EPT Richness versus chlorophyll, BOD_5, and TSS; and, Figure 6 which plots Fish IBI and EPT Richness versus D.O Range). On its face, the proposed approach does not appear to sufficiently account for confounding factors that influence the potential adverse effects of nutrients.

a. *SAB Concerns Must Be Addressed*

The SAB provided the following comments concerning the use of stressor-response analysis for the derivation of numeric nutrient criteria in its SAB Report:

[6] See, http://yosemite.epa.gov/sab/sabproduct.nsf/02ad90b136fc21ef85256eba00436459/E09317EC14CB3F2B85257713004BED5F/$File/EPA-SAB-10-006-unsigned.pdf.
[7] USEPA. November 2010. Using Stressor-response Relationships to Derive Numeric Nutrient Criteria. EPA-820-S-10-001.

> Without a mechanistic understanding and a clear causative link between nutrient levels and impairment, there is no assurance that managing for particular nutrient levels will lead to the desired outcome. (SAB Report at 6, emphasis added)
>
> The statistical methods in the Guidance require careful consideration of confounding variables before being used as predictive tools. … Without such information, nutrient criteria developed using bivariate methods may be highly inaccurate. (SAB Report at 24, emphasis added)
>
> For criteria that meet EPA's stated goal of "protecting against environmental degradation by nutrients," the underlying causal models must be correct. Habitat condition is a crucial consideration in this regard (e.g., light [for example, canopy cover], hydrology, grazer abundance, velocity, sediment type) that is not adequately addressed in the Guidance. Thus, a major uncertainty inherent in the Guidance is accounting for factors that influence biological responses to nutrient inputs. Addressing this uncertainty requires adequately accounting for these factors in different types of water bodies. (SAB Report at 38, emphasis added)

The focus of these comments was primarily on streams and the SAB commented that the use of simple linear regression for these systems is unlikely to account for a substantial amount of variation. The use of multiple linear regression to address the known confounding variables would be required in cases where such factors influence the biological response

Moreover, if criteria developed from a stressor-response analysis are to be applied to a specific waterbody, specific conditions particular to that waterbody must be considered to ensure that application of such criteria is appropriate.

> Numeric nutrient criteria developed and implemented without consideration of system specific conditions (e.g., from a classification based on site types) can lead to management actions that may have negative social and economic and unintended environmental consequences without additional environmental protection. (SAB Report at 38, emphasis added)

These concerns are relevant to the proposed criteria. BOD_5, TKN and TSS are not causatively linked to biological impairment. While the Agency has considered some confounding factors, the proposed criteria ignore the uncertainty in the relationships. These concerns must be addressed in any final Agency action.

b. *EPA Guidance Must Be Considered*

The U.S. EPA's final Stressor-Response Guidance incorporated these recommendations made by the SAB. In addition to describing the various statistical methods for analyzing data, the Guidance presented detailed information on the need to prepare conceptual models and to classify the data. Data are classified in an effort to account for confounding factors that significantly influence the response of aquatic ecosystems to nutrients. The response variables must be linked to the designated use such that the candidate criterion represents a threshold

above which designated uses are likely to be impaired. Finally, the Stressor-Response Guidance discusses evaluations necessary to ensure that the candidate criteria are scientifically defensible based on a consideration of the accuracy and precision of the regression analyses.

> Conceptual model diagrams and their accompanying narrative descriptions (together, referred to as ***conceptual models***) are useful tools for stressor-response analysis for two reasons: they depict accepted scientific knowledge, and they help guide model development.
>
> Conceptual models identify relationships that can be modeled with statistical analyses and help analysts identify variables, in addition to the main nutrient and response variables, that should be considered during analysis. More specifically, conceptual model diagrams provide a graphical means of identifying potentially ***confounding variables***, which are defined as variables that can influence estimates of the stressor-response relationships. (EPA Stressor-Response Guidance at 5, emphasis added)
>
> [M]any **confounding variables** must be considered when estimating the effects of nitrogen/phosphorus pollution on a measure of aquatic life in streams (e.g., a macroinvertebrate index). (EPA Stressor-Response Guidance at 11, emphasis provided)

Data classification is particularly important in streams because of the numerous factors that influence the effect of nutrients on use attainment.

> [I]n the first step of the analysis, **classification**, the analyst attempts to control for the possible effects of other environmental variables by identifying classes of waterbodies that have similar characteristics and are expected to have similar stressor-response relationships. Classifications for a stressor-response analysis are typically based on statistical analysis; however, existing classes can be used as a starting point. The most widely used existing classification for analyses of nutrient data are the fourteen national nutrient ecoregions. (EPA Stressor-Response Guidance at 32, emphasis provided)
>
> The first step for **classifying** data is to identify variables to include in the analysis that will help improve the **accuracy** and **precision** of estimated stressor-response relationships.
>
> * * * * *
>
> [E]xploratory data analysis can indicate other variables that should be included in the **classification** analysis. In particular, other variables that are strongly correlated with the stressor variable or with the response variable should be evaluated for inclusion in classification analysis. (EPA Stressor-Response Guidance at 56-57, emphasis provided)

> Finalizing a **classification** scheme likely requires repeated iterations and adjustments based on an evaluation of the **accuracy and precision** of the resulting stressor-response relationships. (EPA Stressor-Response Guidance at 64, emphasis provided) Before finalizing candidate criteria based on stressor-response relationships, one should systematically evaluate the scientific defensibility of the estimated relationships and the criteria derived from those relationships. More specifically, one should consider whether estimated relationships **accurately** represent known relationships between stressors and responses and whether estimated relationships are **precise** enough to inform decisions. (EPA Stressor-Response Guidance at 65, emphasis provided)
>
> Beyond the possible effects of **confounding variables**, one should also consider whether **assumptions** inherent in the chosen statistical model are supported by the data. (EPA Stressor-Response Guidance at 67, emphasis provided)

The proposed Eutrophication Standard for Ohio's Large Rivers must address the concerns of the SAB and the recommendations in the U.S. EPA's guidance document, particularly with regard to linking the proposed standards to aquatic life use impairment, not enrichment.

c. *Additional Analyses Needed for Criteria Derivation*

Based on the SAB and EPA's Stressor-Response Guidance the following analyses should be presented to ensure the application of nutrient criteria is defensible:

(i) Detailed Conceptual Models -- Detailed conceptual models should be provided illustrating the factors influencing the aquatic life use endpoints linked to use impairment (i.e., ICI, IBI). The conceptual model should break out habitat characteristics that influence periphyton, macroinvertebrates, and fish (e.g., canopy, hydrology, sedimentation). It should also account for other factors influencing dissolved oxygen stress (e.g., organic loads).

(ii) Classification to Isolate Significant Non-Nutrient Factors -- Based on the detailed conceptual models, the data should be classified in accordance with the SAB recommendations and EPA Guidance. This classification should be able to demonstrate habitat alteration conditions where nutrient control is incapable of restoring uses.

(iii) Accuracy and Precision -- Graphical analyses should be presented to illustrate the strength of the final relationships and include confidence intervals to illustrate the likelihood that the proposed criteria will achieve the intended results.

D. ADDITIONAL COMMENTS

1. <u>Administrative Review of Decisions</u>

The ESO does not address the administrative review protections that will need to be established should OEPA proceed with the multi-level decision-making structure set forth in the Box Model framework and the ESO generally. Clear and protective administrative review procedures must

be included in any proposed rule to allow aggrieved parties to seek review of decisions made by OEPA under the Box Model rubric. Such protections are essential to ensure the rights of aggrieved parties to challenge Box Model-based decisions as they are made for each water body and applied to individual dischargers.

2. Implementation of Box Model in NPDES and TMDL Scenarios

We need further explanation regarding how the Box Model concept will be implemented in both basic NPDES permitting and in TMDL scenarios. An important component of this rule making will be clarification that nutrient enrichment analysis applies to waters in nonattainment for biological criteria/aquatic life use, and not as independent impairment criteria. Additionally, given the variability of relevant targets, the rule framework should allow for site-specific targets that reflect the causal determinations for that river. The stakeholder group discussed in comment D.4 below would provide critical support for development of such rules or guidance, just as they did in the SNAP process.

3. Economically Reasonable and Technically Feasible Permit Limits

OEPA must perform a technical feasibility and economic reasonableness analysis on any proposed permit limits. If this rulemaking proceeds, OEPA will need to clarify that any permit limit resulting from the rule will be subject to this analysis. R.C. 6111.03(J)(3). This analysis would be performed in addition to, as well as, in some cases, in coordination with the site-specific review identified in comment 2 above.

4. Request for Stakeholder Group to Participate in Rule Development

As referenced in prior comments, OMA requests that Ohio EPA convene a stakeholder group to provide interested-party feedback, expert support, and industry analysis as part of the rulemaking process for this important nutrient rulemaking. The repercussions of this nutrient rule will be far and wide, and the experience and expertise available to support this process is equally broad and should be used to create the best (and most defensible and scientifically-sound) rule possible. OMA specifically requests the opportunity to participate in the stakeholder process, whether through a continuation of the TAG or through a new process.

E. CONCLUSION

OMA very much appreciates the opportunity to provide this feedback on OEPA's nutrient rule concept and to support the development of this critical rule for Ohio's large rivers. Given the potential impact of this rule, we request that OEPA establish, and OMA be invited to join, an advisory panel or similar working group to help in the further evaluation, development and implementation of this anticipated rulemaking. In the meantime, we offer these comments and concerns only as initial comments and fully reserve all rights to comment further, in all regards and on all issues, in the requested advisory process and thereafter in any rulemaking proceeding.

PROTECTING & GROWING
OHIO MANUFACTURING

For Immediate Release

The Ohio Manufacturers' Association Issues Statement on Biden Administration PM2.5 Rule

COLUMBUS, Ohio – Following the decision by the Environmental Protection Agency (EPA) to lower the National Ambient Air Quality Standards for fine particulate matter (PM2.5) to 9 micrograms per cubic meter, The Ohio Manufacturers' Association President Ryan Augsburger issued the following statement:

"The implementation of the Biden administration's new PM2.5 rule is a disaster for manufacturers in Ohio. The unobtainable standards will only kneecap manufacturing investments, weaken our economy, and erode our nation's competitive advantage. This rule is an unnecessary and blatant assault on our nation's manufacturing industry."

###

The Ohio Manufacturers' Association is Ohio's largest statewide business association comprised solely of manufacturers. Established in 1910, the OMA's mission is to protect and grow Ohio manufacturing. It represents manufacturers of all sizes in every subsector of the industry. Manufacturing is Ohio's largest economic sector, employing approximately 690,000 Ohioans and contributing more than $133 billion annually to the economy. Visit ohiomfg.com, or follow us on LinkedIn, Twitter, Facebook, and YouTube.

Tom Evans
Director, Communications and Marketing
(614) 557-0937
tevans@ohiomfg.com

February 17, 2023

U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

RE: Reconsideration of National Ambient Air Quality Standards for Particulate Matter (Docket ID No. EPA-HQ-OAR-2015-0072)

The Ohio Manufacturers' Association (OMA) is Ohio's largest statewide business association comprised solely of manufacturers. Established in 1910, the OMA's mission is protect and grow Ohio manufacturing. Our association represents manufacturers of all sizes in every subsector of the industry. Manufacturing is Ohio's largest economic sector, employing more than 695,000 Ohioans and contributing more than $130 billion annually to the economy.

As the leading coalition for manufacturers in Ohio, we join manufacturers across the U.S. in strong opposition to EPA's PM2.5 rule proposal that would impose stricter air standards on businesses. American families are already concerned about the threat of a recession. Imposing new, burdensome regulations on the private sector, especially at a time of economic instability, will only further weaken an already slowing economy. The OMA fears this regulation will disproportionally affect our members' supply chains and operational expenses.

The U.S. already has some of the strongest environmental performance standards in the world. Levels of major pollutants have declined dramatically. The U.S. EPA's own data show that the U.S. reduced six common NAAQS pollutants (including PM2.5) by 78% between 1970 and 2020. Moreover, the U.S. EPA affirms that PM2.5 levels have dropped 44% since 2000, while the Ohio EPA notes that particulate pollution has been on a downward trend statewide over the past decade.

The proposed PM2.5 standards would not only hurt existing manufacturing facilities but could also jeopardize the new, clean energy manufacturing that is needed to address climate change. When the U.S. doesn't manufacture, capital investment shifts to other countries that do not have the same commitment to environmental stewardship as the U.S.

Let manufacturers do what they do best: innovate and develop modern technologies that address air quality, reduce emissions, and protect the environment, while protecting manufacturing jobs and growing the economy. On behalf of Ohio's manufacturing community, the OMA strongly urges the U.S. EPA to reconsider its PM2.5 proposal. Thank you.

Sincerely,

Ryan Augsburger
President

The Ohio Manufacturers' Association

April 19, 2023

The Honorable Sherrod Brown
United States Senate
503 Hart Senate Office Building
Washington, DC 20510

Dear Senator Brown,

On behalf of Ohio's manufacturing community, this letter is to inform you that The Ohio Manufacturers' Association is strongly opposed to the U.S. EPA's National Ambient Air Quality Standards (NAAQS) PM2.5 rule proposal that would impose stricter federal air standards.

Businesses and families across Ohio are already concerned about the threat of a recession. Imposing new, burdensome, and unnecessary regulations during a time of economic instability will only weaken a slowing economy. Moreover, this proposed rule will disproportionally affect manufacturing, which is Ohio's largest economic sector, employing nearly 700,000 Ohioans and contributing more than $133 billion annually to the economy.

It's worth noting the EPA's own data show the U.S. reduced six common NAAQS pollutants (including PM2.5) by 78% between 1970 and 2020. Moreover, the U.S. EPA affirms PM2.5 levels have dropped 44% since 2000, while the Ohio EPA notes particulate pollution has been on a downward trend statewide over the past decade.

Changes to the PM2.5 standards would not only hurt existing manufacturing facilities, they could also jeopardize efforts to bring new manufacturing to our state. When the U.S. doesn't manufacture, capital investment shifts to other countries – punishing local economies and communities, as every Ohioan knows too well.

Thank you for your attention to this important issue.

Sincerely,

Ryan Augsburger
President

33 N. High St., FL 6
Columbus, Ohio 43215-3076

Phone: 614-224-5111 • **Toll free:** 800-622-4463
Fax: 614-224-1012

oma@ohiomfg.com
WWW.OHIOMFG.COM

1. OPINION

Washington's regulatory onslaught endangers Ohio's manufacturing momentum: Ryan Augsburger

- Published: Jul. 16, 2023, 5:35 a.m.

Manufacturers have led the Buckeye State's surge as manufacturing payrolls once again boast more than 690,000 jobs. Manufacturing economic output continues to smash records, contributing more than $134 billion annually to our state's economy.David Petkiewicz, cleveland.com

Guest columnist, cleveland.com and The Plain Dealer

COLUMBUS, Ohio -- While the drumbeat of dismal economic forecasts has been steady since the early days of the pandemic, Ohio's economy has kept its head above water.

More accurately, it has thrived.

Manufacturers have led the Buckeye State's surge as manufacturing payrolls once again boast more than 690,000 jobs. Manufacturing economic output continues to smash records, contributing more than $134 billion annually to our state's economy.

Unfortunately, some in Washington, D.C., are working overtime to repel this momentum.

The latest survey conducted by the National Association of Manufacturers (NAM) finds that U.S. manufacturers' concerns over federal regulations have reached a six-year high as nearly 100 new major regulations – from 30 federal agencies and offices – threaten jobs and investment.

Ryan Augsburger is president of The Ohio Manufacturers' Association, which represents approximately 1,500 manufacturers statewide.

A new report by the conservative American Action Forum shows the Biden administration's near and long-term plan to issue approximately 3,200 rulemakings within the next year or so includes 280 "major rules" and 1,326 "significant rules," representing high-water marks for both categories over the past decade.

The Ohio Manufacturers' Association (OMA) has partnered with NAM to push back against the regulatory onslaught. What takes place in D.C. and key federal agencies ultimately impacts Ohio manufacturers and their communities.

Here are just a handful of examples of recent regulations that will affect our industry:

Feb 22, 2024

The Honorable Richard Revesz
Administrator
Office of Information and Regulatory Affairs
U.S. Office of Management and Budget
Washington, D.C. 20503

Dear Administrator Revesz,

On behalf of The Ohio Manufacturers' Association (OMA), I write today to request that the Biden administration take a consistent, measured, and scientifically sound approach to regulating per- and polyfluoroalkyl substances (PFAS) under the Safe Drinking Water Act (SDWA).

The OMA is Ohio's largest statewide business association comprised solely of manufacturers. Established in 1910, the OMA's mission is to protect and grow Ohio manufacturing which continues to serve as the backbone of our state. Our association represents manufacturers of all sizes in every subsector of the industry. Manufacturing remains Ohio's largest economic sector, employing more than 690,000 Ohioans and contributing more than $130 billion annually to the economy.

PFAS are used in a wide variety of applications, including critical components needed to achieve the President's stated priorities around clean energy technologies and domestic semiconductor manufacturing. Among their many uses, this family of chemicals is used in batteries, electric grid infrastructure, semiconductors, automotive equipment, and virtually all sources of energy in our power sector, including solar panels and wind turbines. In many cases, there is no alternative to PFAS in the manufacturing process. Accordingly, regulations on this topic should be achievable and allow for reasonable flexibility.

Unfortunately, the Environmental Protection Agency's (EPA) current regulatory proposal under the SDWA does not reflect a balanced or technically feasible approach to addressing PFAS. The EPA's proposed limits are below 10 parts per trillion (PPT). For comparison, a PPT is a single drop of water in an Olympic swimming pool, effectively setting an unachievable standard that will cost everyone billions of dollars to chase. Regulations set near zero are technologically and economically impossible to achieve. Limits at such low levels have the three-fold impact of raising prices for consumers across the country, threatening manufacturing supply chains, and imposing a severe financial burden on local communities and ratepayers who will foot the bill for cleanup efforts.

In fact, a report released last year from the American Water Works Association projected that potential regulatory compliance for just two of the six PFAS covered under the new rules would cost $3.8 billion per year. As such, the proposed rule threatens to wreak havoc on Ohio's supply chains and hurt the manufacturing of key products. The severity of the proposed regulations will mean higher prices for everything from community water and waste systems to medical treatments. The onslaught of regulations facing the industry is putting at risk new investment, slowing hiring, and reducing innovation on products critical to everyday life.

Given the significant economic consequences of the new SDWA regulations, we respectfully request that the EPA withdraw the current proposal to regulate PFAS under the SDWA and reissue a proposal that considers the real-world impacts on local taxpayers and manufacturers in Ohio. Thank you for your consideration.

Sincerely,

Ryan Augsburger
President
The Ohio Manufacturers' Association

The Ohio Manufacturers' Association

November 17, 2023

VIA Electronic Mail

Richard A. Wayland
Director, Air Quality Assessment Division
Office of Air Quality and Planning Standards
U.S. Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460

Re: OMA Comments – EPA's Proposed Revisions to the Air Emissions Reporting Requirements, Docket ID: EPA-HQ-OAR-2004-0489, 88 Fed. Reg. 54118 (August 9, 2023)

Dear Director Wayland:

On August 9, 2023, the United States EPA (EPA) published proposed revisions to the Air Emissions Reporting Requirements (AERR) and opened a 60-day public comment period (88 FR 54118), which was subsequently extended with a current comment submission deadline of November 17, 2023 (88 FR 70616). Pursuant to EPA's public notices, The Ohio Manufacturers' Association is hereby providing EPA with written comments on the proposed rule.

The OMA is dedicated to protecting and growing manufacturing in Ohio. The OMA represents over 1,300 manufacturers throughout Ohio. For more than 100 years, the OMA has supported reasonable, necessary, and transparent environmental regulations that promote the health and well-being of Ohio's citizens. The OMA appreciates the opportunity to comment on EPA's proposed changes to the AERR, and hereby incorporates and emphasizes many of the comments also submitted by the National Association of Manufacturers.

The OMA recognizes that EPA's proposed changes seek to provide greater transparency of significant sources of air pollution to protect communities from those pollutants, and agrees there is a strong need for harmonized reporting requirements in this area. Despite this, the OMA has serious concerns about the compliance costs and workability of the proposed changes. In particular, and as described more completely below, EPA estimates the new rules carry a compliance cost of over $3 billion, and proposes reporting requirements that will lead to regulatory uncertainty.

1. <u>The "Potential to Emit" Standard</u>

The proposed "potential to emit" standard imposes unnecessary costs on manufacturers and would lead to regulatory uncertainty. In its current form, the AERR defines "major source" for point source reporting purposes based on actual emissions. Now, the EPA's proposal would base reporting requirements on a source's "potential to emit." This change will require states to report on more sources and create uncertainty throughout the entire reporting process. Accordingly, OMA urges EPA to retain the original threshold criteria and definition for point source in order to allow for much-needed clarity and standardized reporting.

33 N. High St., FL 6
Columbus, Ohio 43215-3076

Phone: 614-224-5111 • **Toll free:** 800-662-4463
Fax: 614-224-1012

oma@ohiomfg.com
WWW.OHIOMFG.COM

2. Mandatory HAPs Reporting

EPA's proposed rule would require manufacturers to provide data on hazardous air pollutants (HAPs) to EPA, regardless of the facility's potential to emit HAPs. In the past, this information has been collected on a voluntary basis through state environmental agencies. This additional reporting requirement is overly broad, as it contains no de minimis, facility-wide HAP threshold, and it burdens small facilities with significant work and monitoring to evaluate and verify the HAP thresholds of low-risk products. Further, the EPA's proposed timeline to enact these additional requirements is far too short. If EPA expects additional reporting from manufacturers, including a source's "potential to emit," the industry requires more time, technical assistance, and guidance from the EPA on best practices.

3. Mandatory Reporting on all State and Federal Air Requirements

The proposed rule would require manufacturers to detail all state and federal air requirements that a source is subject to, thereby creating a roadmap for potential enforcement actions and potentially forming the basis for a civil suit. For example, the proposed rule would require sources to calculate emissions for "events," even when there is no mechanism available to support that calculation (such as WebFIRE, AP42, or source tests). This could lead to inaccurate reporting and also expose the entire industry to the threat of increased litigation, making the task of manufacturing itself more costly. Litigation is already a major impediment to permitting new manufacturing facilities or expanding existing ones. Accordingly, the OMA advocates for a rejection of this aspect of the proposed rule.

4. Mandatory PFAS Reporting

The proposed rule consolidates and expands reporting on air quality standards, including criteria air pollutants ("CAPs") and HAPs, and EPA notifies that it is currently considering expanding reporting requirements even further to include PFAS substances. However, PFAS substances have yet to be categorized as HAPs or CAPs, and EPA even admits that it lacks the necessary toxicity and risk data for PFAS substances to properly make this determination. This requirement is premature and will introduce regulatory uncertainty and hinder manufacturing growth in the United States. Further, it puts critical products that often contain PFAS substances, like semiconductors, batteries, medical devices, and electrolyzers for clean hydrogen, in jeopardy. EPA should not require reporting on PFAS substances until there is adequate data for it to rely on and until the substances have been classified as either a CAP or HAP.

5. Emissions Data

EPA's proposed rule removes the confidential designation that has been previously given to emissions data. The rule fails to recognize that in certain industries, such as the semiconductor industry, this data can reveal trade secrets. Innovation is vital to our national goal of returning semiconductor manufacturing back to the United States. EPA should not place additional barriers on innovation by removing the confidential information protection from emissions data. The rule must encompass a means of protection for trade secrets.

6. Mandatory Reporting of Mobile Sources

The proposed rule further requires manufacturers to calculate emissions from on-site mobile sources and generator emissions. However, stationary sources cannot accurately estimate or control emissions from mobile sources. This reality means that manufacturers will be required to take on the additional task of collecting data that, ultimately, may not be reliable or usable by EPA. Accordingly, the OMA opposes this requirement.

Conclusion

The OMA respectfully requests that EPA adopt a proposed rule that adequately considers and implements the concerns and recommendations discussed above. While manufacturers are committed to developing and utilizing new technologies to improve the quality of life and protect the environment, the AERR proposed rule, in its current form, adds significant additional barriers and requirements. Reporting requirements need to ensure regulatory certainty and not impede a manufacturer's ability to roll out new technologies or compete in a global economy.

The OMA greatly appreciates the opportunity to comment on the proposed rule. Please contact me at (614-629-6834) or jlee@ohiomfg.com if you have any questions regarding the OMA's comments.

Sincerely,

James Lee
Director of Public Policy
The Ohio Manufacturers' Association

cc: Christy Rideout Schirra
Julianne Kurdila

May 30, 2023

VIA ELECTRONIC SUBMISSION (https://www.regulations.gov)

U.S. EPA, Existing Chemicals Risk Management Division
Office of Pollution Prevention and Toxics
1200 Pennsylvania Avenue, NW.
Washington, DC 20460-0001

Re: Comments on U.S. EPA's Proposed Methylene Chloride Action under the Toxic Substances Control Act
Docket ID: EPA-HQ-OPPT-2020-0465

Dear Sir or Madam:

The Ohio Manufacturers' Association (OMA) is hereby providing U.S. EPA (EPA) with written comments on the agency's proposed action on methylene chloride under the Toxic Substances Control Act (TSCA) (Docket ID# EPA-HQ-OPPT-2020-0465).

The OMA is dedicated to protecting and growing manufacturing in Ohio. The OMA represents over 1,300 manufacturers throughout Ohio. For more than 100 years, the OMA has supported reasonable, necessary, and transparent environmental regulations that promote the health and well-being of Ohio's citizens.

Pre-emption of OSHA Workplace Safety Standards

OMA can appreciate EPA's desire to restrict use of methylene chloride to the general public, retailers, and consumers such as home contractors/remodelers who may not be fully aware of the necessary precautions to safely use this chemical. However, this proposed rule is a case of "throwing-the-baby-out-with-the-bathwater".

Commercial and industrial entities, including manufacturers, have, for decades, been safely using methylene chloride for specific critical functions where there is no viable alternative, under OSHA workplace safety regulations and industry best practices, including OSHA Permissible Exposure Limit (PEL) of 25 ppm, OSHA Short Term Exposure Limit (STEL) of 125 ppm, and American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV) of 50 ppm.

With this proposed rule, EPA is overturning long-established OSHA (and ACGIH) workplace safety regulations, limits and practice with the imposition of arbitrary and capricious EPA Existing Chemical Exposure Limit (ECEL) of 2 ppm and EPA STEL of 16 ppm. In Section 4 of the proposed rule, which provided the justification for the development of these ECEL and STEL

values, EPA clearly “cherry-picked” the worst-case, unrealistic information, including use of modeling and statistically insignificant studies, in order to craft the ECEL and STEL values – which are well below existing OSHA PEL, OSHA STEL and ACGIH TLV that are well protective to human health.

We have grave concerns that EPA is going beyond its statutory authority with this rule, and usurping OSHA’s authority to regulate workplace safety by replacing OSHA’s limits with EPA’s own limits and practices. We also have concerns that this rule will set precedent for EPA to likewise usurp OSHA’s regulatory authority in the future.

Therefore, we urge in the strongest terms that the final rule exempts commercial and industrial sectors, that are already highly regulated by OSHA, from the EPA ECEL, EPA STEL and Workplace Chemical Protection Program (WCPP) requirements, and to limit the proposed requirements to the general public, retailers and consumers that fall outside of OSHA’s regulatory authority.

Methylene Chloride Use in Chemical Bonding of Acrylic and Polycarbonate

In the proposed rule, EPA described “*a lack of viable alternatives for the use of methylene chloride in chemical bonding of acrylic and polycarbonate, specifically for specialty batteries for use in military and space applications…EPA consulted with NASA, and NASA provided information on its effort to screen alternative adhesives for the chemical bonding of acrylic and polycarbonate…Results submitted to EPA indicate that none of the materials tested met the technical requirements for chemical bonding applications”.*

In fact, the lack of viable alternatives for methylene chloride as the active ingredient in chemical bonding extends beyond the stated example of specialty batteries. For critical acrylic and polycarbonate applications that require very strong bonds, such as large aquariums and critical liquid storage, chemical bonding is the only option where the separate plastic surfaces to be bonded are dissolved by methylene chloride, and then chemically fused together to become continuous, monolithic plastic.

There are adhesives for acrylic and polycarbonate applications that do not dissolve or melt the plastic, but merely act as a separate adhesive or glue layer that causes the plastic to stick, but not fuse, to plastic or other materials; however, these adhesive bonds are weaker than those created through chemical bonding.

Restricting adhesives that contain methylene chloride from the market will disrupt critical industries, not just NASA and the military. Therefore, we are requesting that EPA treat chemical bonding of acrylic and polycarbonate in the industrial sector (already under OSHA regulation) in the same category as for NASA and the military, including the 10-year exemption to possibly search for viable substitutes.

Alternatively, we are requesting that EPA consider the industrial and commercial use of methylene chloride in chemical bonding of acrylic and polycarbonate in the same category as its industrial and commercial use as a laboratory chemical.

Onerous New Workplace Chemical Protection Program

We have grave concerns with the introduction of the WCPP program, which overlaps and exceeds OSHA's methylene chloride standard (29 CFR 1910.1052). As proposed, the new WCPP is an onerous, top-down, command-and-control, bureaucratic process that is going to be layered onto the existing OSHA workplace safety program.

Rather than develop an entirely new process (as-proposed WCPP), we strongly urge for deference to the OSHA methylene chloride standard (29 CFR 1910.1052), which can be achieved by reference, or by incorporating as much of the exposure monitoring and control process that is already found the in this OSHA standard. Another suggestion would be to provide an alternative compliance method to the WCPP by following the exposure monitoring and control process in the OSHA methylene chloride standard.

Finally, we would request a three (3) year implementation timeline, typical of other EPA rules, such as MACT, for such a substantive regulatory requirement.

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The OMA appreciates the opportunity to provide these comments for the proposed methylene chloride action under TSCA. If EPA has any questions regarding the foregoing, please do not hesitate to contact me (614) 224-6834 or OMA's environmental counsel, Christy Schirra at Bricker Graydon LLP (614) 227-8810.

Regards,

James Lee
Director of Public Policy
The Ohio Manufacturers' Association

cc: Christy Schirra, Esq.
Julianne Kurdila, Chair

November 21, 2023

VIA ELECTRONIC SUBMISSION (https://www.regulations.gov)

U.S. Environmental Protection Agency
EPA Docket Center
Office of Resource Conservation and Recovery Docket
Mail Code 28221T
1200 Pennsylvania Avenue NW.
Washington, DC 20460

Re: Comments on EPA's Used Drum Management and Reconditioning Advance Notice of Proposed Rulemaking Docket ID: EPA-HQ-OLEM-2023-0320

Dear Sir or Madam:

The Ohio Manufacturers' Association (OMA) is hereby providing U.S. EPA (EPA) with written comments on the agency's Used Drum Management and Reconditioning Advance Notice of Proposed Rulemaking (ANPR) (Docket ID# EPA-HQ-OLEM-2023-0320).

The OMA is dedicated to protecting and growing manufacturing in Ohio. The OMA represents over 1,300 manufacturers throughout Ohio. For more than 100 years, the OMA has supported reasonable, necessary, and transparent environmental regulations that promote the health and well-being of Ohio's citizens.

In the course of their manufacturing operations, many of OMA's members would typically be subject to EPA's solid waste rules, including the RCRA hazardous waste rules. Our members understand the importance of compliance with all environmental regulations, including RCRA, to provide sustainable working environments which are protective to the health of their employees and the public, and the environment.

As EPA is aware, a long-time, sustainable activity has been the reuse of containers (e.g., drums, totes) through sourcing of reconditioned containers, and sending empty used containers to the appropriate container reconditioners. This sustainable container reuse activity has been greatly aided by the "RCRA empty" container exemption in 40 CFR 261.7.

It has been our members' experience that this "RCRA empty" exemption, since its inception in 1980, has been a RCRA policy success story that has enabled widespread container reuse, as opposed to "single-use" of these containers (e.g., landfill disposal, scrap metal). EPA's reopening of this "RCRA empty" container exemption risks upsetting this successful sustainability effort, "destroying" legitimate container reconditioners, and causing a shift away from container reuse towards single-use containers – a regrettable step backwards in sustainability.

With reference to attached the Reusable Industrial Packaging Association's (RIPA) February 3, 2023 comment letter to the EPA's "Drum Reconditioner Damage Case Report (Document No. EPA 530-R-22-003, September 2022)", this trade group that represents and knows well the container reconditioning market had performed a careful review of the September 2022 EPA document, and indicated that EPA had over-stated the dire conclusions in that report, as seen in these quotes from the RIPA February 3, 2023 letter:

- *"These facilities, at which environmental and/or safety issues have been documented, are not representative of the overwhelming majority of active facilities at which no issues have been identified."*
- *"In addition, the focus of the Drum Reconditioner Report on when environmental and safety issues are identified, rather than when the reconditioning operations at the facilities occurred, leads to the inaccurate and misleading conclusion that there is a "growing number of incidents at drum reconditioner facilities.""*
- *"Many of the facilities identified as damage cases are not and never were reconditioning facilities."*
- *"Many of the facilities identified as damage cases have a history of industrial uses unrelated to reconditioning and/or are located adjacent to other operations that are a likely source of environmental contamination…"*
- *"70% (60 of 86) of the identified damage cases involve facilities that operated before 1980 (i.e., before enactment of the empty-container rule) and/or involve facilities that are no longer operating (many of which ceased operating decades ago). None of these facilities represent a "growing number of incidents at [active] drum reconditioner facilities."*
- *"50% (13 of the 26) remaining damage cases involve non-RCRA compliance issues (e.g., alleged non-compliance with Clean Air Act recordkeeping requirements) and/or events unrelated to the handling of container residues (e.g., an employee falling into a tank of caustic solution)."*
- *"Only 13 of the identified damage cases, which represent only 7% of the 181 reconditioning facilities EPA identified, appear to involve the alleged mishandling of container residues by a currently operating reconditioning facility."*

Therefore, RIPA's assessment casts serious doubt upon EPA's reliance of its September 2022 document for this ANPR addressing the "RCRA empty" container exemption. OMA urges EPA in the strongest terms possible, **not** to eliminate the "RCRA empty" container exemption, nor restrict or substantially change this exemption to the point that it is no longer a workable or cost-effective option. This action by EPA would, in turn, result in a shift away from reuse, towards the single-use of these containers.

In the spirit of "don't-throw-the-baby-out-with-the-bathwater", we believe that EPA's expressed concerns regarding the operations of drum reconditioners can largely be mitigated by reasonable, minor policy additions in this matter, including the following:

- The concept of thresholds in the "RCRA empty" exemption in 40 CFR 261.7(b)(1) should be maintained; however, some reduction in these thresholds may be appropriate, (see text strikethrough with new text in **RED**): "(ii) No more than ~~**2.5 centimeters (one inch)**~~ **1.25 centimeters (0.5 inch)** of residue remain on the bottom of the container or inner liner, or… (iii)(A) No more than ~~**3 percent**~~ **2 percent** by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 119 gallons in size; or… (iii)(B) No more than ~~**0.3 percent**~~ **0.2 percent** by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 119 gallons in size."

- Drum reconditioners should **not** be treated as hazardous waste facilities, since that would seriously jeopardize their businesses, leading to less reconditioners in the marketplace. Therefore, EPA should **not** seek to regulate drum reconditioners as Part B hazardous waste facilities.

- A policy to control the on-site inventory of empty containers at drum reconditioning sites may be appropriate, such as establishing an accumulation period (e.g., 270-365 days) for on-site storage of used drums, prior to reconditioning, to ensure reconditioning of the used drums in a reasonable timeframe. Another possibility might be a maximum storage limit for used drums, prior to reconditioning, at each site (e.g., used containers per stored acre).

- Better identification of the used drum generators can be achieved by requiring empty drum shipments to be recorded on either a standard bill of lading (BOL), or a non-hazardous waste manifest. In addition, having a label on each empty drum with the used drum generator's contact information can also facilitate proper tracking, and prompt returns of off-spec drum(s) to the used drum generator.

- Requiring Best Management Practices (BMP) at drum reconditioning sites is prudent; however, rather than "re-inventing-the-wheel", EPA should defer to, or model such BMP program on, industry best practices, such as the RIPA's Responsible Packaging Management program (https://www.reusablepackaging.org/ripa-publications/).

The OMA believes that the above suggested policy additions, along with compliance assistance of drum reconditioning operations, would largely address the concerns of EPA and the public, while ensuring the viability of this sustainable reuse activity. OMA again urges EPA **not** to eliminate the "RCRA empty" container exemption, or turn it into a cumbersome, bureaucratic, expensive program that would then force a shift away from container reuse towards single-use containers.

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The OMA appreciates the opportunity to provide these comments on this ANPR. If EPA has any questions regarding the foregoing, please do not hesitate to contact me (614-629-6834) or OMA's environmental counsel, Christy Schirra at Bricker Graydon LLP (614-227-2300).

Regards,

James Lee
Director of Public Policy
The Ohio Manufacturers' Association

cc: Christy Schirra, Esq.
Julianne Kurdila, Chair

Attachment 1

Reusable Industrial Packaging Association's (RIPA) February 3, 2023 comment letter to "Drum Reconditioner Damage Case Report (Document No. EPA 530-R-22-003, September 2022)"

July 28, 2023

VIA ELECTRONIC SUBMISSION (https://www.regulations.gov)

U.S. EPA, Resource Conservation and Sustainability Division
Office of Resource Conservation and Recovery
Office of Land and Emergency Management
Mail Code 5306T
1200 Pennsylvania Avenue, NW.
Washington, DC 20004

Re: Comments on U.S. EPA's Draft National Strategy to Prevent Plastic Pollution
Docket ID: EPA-HQ-OLEM-2023-0228

Dear Acting Assistant Administrator Breen:

The Ohio Manufacturers' Association (OMA) is hereby providing U.S. EPA (EPA) with written comments on the agency's Draft National Strategy to Prevent Plastic Pollution (Docket ID# EPA-HQ-OLEM-2023-0228).

The OMA is dedicated to protecting and growing manufacturing in Ohio. The OMA represents over 1,300 manufacturers throughout Ohio. For more than 100 years, the OMA has supported reasonable, necessary, and transparent environmental regulations that promote the health and well-being of Ohio's citizens.

Many products in society incorporate plastics, in whole or partially, for their beneficial material properties such as lightweight, chemical resistance and aesthetics (e.g., LED lighting fixtures, renewable energy devices, electric vehicles, artwork). Ohio's manufacturers, as well as all manufacturers in general, rely on plastics along with other materials (e.g., metals, paper, glass, wood, ceramics, concrete) as the raw materials to make products that benefit society in general. Plastics are also components of the buildings and equipment used in manufacturing, such as piping, wiring, digital devices, industrial robots and vehicles.

Comment #1 on Draft Objectives for the Strategy:
EPA states in the Federal Register notice that *"The Draft National Strategy to Prevent Plastic Pollution, satisfies Congress' direction to EPA in section 301 of the Save Our Seas 2.0 Act to develop a strategy to improve postconsumer materials management and infrastructure for the purpose of reducing plastic waste and other postconsumer materials in waterways and oceans."* It would appear that the draft strategy does not meet the statutory intent in at least two ways.

First, the draft strategy, as published in the Federal Register notice, is focused only on plastics,

and does not appear to address the “other postconsumer materials” at all. Will there be a separate national strategy for these “other postconsumer materials”? Second, the following sentence in the Federal Register notice - “Sea-based sources are not in the scope of this strategy” – also appears to not meet the statutory intent of Section 301 of the Save Our Seas 2.0 Act to focus on “waterways and oceans”.

Comment #2 on Draft Objective A: Reduce Pollution During Plastic Production
Current stormwater NPDES permits already incorporate extensive pellet management obligations on the plastic industry sector for at least a decade. Therefore, it would be inefficient and counter-productive to layer another regulatory program onto the existing stormwater NPDES program. EPA should continue with the current stormwater NPDES permit program as the regulatory vehicle to manage pollution during plastic production.

Comment #3 on Draft Objective B: Improve Post-use Materials Management
EPA should consider an “all-of-the-above” view to managing pre- or post-consumer plastics, including reuse, mechanical recycling and chemical recycling. The various plastics recycling approaches continue to evolve, and EPA should encourage their further research and development, rather than picking “winners-and-losers” at this early stage of their development. Encouraging on-going development would appear to align with the following statement in the Federal Register notice: *“The proposed actions under each objective create opportunities to shift from a linear approach in plastic materials management to a more circular system that is restorative or regenerative by design, enables resources to maintain their highest value for as long as possible, and aims for the elimination of waste.”*

Additionally, pre-consumer material management, in an industrial setting, is already well established under existing EPA regulations, including the stormwater NPDES and solid waste rules; therefore, the regulatory focus for this objective should be on post-consumer material management.

Comment #4 on Draft Objective C: Prevent Trash and Microplastics from Entering Waterways and Remove Escaped Trash from the Environment
It should be obvious that marine pollution is primarily a problem with the human activity of littering, so this should be a focus of any national strategy. If current policies on littering are no longer effective, then a complete overhaul of litter policy might also be in order.

Plastics make up less than 0.5% of the materials we use and the waste we create, which means that eliminating plastics completely will still leave 99.5% of waste that has to be dealt with. Any national strategy should address 100% of the wastes, rather than focus on just plastics, which is a very small subset of that waste.

Comment #5 on “Which actions are the most important and would have the greatest positive impact at the local, regional, national, and global level?”
As stated previously, plastics make up less than 0.5% of the materials we use and the waste we create, which means that eliminating plastics completely will still leave 99.5% of waste that has to be dealt with. In addition, data on materials growth rate shows that <u>all</u> materials (i.e., metal, wood, concrete, paper, plastics) are all projected to grow at about the same rate of

approximately 2-3% per year.

These two examples highlight what is missing in the current plastics debate – a comprehensive, balanced, holistic view of the scientific data regarding plastics pollution. As the scientific studies continue, it is important to maintain an "open-mind" to any comparative analysis of plastics to other materials, such as metals, concrete, ceramics, glass and paper. It is critical to understand the scope of the problem in any attempt to develop solution.

At its core, the issue of marine or land pollution, whether plastics or any other material, is the problem of litter. Unless real action is taken to tackle the problem of littering by people, marine pollution will continue to be a problem, even if plastics are completely outlawed.

We understand that it has been, and continues to be, a challenge to tackle the scourge of littering, and it is discouraging that littering, in general, has become more endemic in the American society, in spite decades of education and litter enforcement efforts. However, the proper focus should be on trying to get humans to properly manage, reduce or eliminate littering to have any meaningful result on the marine pollution.

Comment #6 on "What are the most important roles and/or actions for federal agencies to lead?"
While plastics are no different than the other materials (e.g., paper, metals, glass, wood, ceramics, concrete) used to manufacture products beneficial to a well-functioning society, synthetic plastics are, so to speak, the "new-kid-on-the-block", being present only within the last 100+ years, as compared to the other traditional materials that have been around for thousands of years (e.g., approximately 5,000 years for glass).

Due to their long existence, people have become used to these traditional materials, including living with the risks of each and every material, but the current "plastophobia" or "fear of plastics" is a reflection of society still getting used to this relatively new material. Therefore, EPA can have an important role in helping society to become more comfortable with living with plastics, rather than joining in the efforts to demonize and criminalize this highly beneficial material. Plastics need more time for societies to become used to it, similar to how civilizations have adapted to the use of paper, metals, glass and ceramics. If EPA joins in the chorus of "plastophobia", leading to outright plastic bans, then it will have missed a golden "once-in-a-millenia" opportunity to benefit human health and the environment.

Comment #7 on "What are potential unintended consequences of the proposed actions that could impact communities considered overburdened or vulnerable, such as shifts in production or management methods?"
Life-cycle analysis (LCA) studies have shown that plastics have lower environmental footprints when compared to other materials, such as steel, aluminum, glass. This means that an unintended consequence of any plastic ban would be the substitution of plastics with materials that would end up consuming far more energy, CO2 and waste. The lesson from these LCAs show that there is a balancing act in material selection, and EPA should not be picking "winners-and-losers", but allow human creativity and the marketplace of ideas to optimize to the most efficient use of materials.

While the focus of plastic pollution has been on single-use plastics packaging, it is important to note that a primary use of single-use plastic packaging is in aseptic and food-safe applications. This benefit was clearly seen when all manner of single-use plastic packaging was required in the medical response during the recent Covid-19 pandemic. Removing the use of plastics from aseptic, medical-grade and food-safe packaging, while substituting with less capable materials, will have the unintended consequence of increasing the risk of infections and food poisoning, including to overburdened or vulnerable communities.

Comment #8 on "Should EPA expand the scope of the strategy to include sea-based sources?"
With reference to Comment #1 on the draft strategy not meeting its statutory intent to focus on the "waterways and oceans" ecosystems, EPA should expand the scope of the strategy to include sea-based sources.

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The OMA appreciates the opportunity to provide these comments on the Draft National Strategy to Prevent Plastic Pollution. If EPA has any questions regarding the foregoing, please do not hesitate to contact me at (614) 629-6834 or OMA's environmental counsel, Christy Schirra at Bricker Graydon LLP - (614) 227-8810.

Regards,

James Lee
Director of Public Policy
The Ohio Manufacturers' Association

cc: Christy Schirra, Esq.
Julianne Kurdila, Chair

Ohio Environmental Protection Agency

Division of Air Pollution Control (DAPC)

Funding Needs

DAPC ensures air is safe for Ohioans to breathe

Balances the needs of economic growth

Sets safe limits for large manufacturing and utility facilities

Thirty years ago, Ohio EPA adopted the minimum fee established by the Clean Air Act.

The fee is not adequate to maintain DAPC's program. If Ohio EPA cannot fund the Title V Program, U.S. EPA will step in.

Ohio's Proposal

Generate $7M in Additional Annual Revenue

DAPC looked to neighboring states facing the same issue. Many have instituted an annual base fee – Indiana ($6,100), Michigan ($5,250-$45,000), Pennsylvania ($8,000), Tennessee ($10,000).

DAPC is proposing a base fee of $5,000 for all Title V and synthetic minor facilities and a 50% increase in synthetic minor emission fees along with a 50% increase in Permits to Install fees.

	Number of Facilities	Fee Increase Proposal	Increased Revenue
Title V Fee	509	$5,000 Base Fee	$2,545,000
PTI Fee		50% increase	$400,000
Synthetic Minor Fee	791	50% increase + $5,000 base fee	$4,121,000
Total Additional Revenue			$7,066,000

For more information, email **Andrew.Smith@epa.ohio.gov**

LAW

Supreme Court halts EPA's 'Good Neighbor Plan'

JUNE 27, 2024 · 10:11 AM ET

By Nina Totenberg, Jordan Thomas

The Supreme Court

Andrew Harnik/Getty Images

The U.S. Supreme Court on Thursday temporarily blocked the Environmental Protection Agency's "Good Neighbor Plan." By a 5 to 4 vote, the court ruled that the emissions-reductions standards set by the plan were likely to cause

"irreparable harm" to almost half the states unless the court halted the rule pending further review by the U.S. Court of Appeals for the District of Columbia.

The EPA's Good Neighbor Plan aimed to ensure compliance with the 2015 Ozone National Ambient Air Quality Standards law. To carry out the law's mandate, the EPA required "upwind" states to reduce air pollution affecting "downwind" states. Under the Good Neighbor rule, states are first given the chance to create a plan that complies with agency's ozone guidelines. If a state fails to submit an adequate plan, the EPA then designs a compliance plan for the state. In February 2023, the EPA determined that 23 states had not provided sufficient plans and the agency then decided to implement its own emissions-control program for those states.

Ohio, plus several other states, large industrial companies, and trade associations, challenged the EPA plan in court. They contended that the agency's "dictatorial approach" failed to adequately consider the legal and practical implications of substituting its own plan for the state plans. The opponents also argued that the plan's implementation would cause significant economic and operational harm, particularly by forcing states to undertake costly modifications to their power plants while judicial review is pending in the U.S. Court of Appeals for the District of Columbia.

On Thursday, the Supreme Court agreed with the states.

The decision was a major loss for environmental groups and downwind states; they warned that halting the Good Neighbor Plan could lead to continued ozone pollution, adversely affecting public health and the environment. For its part, the EPA maintained that the plan was crucial for achieving national air quality standards and protecting downwind states from the harmful effects of upwind pollution.

u.s. supreme court

More Stories From NPR

MEMORANDUM

TO: James Lee, The Ohio Manufacturers Association
FROM: Christy Rideout Schirra, Bricker Graydon
DATE: January 28, 2024
RE: U.S. EPA's Good Neighbor Plan

I. Summary Overview

The United States Environmental Protection Agency's (U.S. EPA) Good Neighbor Plan (GNP), which went into effect on August 4, 2023, requires Ohio manufacturers in certain industries to implement emissions reductions through the installation and implementation of strict nitrogen oxide emission controls. Previous iterations of GNP only applied to the power industry, but U.S. EPA's new plan widely applies to industry across 20 states, including Ohio, which have been identified by U.S. EPA as "upwind" states contributing significantly to air quality in downwind states.

GNP is currently stayed in twelve of the twenty-three states to which it more broadly applies as a result of pending litigation. Notably, this does not include Ohio. However, Ohio, Indiana, and West Virginia, along with industry groups, initiated litigation currently pending before the U.S. Supreme Court to argue that application of the GNP to the remaining eleven states is unfair and arbitrary, and therefore the stay should apply to all twenty-three states while the various court cases are pending.

II. Detailed Discussion

1) What is the Good Neighbor Plan? What does it require and will it impact manufacturers?

The GNP is a set of new regulations issued by U.S. EPA that went into effect on August 4, 2023. U.S. EPA issued this new rule in compliance with the Clean Air Act (CAA), which requires U.S. EPA to review and update the air quality standards for six pollutants that are considered harmful to the public's health and the environment. In particular, the GNP regulates emissions of one of these pollutants: nitrogen oxide (NOx) (also referred to as "ground-level ozone" or "smog").

The goal of the GNP is to reduce NOx pollution during the "ozone season" (typically May 1 – September 30 each year) from power plants and industrial facilities in states that contribute to NOx pollution in other states. In determining which states would be subject to the new regulations, the U.S. EPA went through a four-part framework to identify "downwind" states that are not expected to meet the air quality standards required by the CAA and the "upwind" states that

significantly contribute to the air quality issues in the identified downwind states. This framework was also used to determine what pollution reduction measures would be imposed.

Under the GNP, industrial facilities in twenty states, including Ohio, are subject to emission budgets beginning in 2024 that "decline over time based on the level of reductions achievable through phased installation of" existing and new NOx emission controls.

While this type of program is not new (prior iterations of the GNP have been in effect), the GNP is unique because beginning in 2026, it applies to certain emission sources in nine additional, new industries, including manufacturers. Previous iterations of the plan applied only to the power industry. The additional emission sources and industries covered by GNP are as follows:

(1) reciprocating internal combustion engines used in the Pipeline Transportation of Natural Gas;
(2) kilns used in Cement and Cement Production Manufacturing;
(3) reheat furnaces and boilers used in Iron and Steel Mills and Ferroalloy Manufacturing;
(4) furnaces used in Glass and Glass Products Manufacturing;
(5) boilers used in Metal Ore Mining;
(6) boilers used in Basic Chemical Manufacturing;
(7) boilers used in Petroleum and Coal Products Manufacturing;
(8) boilers used in Pulp, Paper, and Paperboard Mills; and
(9) combustors and incinerators used in Solid Waste Combustors or Incinerators.

Specific to power plants, GNP further subjects power plants in twenty-two states, including Ohio, to a cap-and-trade program for NOx emissions. This program is described as a "revised and strengthened" version of previous ozone season trading programs. The program sets daily emissions limits for large (at or above 100 MW) coal fired units that, when exceeded by more than 50 tons, will result in a 3-for-1 surrender of emission allowances. For units that already have post-combustion controls installed, the limits become effective in September of 2024. For units that are planning to install emission controls after 2024, the limits become effective one year after installation, but not later than 2030. The program also provides for an annual recalibration of the emissions allowance bank and the emissions budget bank, with the latter beginning in 2030 to account for changes in power generation.

U.S. EPA estimates that the GNP's compliance costs will be approximately $910 million annually and the Plan's benefits will be anywhere from $4.3 to $15 billion in 2026.

2) What is the effectiveness of the rule? Is the any ongoing litigation that has the potential to affect the rule?

Despite the fact that the GNP went into effect in August 2023, it has not been implemented in twelve of the twenty-three states to which it applies, due to pending court actions in those states. To understand the arguments in those cases, it is necessary to understand how the CAA operates. Under the CAA, each state is required to develop and implement a "state implementation plan" (SIP) to ensure it is not significantly contributing to non-attainment of U.S. EPA's air quality

standards for certain pollutants. U.S. EPA is then tasked with approving or disapproving each SIP. If the U.S. EPA disapproves of a state's SIP, it must develop a "federal implementation plan" (FIP), such as the GNP. Accordingly, before implementing the GNP, U.S. EPA issued a final order disapproving SIPs developed by twenty-one states.

Following U.S. EPA's order, twelve affected states filed claims against U.S. EPA, and courts "stayed" the disapproval order, which effectively prevented implementation of the GNP in those states. As a result, the following states are not subject to the new standards or requirements in the GNP and will not be subject to them, unless a Court finds U.S. EPA lawfully disapproved of their SIPs: Alabama, Arkansas, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Nevada, Oklahoma, Texas, Utah, and West Virginia.

Further, in December 2023, the U.S. Supreme Court decided to hear a case regarding the GNP brought by industry groups and three states: Ohio, Indiana, and West Virginia. These parties argue that because the GNP has not been implemented in twelve of the states originally subject to the GNP, its application to the remaining eleven states is unfair and arbitrary. As a result, they argue the GNP should not be implemented in any state while the various court cases are pending. The Supreme Court is scheduled to hear oral arguments on this case on February 21, 2024.

Given the mounting legal battles U.S. EPA faces in implementing the GNP, it is unclear what the fate of the new regulations will be.

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Toledo and Lucas County Commissioners sue U.S. EPA

STEPHEN ZENNER
The Blade
szenner@theblade.com

MAY 1, 2024 | 7:05 PM

Local officials on Wednesday took another strike at the U.S. Environmental Protection Agency in an ongoing effort to try and fight Lake Erie pollution.

The board of Lucas County Commissioners, the City of Toledo, and the Environmental Law & Policy Center filed a lawsuit in U.S. District Court, alleging that the federal agency knowingly violated the Clean Water Act by approving an inadequate total maximum daily load, or TMDL, plan to restore the western basin of Lake Erie.

“This lawsuit is directed at obtaining an order that would require the U.S. EPA to withdraw its approval of Ohio's remedial plan and would also require the U.S. EPA to develop a remedial plan that meets the applicable legal standard,” said Fritz Byers, legal counsel for the commissioners.

The lawsuit was first announced last week at an Earth Day rally at the Middlegrounds Metropark, which sits along the Maumee River.

The lawsuit, which comes nearly a decade after a toxic Lake Erie algal bloom left 500,000 people in the Toledo area without access to clean water, is part of a string of actions filed against the EPA that first began in 2019.

Ohio Farm Bureau Federation spokesman Ty Higgins previously released a statement expressing disappointment about news of the lawsuit.

"It was pretty clear shortly after the creation of the TMDL for the Western Lake Erie Basin that those who pushed for it for years would still not be satisfied," Mr. Higgins said. "Even as this lawsuit goes through a long, drawn-out court process, Ohio farmers will continue to do what they were doing before the TMDL ever existed by focusing on water quality practices that will make a positive impact for the entire region."

The TMDL is a regulatory component of the U.S. Clean Water Act intended to address the cleanup of impaired waters by identifying a maximum amount of a pollutant that a body of water can receive while still meeting federal standards.

But Mr. Gerken expressed frustration with the persistence of algal blooms in the Maumee River watershed.

They are "avoidable, and they are unnecessary," he said.

"Why do they continue to exist?" he questioned. "Because there's been a failure to act on many levels of government, and that failure to act is not at this level of government."

The commissioners and Toledo Mayor Wade Kapszukiewicz blamed concentrated animal-feeding operations for the continued pollution of the northwest Ohio waterways.

“Some people call them farmers,” Mr. Gerken said. “But just like any other factory, they produce massive amounts of waste.”

By calling themselves farms and categorizing themselves under the agriculture sector, Mr. Gerken alleged that these CAFOs intentionally shirked regulation of their waste products.

Mr. Gerken also said the state EPA and the Department of Agriculture were “in bed” with CAFOs.

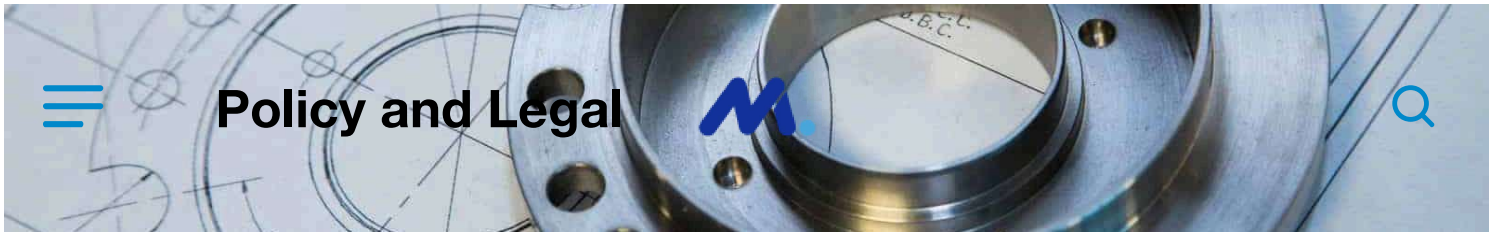
“We're gonna make that bed messied up with this lawsuit,” he said.

Added Commissioner Lisa Sobecki: “That algal bloom is not going away. And Pete is right. These massive livestock operations shouldn't be considered farms.”

Commissioner Anita Lopez told an anecdote about her son’s crew team having to wash immediately after a competition in Lake Erie to escape contamination, and the mayor pointed out that the same toxic level of phosphorus found a decade ago is the same as it is today.

“The residents of our region have had to reach into their pockets for almost $700 million since the water crisis to make the improvements at the plant necessary to allow water coming from a poisonous source to be drinkable,” Mr. Kapszukiewicz said, calling it an unfair bill for Toledoans to front.

“The science is clear that the algal blooms that lay in the western basin of Lake Erie have to be remediated,” Mr. Byers said. “The science is clear about what is causing them, and it is both legally and logically clear that Ohio's TMDL will not repair the problem.”



Policy and Legal

NAM, Partners File Opening Brief in Suit Against EPA

By NAM News Room June 7, 2024 12:00am

On Thursday, the NAM, joined by other business groups, filed the opening brief in their pending lawsuit against the Environmental Protection Agency.

What's going on: In March, the groups petitioned the D.C. Circuit to review the EPA's reconsideration of the National Ambient Air Quality Standards for fine particulate matter (or PM2.5), which lowers the allowable level to 9 micrograms per cubic meter of air from 12, a 25% reduction. The agency handed down the final, tightened rule in February.

- In their brief, the coalition argues that the EPA lacks the authority under the Clean Air Act—the law that authorizes it to establish the NAAQS—to "reconsider" a decision made in 2020 to *not* lower the PM2.5 standard; that the agency failed to take into account the cost and feasibility of a tightened standard; and that it failed to give a "reasoned explanation for key aspects of its decision."
- The groups participating in the suit with the NAM are the U.S. Chamber of Commerce, the American Chemistry Council, the American Petroleum Institute, the American Forest & Paper Association, the American Wood Council, the National Mining Association and the Portland Cement Association.

Why it's important: The tighter NAAQS rule could result in many parts of the U.S. being designated as in nonattainment, which would trigger significant new costs for manufacturers and others attempting to obtain air permits in those locations.

- Many of these areas "are indisputably handicapped in their ability to reduce emissions to meet the new NAAQS" due to factors beyond municipalities' and manufacturers' control (i.e., wildfires, which affect most of the contiguous U.S. at some point each year).
- The new rule could also prevent manufacturers from building or modifying facilities in certain areas, undermining the Biden administration's own "Investing in America" agenda, as it would stifle investment in manufacturing and kill—not create—well-paying manufacturing jobs.

What should be done: The rule should be vacated as soon as possible, the groups told the court.

Biden outlines regulatory plans for the rest of his term

By Kevin Bogardus | 07/08/2024 01:36 PM EDT

The president's future regulations are vulnerable to being overturned if Donald Trump wins the White House in November.

President Joe Biden, pictured here Thursday, issued the spring Unified Agenda on Friday outlining his regulatory plans for the upcoming months. Susan Walsh/AP

President Joe Biden shared his road map for upcoming regulations that are under threat by a potential second Trump administration.

The White House on Friday released the spring Unified Agenda (https://www.reginfo.gov/public/do/eAgendaMain), showing agencies' timelines for rules dealing with everything from natural gas power plants to household appliances. The document comes as Biden is in a fierce campaign dogfight with former President Donald Trump, who plans to pull back many of the rules if he wins the race.

The regulatory agenda "can usually best be seen as a wish list," which is particularly tricky during an election year, said Stuart Shapiro, a dean and public policy professor at Rutgers University.

"The time frames listed there are usually ambitious, and administrations rarely complete anything near their complete list of intended actions," Shapiro told POLITICO's E&E News. "I find it is best seen as signaling to interest groups, 'This is what we want to do.'"

This agenda also arrives after the Biden administration completed a regulatory sprint this spring (https://subscriber.politicopro.com/article/eenews/2024/06/12/how-biden-beat-the-clock-on-big-environmental-regs-00162573) as energy and environmental agencies finalized significant rules. That push was crucial to the president's legacy, shielding those regulations from being overturned quickly next year if he loses the White House.

Under the Congressional Review Act, lawmakers can offer resolutions to ax rules, including if they were finalized during the law's "look-back" window of the previous session's last 60 legislative days. Some experts say that window has already opened, while others believe it could come later this summer. That deadline will be determined by when Congress adjourns later this year.

If Trump were to become president again and his GOP allies made gains on Capitol Hill, they could use that part of the law in 2025 to attack Biden's regulations finalized late in his term.

"Now that the Congressional Review Act deadline is nearing, anything not yet issued is at risk of repeal if Trump wins and the GOP takes Congress," Shapiro said. "If Biden wins, the agenda is a decent list of what he would try to do in a second term."

Sam Berger, associate administrator of the White House's Office of Information and Regulatory Affairs, touted the proposed rules in a blog post (https://www.whitehouse.gov/omb/briefing-room/2024/07/05/the-2024-spring-regulatory-agenda/) Friday. He said the agenda continues "this Administration's progress in delivering for the American people, including by investing in America, lowering costs for families, combating climate change, and growing the economy from the middle out and bottom up."

Wayne Crews, a fellow in regulatory studies at the Competitive Enterprise Institute, a free market think tank, said the administration has entered a lull as it manages the remainder of Biden's first term and prepares for his second if the president's campaign prevails.

"There's no need to rock the boat now during an election year," Crews said.

James Goodwin, policy director for the Center for Progressive Reform, a liberal-leaning regulatory think tank, said the agenda can spell out what the administration intends to do in a message to potential voters.

"The results, the effectiveness of the administration, in fulfilling the mandate that it received when it won the election," Goodwin said. "It's 'promises kept' may be the way to summarize that."

Noting the uncertainty of the upcoming election, "anything that's on here has little chance of being finalized if Trump wins," Goodwin said, adding, "It really does come down to who wins, right? Elections have consequences."

Other challenges lie ahead as the Supreme Court threw a wrench into the rulemaking process. Shapiro noted the recent decision overturning the *Chevron* doctrine (https://subscriber.politicopro.com/article/eenews/2024/06/28/supreme-court-chevron-ruling-hamstrings-the-executive-branch-00165776), which said courts should yield to agencies' reasonable regulations when their statutory authority is unclear, could affect the regulatory plan.

"I doubt it will affect the contents of the agenda much," Shapiro said. "But it probably makes the time frames listed in the agenda even less realistic since now agencies have to craft rules that have a reasonable chance of surviving the new legal regime."

EPA rules

EPA's highly anticipated rule on greenhouse gas emissions from existing natural gas power plants is coming after Election Day.

The agency is expected to issue the proposed rule in December, according to the regulatory agenda (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=2060-AW24). Those standards were originally part of EPA's rule curbing power plants' carbon emissions that were finalized earlier this year.

Of some 50 other Clean Air Act rulemakings on the roster, agency officials hope to release this month the final version of a far-reaching update (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=2060-AV41) to hazardous air pollutant reporting requirements. The update is undergoing a routine review at the White House regulations office.

Now slated for completion this September is one of the air office's last remaining do-overs prompted by a Trump-era rollback: a final rule (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=2060-AV20) addressing the 2020 repeal of the "once in, always in" policy.

That approach, which dated back decades, required factories and other industrial plants to stick with the "maximum achievable" controls for air toxics even when their emissions fell below the thresholds that triggered that requirement in the first place. The draft rule (https://subscriber.politicopro.com/article/eenews/2023/09/22/epa-moves-to-reverse-trump-era-clean-air-act-rollback-00117664), released last September, stopped short of exact restoration of the earlier policy; it has drawn flak from both industrial and environmental groups.

EPA expects to finalize restrictions for three widely used "high priority" chemicals each linked to cancer. The agency's risk management rules on trichloroethylene (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=2070-AK83) and carbon tetrachloride (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=2070-AK82) are slated to be published this September, with perchloroethylene (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=2070-AK84) expected in August.

The Biden administration expects to wrap up the last of its rules on implementing the 2016 amendments to the Toxic Substances Control Act — updates to its framework for new chemicals reviews (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=2070-AK65) — by August.

Also on the agenda for the first time is 6PPD, a chemical used in tires and rubbers, and its byproduct 6PPD-q, which has killed large swaths of salmon in the Pacific Northwest. EPA expects to launch (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=2070-AL16) its information-collecting stage in December with an advanced notice of proposed rulemaking.

EPA is still on track to finalize a landmark regulation (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=2040-AG16) to virtually eliminate lead from drinking water by October, according to the agenda. The rule would give utilities 10 years to replace lead pipes, which have caused major public health crises in multiple cities.

Still, some regulations to reduce the spread of "forever chemicals" through rivers and streams are months or years away. One upcoming rule (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=2040-AG10), which would set wastewater standards for PFAS from chemical and plastic plants, will be proposed by September of this year — three and a half years after the agency announced the rule.

On biofuels policy, EPA said it would combine next year's announcement of minimum biofuel blending through the renewable fuel standard with proposed changes to improve the program's implementation. A notice of proposed rulemaking is slated for March, with a final rule envisioned for December 2025 (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=2060-AW23).

Interior rules

The Interior Department anticipates a busy December, including action on several long-awaited policies that got pushed back until after the November election.

The Fish and Wildlife Service is now scheduled to announce by Dec. 4 a decision on whether to designate the monarch butterfly (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=1018-BE30)as threatened or endangered. The agency was initially set to announce its decision in September, but it secured a 90-day delay.

Rules governing the Migratory Bird Treaty Act (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=1018-BF71) are also now set for a December decision. The agency had once appeared close to completing its work on a permit system, but a proposed rule was yanked (https://subscriber.politicopro.com/article/eenews/2023/12/01/fws-pulls-back-on-rewrite-of-migratory-bird-regulations-00129541) from the White House's Office of Information and Regulatory Affairs last December.

The Fish and Wildlife Service has suggested creation of a new permitting system that might allow companies to accidentally harm or kill a certain number of birds if they also take certain steps to mitigate harm.

December is also the target date for the Fish and Wildlife Service to complete a proposal (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=1018-BG78) to promote the "biological integrity, diversity, and environmental health" of the FWS refuge system.

This has excited considerable interest, with the Fish and Wildlife Service having received more than 146,000 public comments on its proposal.

The Biden administration also continues to stiffen offshore oil rules and may limit who can drill for oil in the ocean.

The Bureau of Safety and Environmental Enforcement plans to finish a rule this summer that would force offshore oil companies to obtain a bond to cover penalties (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=1014-AA57) before they can contest them at the Interior Board of Land Appeals.

The agency also aims to update 22-year-old oil spill response regulations.

In a potentially significant shift for offshore oil companies, the Bureau of Ocean Energy Management plans to ink long-awaited "fitness to operate" standards (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=1010-AE21) in January of 2025. The rules would limit which companies are allowed to drill for oil and gas in the ocean by judging their financial status, environmental record or other metrics.

The National Park Service said it will issue a public notice by December on a proposed rule that would eliminate fees for commercial "low impact" filming (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=1024-AE81), even if the footage is used to generate income.

And by May of next year, NPS said it would issue similar notices for proposed rules that would designate routes for off-road vehicles at Big Cypress National Preserve (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=1024-AE54) in Florida and for horses and bicycles at Mammoth Cave National Park (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=1024-AE93) in Kentucky.

Energy rules

The Department of Energy is rolling out new regulations on the energy efficiency of household appliances. That regulatory program — enacted into law decades ago — obligates DOE to periodically increase energy efficiency requirements for appliances.

DOE plans to finalize regulations on commercial ice-makers (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=1904-AE47) in September, commercial refrigerators and freezers (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=1904-AD82) in November, walk-in coolers and freezers (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=1904-AD79) in November, residential boilers (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=1904-AE82) in December, and other appliance categories.

The Biden administration's plans on appliance efficiency come amid Republican pressure to rein in regulations. This week, the House will vote on two Republican bills (https://subscriber.politicopro.com/article/eenews/2024/07/08/biden-efficiency-standards-back-on-the-house-floor-00166478) that aim to make it more difficult to regulate refrigerators and dishwashers.

Critics of the appliance regulations say they increase costs, but DOE says the regulations proposed and finalized under Biden "save the average family $100 a year through lower utility bills." DOE also says the regulations together will cut 2.5 billion metric tons of greenhouse gas.

In the final months of this year, DOE also plans to update eligibility and other requirements (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=1930-AA00) for its weatherization assistance program, which helps tens of thousands of low-income households retrofit homes.

Agriculture and NOAA rules

The Department of Agriculture said it would seek to codify its higher blends infrastructure program (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=0570-AB11), which helps expand availability of higher-ethanol fuels. That proposed rule would be ready in May 2025, the USDA said.

EPA also said it would publish a final rule in August updating the worker protection standards for pesticide use (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=2070-AK92), including regulations around who's permitted to be within a certain zone where pesticides are being applied.

The Forest Service said it would propose regulations in January to advance carbon stewardship (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=0596-AD61) in national forests through vegetation management and land use. But timing for a separate notice of proposed rulemaking on forest and grassland climate resilience (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=0596-AD59), responding to Biden's executive order on forests and climate, remains to be determined, the USDA said.

On a more bipartisan effort, the USDA said it's drawing closer to creating the greenhouse gas technical assistance program provided for in the Growing Climate Solutions Act. A notice of proposed rulemaking (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=0581-AE29) is slated for August, with a final rule to come in October.

Before the end of 2024, the Forest Service expects to finalize a rule that would allow it to consider carbon storage projects on forest system land. The rule would exempt carbon capture and storage from an existing Forest Service prohibition on the permanent or "perpetual" use of national forests and grasslands.

The Forest Service released a proposed rule (https://subscriber.politicopro.com/article/eenews/2023/11/06/biden-admin-rule-sets-stage-for-ccs-in-national-forests-00125249) in November and had aimed to issue a final rule in spring of this year. The Unified Agenda said a "final action" would come around December.

NOAA said it would take final action by November on its long-delayed rule to impose speed limits on more boaters along the Atlantic coast with hopes of reducing collisions (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=0648-BI88) with endangered North Atlantic right whales.

The agency had promised to finalize the rule last year but missed its deadline.

Treasury rules

The agenda also reflects the administration's push to finalize a host of new rules tied to implementing the 2022 Inflation Reduction Act, the nation's biggest climate law.

The Treasury Department is moving to complete a proposal floated in May (https://subscriber.politicopro.com/article/eenews/2024/05/29/treasury-paves-way-for-clean-energy-tax-breaks-00160361) that would give big breaks to clean energy projects built in 2025 and potentially decades into the future.

The Unified Agenda for the first time includes a proposal (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=1545-BR17) to add credits under Sections 45Y and 48E of the IRA for electric power projects that eliminate greenhouse gas emissions, including those that use fossil fuels. According to the agenda, Treasury plans to wrap up public comment in August.

Also on the horizon is a proposed rule (https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202404&RIN=1545-BQ97), which the agency originally released in December, to create production credits for clean hydrogen under the IRA, also known as 45V. In recent months, companies poised to produce hydrogen have urged the Biden administration (https://subscriber.politicopro.com/article/eenews/2024/06/12/clean-hydrogen-industry-slams-pace-of-biden-tax-rules-00162755) to move faster to implement and finalize the credits.

Despite those calls, Treasury is slated to review public comments to the proposal through July with no date set for finalizing the rule.

Reporters Carlos Anchondo, Ellie Borst, Brian Dabbs, Michael Doyle, Marc Heller, Rob Hotakainen, Hannah Northey, Sean Reilly, Heather Richards and Miranda Willson contributed.

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MOBILIZING FEDERAL ACTION ON PLASTIC POLLUTION: PROGRESS, PRINCIPLES, AND PRIORITIES

A COLLABORATIVE EFFORT OF THE INTERAGENCY POLICY COMMITTEE ON PLASTIC POLLUTION AND A CIRCULAR ECONOMY

JULY 2024

Letter from the Co-Chairs of Interagency Policy Committee on Plastic Pollution and a Circular Economy

Plastic production around the globe has doubled over the past two decades. Plastic waste has also doubled in that time, and is now found almost everywhere on our planet, from floating garbage patches in the Pacific Ocean to nearly every waterline, coastline, and shore line, including beaches and river banks. Plastics are turning up in the stomachs of whales, birds, and other animals that ingest them. Communities near plastic production and processing facilities are confronted with toxic air emissions and chemical releases. Researchers are sounding alarm bells over the growing presence of microplastics in the human body, and are concerned that the ingestion of microplastics and exposure to plastics-related pollution are posing a growing risk to public health. And the production and transport of plastics are contributing to greenhouse gas pollution and exacerbating climate change.

With its multitude of environmental impacts across its supply chain, broad global effects, and severe public health consequences, plastic pollution has become one of the most pressing and consequential environmental problems in the U.S. and around the globe. Tackling plastic pollution and its associated impacts will require unprecedented action at every stage of the plastic lifecycle—from reining in the pollution from petrochemical production that is poisoning communities and driving climate change, to reorienting infrastructure to ensure dramatic increases in recycling and reuse, to investing in innovative materials to replace the pervasive use of plastics in our society. The President is committed to taking ambitious actions throughout the full lifecycle of plastics to end plastic pollution and is calling upon the global community to do the same, with the goal to reduce the global production and consumption of virgin plastics.

This full lifecycle approach is a critical element of President Biden's and Vice President Harris's environmental and public health agenda, and complements other key actions the Administration has taken to protect clean air and clean water. The Administration, for example, has implemented a historic ban on ongoing uses of asbestos—a known carcinogen linked to more than 40,000 deaths in the U.S. each year—and is working with communities to replace every lead pipe in the country, has set new standards to eliminate "forever chemicals" from drinking water, and has tightened pollution controls for chemical plants.

In 2023, to mobilize and coordinate a Federal effort to confront plastic pollution, the Administration launched the Interagency Policy Committee on Plastic Pollution and a Circular Economy (IPC), of which we are proud to serve as co-chairs. The IPC was formed and operates with the understanding that the scale and breadth of the plastic pollution challenge require not only an all-of-government effort at the Federal level, but sustained and coordinated work with the state, local, and Tribal governments, local communities and other stakeholders.

Under President Biden's leadership, Federal departments and agencies are working to reduce single-use plastics in government operations, drive down toxic emissions and chemicals of concern in plastic production, and fund historic investments to improve solid waste management while cleaning up existing pollution. These early steps are important for building momentum for the scale of action and progress needed across all levels of government to address plastic pollution and its associated impacts.

In *Mobilizing Federal Action on Plastic Pollution: Progress, Principles, and Priorities*, the Federal government is—for the first time—formally acknowledging the severity of the plastic pollution crisis and

the scale of the response that will be required to effectively confront it. In particular, the report reaches two key topline findings:

1. Successfully combatting plastic pollution requires the United States to take a comprehensive approach that addresses the impacts of plastic throughout the entire lifecycle – from production to end of life; and
2. The scope, scale, and complexity of plastic pollution require coordinated action from all levels of government.

This report complements and supports other key domestic and international efforts to combat plastic pollution, including developing an international agreement that is commensurate to the scale and breadth of the plastics problem. Reaching a strong global agreement can help turn the tide against the sea of plastic pollution that is rising around the world.

Although the plastic pollution challenge remains severe and daunting, we are optimistic that—by steadily and rapidly building momentum through the opportunities and actions outlined in this report—the U.S. can mobilize the all-hands-on-deck response that is needed to meet this profound environmental and public health challenge.

Sincerely,

Brenda Mallory
Chair, White House Council on Environmental Quality
Co-Chair, Interagency Policy Committee on Plastic Pollution and a Circular Economy

Ali Zaidi
Assistant to the President and National Climate Advisor
Co-Chair, Interagency Policy Committee on Plastic Pollution and a Circular Economy

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Background

About the Interagency Policy Committee on Plastic Pollution and a Circular Economy

The Interagency Policy Committee on Plastic Pollution and a Circular Economy (IPC), co-chaired by the White House Council on Environmental Quality (CEQ) and the White House Office of Domestic Climate Policy (CPO), was announced by the White House in April 2023 to advance efforts to combat plastic pollution[1] across the plastic lifecycle, prioritizing public health, economic development, and environmental justice.[2] The IPC seeks to coordinate federal efforts on plastic pollution, to help ensure that the benefits from acting on plastic pollution—including minimized human exposure to harmful chemicals, and protection of clean air, water, coastal and marine environments—are available to all, including communities with environmental justice concerns.

IPC Participants

The following United States federal departments, agencies, bureaus, and offices are engaged in the IPC and have contributed to this document:

- CBP: Customs and Border Protection
- CPSC: Consumer Product Safety Commission[i]
- DOC: Department of Commerce
    - DOC/Census: Census Bureau
    - DOC/ITA: International Trade Administration
    - DOC/NIST: National Institute of Standards and Technology
    - DOC/NOAA: National Oceanic and Atmospheric Administration
- DOD: Department of Defense
- DOE: Department of Energy
- DOI: Department of the Interior
- DOJ: Department of Justice
- DOL: Department of Labor
- DOT: Department of Transportation
- ED: Department of Education
- EPA: Environmental Protection Agency
- GSA: General Services Administration

[i] CPSC staff contributed to this report. It has not been reviewed or approved by, and does not represent the views of, the Commission.

- HHS: Department of Health and Human Services
    - HHS/CDC: Centers for Disease Control and Prevention
        - HHS/CDC/NIOSH: National Institute for Occupational Safety & Health
        - HHS/CDC/NCEH: National Center for Environmental Health
        - HHS/CDC/ATSDR: Agency for Toxic Substances and Disease Registry
    - HHS/CMS: Centers for Medicare & Medicaid Services
    - HHS/FDA: Food and Drug Administration
    - HHS/NIH: National Institutes of Health
        - HHS/NIH/NIEHS: National Institute of Environmental Health Sciences
    - HHS/OASH: Office of the Assistant Secretary for Health
- NASA: National Aeronautics and Space Administration
- NSF: National Science Foundation
- State: Department of State
- USAID: Agency for International Development
- USDA: Department of Agriculture

Additional IPC participants from the Executive Office of the President include the Domestic Policy Council (DPC), the National Economic Council (NEC), the Office of Clean Energy Innovation & Implementation (OCEII), the Office of Science and Technology Policy (OSTP), OSTP's National Nanotechnology Coordination Office (NNCO), the Office of Management and Budget (OMB), OMB's Office of Federal Procurement Policy (OFPP), and the Office of the United States Trade Representative (USTR).

About the White House Council on Environmental Quality

The White House Council on Environmental Quality (CEQ) was established within the Executive Office of the President by the National Environmental Policy Act of 1969 (NEPA). CEQ advises the President and develops policies on climate change, environmental justice, federal sustainability, public lands, ocean, and wildlife conservation, among other areas. For more information, please see: www.whitehouse.gov/ceq.

About the White House Office of Domestic Climate Policy

The White House Office of Domestic Climate Policy (CPO) implements the President's domestic climate agenda, coordinating the whole-of-government approach to tackle the climate crisis, create good-paying, union jobs, and advance environmental justice. CPO coordinates the policy-making process with respect to domestic climate policy issues; coordinates domestic climate policy advice to the President; ensures that domestic climate policy decisions and programs are consistent with the President's stated goals and that those goals are pursued; and monitors implementation of the President's domestic climate policy agenda. For more information, please see: www.whitehouse.gov/cpo.

About this Document

Mobilizing Federal Action on Plastic Pollution: Progress, Principles, and Priorities is the result of a collaborative effort of the IPC from 2023-2024. It includes information, opportunities, and principles that agencies across the Federal Government have provided and goals that agencies are working to achieve as appropriate under their respective authorities, missions, and consistent with applicable law. It aims to leverage existing federal authorities, strengthen interagency collaboration, and build upon current federal actions to identify additional opportunities federal agencies can undertake to combat plastic pollution. Two appendices accompany this document. They outline ongoing federal activities (Appendix A) and interagency working groups (Appendix B).

Introduction: The Plastic Pollution Crisis and Ongoing Efforts to Combat It

After its introduction in the 1950s, plastic[3] transformed many aspects of modern society. Plastic opened up new possibilities for consumer and industrial usage, serving as an inexpensive, lightweight, versatile, durable, and sanitary material in the food, medical, technology, textile, and transportation industries. Modern sanitation systems, food security, and medical equipment advancements were made possible by innovations in plastic. However, due to the broad consequences of plastic production and consumption, our nation and global neighbors are now facing a plastic pollution crisis.

It has become clear that the reliance on plastic across the globe and in all economic sectors has a serious cost to public health and the environment that requires action. The exponential increase in plastic production and consumption has outpaced society's ability to properly manage this increasingly complex material and scale innovative solutions to holistically address its impacts. As a result, the annual amount of uncontrolled plastic waste released into the aquatic environment is estimated to reach 53 million metric tons by 2030.[4] Experts have estimated that the equivalent of one garbage truck of plastic enters the ocean every minute.[5] Plastic particles have been found in the deepest depths of the ocean, in the air above the highest points on Earth, and even within human blood and tissue.[6,7,8] Plastic polymers[9] and their affiliated additives[10] are known to pollute air, soil, waterways, wildlife, and homes.[11,12,13]

While littered plastic items on streets and in waterways are a familiar sight across the United States, less visible forms of pollution, such as hazardous air emissions from plastic production or end-of-life processing, can occur at every stage of the plastic lifecycle. Certain plastic particles and additives used in the production of plastic can contribute to adverse human health effects such as cancer, metabolic diseases, and disruptions to reproduction, development, and growth.[14,15,16] Exposure to these chemicals is particularly dangerous during vulnerable stages of life, including pregnancy, infancy, and childhood. The cumulative impacts[17] of plastic production and plastic pollution are disproportionately concentrated in communities that live near production facilities and disposal sites.[18,19] Many of the same communities are often overburdened by other types of environmental hazards associated with living near industrial manufacturing sites, such as air pollution, chemical exposure, and soil and groundwater contamination, which can exacerbate the harms caused by exposure to plastics pollution.[20,21]

The vast majority of plastic is made from extracted fossil fuels,[22] a main feedstock[23] in petrochemical facilities. Petrochemical facilities are projected to expand as demand for petrochemical products, such as plastic, continues to grow. This will contribute to more industrial pollution, increased plastic waste, and significant amounts of greenhouse gas emissions released throughout the plastic lifecycle.[24,25] Under business-as-usual production and management scenarios, plastic production may account for 15-31% of the global carbon budget by 2050, undermining efforts to keep global temperatures within a 1.5 degrees Celsius climate threshold.[26,27,28] These trends in growth are unsustainable and should be reversed.

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"Plastic pollution is one of the most significant problems facing our country and the world, harming human health and environment, including communities already overburdened by pollution. Fossil fuel extraction, refining, plastics production and use increases the climate crisis and harmful pollution and waste. Emerging science also continues to reveal new health threats. We must combat plastic pollution from every angle and prevent it at every step of its lifecycle. Every action we take matters, because every day people are suffering from the impacts of plastic pollution."

—Administrator Michael S. Regan, EPA

Recognizing the growing risks of plastic pollution to public health and the environment, the Biden-Harris Administration has been working to build a whole-of-government approach to confront the problem and its associated impacts. From securing landmark investments in waste management infrastructure to strengthening pollution standards at chemical and plastic production facilities, the Administration is making major strides toward a cleaner and healthier nation—and recognizing that more work is needed to protect the environment, economy, and local communities.

To help mobilize and coordinate interagency actions on plastic pollution, in April 2023, the Biden-Harris Administration announced the formation of an Interagency Policy Committee on Plastic Pollution and a Circular Economy (IPC). IPC participants include experts across federal agencies and within the Executive Office of the President.

This document is a product of the IPC's dedicated interagency coordination and a critical first step in undertaking meaningful actions and considering long-term targets to effectively address pollution at key stages of the plastic lifecycle. It outlines both ongoing efforts within the United States Federal Government (Appendix A) and opportunities for further action. This document establishes the first United States Federal Government-wide strategy to address plastic pollution. It aims to enhance domestic initiatives that reinforce United States leadership in international efforts during an unprecedented period of global coordination on plastic pollution.[29]

Importantly, the IPC recognizes two essential topline findings:

1. **To successfully combat plastic pollution, the United States must take a comprehensive approach that addresses the impacts of plastic throughout the entire lifecycle.** From the extraction of raw materials used to create plastic polymers, such as fossil fuels, to pollution resulting from mismanaged waste, communities and the environment experience the escalating effects of a worldwide dependence on these materials. A national effort should involve meaningful cross-sector and cross-disciplinary engagement in actions that holistically address all stages of the plastic lifecycle and support a more circular economy.
2. **The scope, scale, and complexity of plastic pollution require coordinated action from all levels of government.** No single federal agency or level of government has sufficient authority or resources to successfully combat plastic pollution on its own.

United States federal agencies must continue to build a whole-of-government effort to confront plastic pollution, while also partnering with state, territorial, Tribal, and local governments to support actions and strategies that can be deployed at the regional, state, Tribal, or local level.

While the IPC recognizes that more work, collaboration, and investment are needed to spark a whole-of-society approach to address plastic pollution, this document serves as a foundation for federal action, outlining a path forward to comprehensively address, coordinate, and catalyze effective action on plastic pollution across the Federal Government and with partners abroad.

Progress: Advancing Efforts to Combat Plastic Pollution

The Biden-Harris Administration is working to advance and expand efforts to combat plastic pollution, reduce the Federal Government's use of plastic, and, as appropriate, set new standards or regulations to prevent and decrease toxic emissions, discharges, and releases from plastic production processes. The Administration is committed to following the best available science on plastic pollution, and taking further action to prioritize environmentally sustainable solutions at each stage of the plastic lifecycle. Across the Federal Government, agencies and departments are spearheading efforts to address plastic pollution and reduce dependence on plastic in federal operations and agency programs. These actions advance the President's vision of prioritizing public health, economic development, and environmental justice.

Assessing and Reducing Pollution from Plastic Production

Over 90% of plastic is derived from fossil fuels.[30] After extraction, oil, natural gas, and other fossil fuels are transported to refining and petrochemical facilities to be transformed into feedstocks, polymers, and pellets for plastic production.[31] Many of these sites are located in or near communities where people are confronted with daily emissions, discharges, and releases.[32,33,34] These communities have raised concerns about toxic exposure and its health impacts, including cancer.[35] For years, local, national, and international environmental groups and environmental justice advocates have worked to bring attention to these problems. They have called for action to address existing and prevent further harm to local communities from plastic production.[36]

Under President Biden's and Vice President Harris's leadership, federal agencies are taking steps to reduce pollution from the extraction of fossil fuels and production of plastic. This includes chemicals of concern and hazardous air pollutants (Box 1). There is much work to be done, but the Biden-Harris Administration is committed to ongoing engagement to help ensure that all communities are able to breathe clean air, drink clean water, and live in a healthy environment. The actions outlined in this document align with other government initiatives focused on human, environmental, and community health, including the Healthy People 2030 objectives.[37]

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Box 1. Environmental Protection Agency: Actions that Address Pollution from Plastic Production and Advance Environmental Justice

EPA has been diligently addressing the harmful pollution generated by plastic production processes and the uncontrolled release of plastic into the environment. In 2024, EPA finalized rules to reduce emissions of toxic air pollutants including ethylene oxide and chloroprene, which will result in significant reductions to harmful air pollution in local communities near plastic production facilities, including communities with environmental justice concerns. In addition, EPA includes upstream pollution associated with plastic manufacturing in reporting requirements under its Toxics Release Inventory Program to track progress in eliminating or reducing specific chemicals used in plastic manufacturing. EPA has also started the process of prioritizing several chemicals of concern used in plastic production, such as vinyl chloride and seven phthalate chemicals, for risk evaluations under the Toxic Substances Control Act. Additionally, EPA updated requirements for facilities to plan for worst-case discharges of hazardous substances under the Clean Water Act. This action follows updates under the Clean Air Act to revise the Risk Management Program to further protect vulnerable communities from chemical accidents. These actions complement Biden-Harris Administration efforts to reduce pollution from oil and gas extraction, such as EPA's Final Rule for Oil and Natural Gas Operations.

Innovating Materials and Product Design

Agencies are also advancing work to explore alternative materials and processing methods, such as through the National Institute of Standards and Technology's Circular Economy Program, which invests in safe materials, manufacturing, and product design. The Department of Energy's Strategy for Plastics Innovation (SPI) focuses resources from across the Department to create a comprehensive program to accelerate innovations that will dramatically reduce plastic waste in the ocean and landfills. One of the SPI's strategic goals is to develop and manufacture new and renewable plastic and bioplastic that is designed for either recycling or improved plastic end-of-life outcomes, including biodegradability, and can be manufactured at scale domestically. The Department of Agriculture also conducts regular research on biopolymers, alternative feedstocks, and reduced pollution production processes in support of a transition away from fossil fuel-based plastic.[38] Together, these actions within the Federal Government will promote reduction of plastic pollution, more efficient end-of-life processes, and a more circular economy.[39]

Decreasing Plastic Waste Generation

In support of the President's direction in Executive Order (E.O.) 14057 (Box 2), federal agencies are leading by example to reduce single-use plastic (as defined by GSA[40]) within their own operations and through new initiatives. In accordance with E.O. 14057 Section 207, all federal agencies are required to divert at least 50% of non-hazardous solid waste, including plastic, from landfills annually by fiscal year 2025 and 75% by fiscal year 2030. The Department of the Interior announced Secretary's Order 3407 and the General Services Administration issued a new rule to address the reduction of single-use plastic used in packaging (Box 3). The National Aeronautics and Space Administration (NASA) is advancing internal waste prevention practices that protect natural resources and reduce pollution, waste toxicity, and costs, resulting in a waste diversion rate exceeding approximately 75% for the past five years. Consistent with the E.O.

14057 Implementing Instructions, the Department of Justice issued an Acquisition Policy Notice that provides that, "Bureaus should consider reducing and phasing out procurement of single-use plastic products, to the maximum extent practicable." These efforts will not only have a positive impact within federal facilities, but also reduce the potential for mismanaged waste and ultimately environmental pollution that affects communities nationwide. Because of its purchasing power, by reducing the demand of plastic products through procurement[41] changes, the Federal Government has the potential to significantly impact the supply of these products.

Box 2. Executive Order 14057: Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability

In December 2021, President Biden issued E.O. 14057 on Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability, which demonstrates how the United States will leverage its scale and procurement power to lead by example. The E.O. commits federal agencies to "reduce emissions, promote environmental stewardship, support resilient supply chains, drive innovation, and incentivize markets for sustainable products and services by prioritizing products that can be reused, refurbished, or recycled; maximizing environmental benefits and cost savings." The E.O. requires agencies to incorporate environmental justice considerations when planning programs and operations. Subsequent E.O. 14057 instructions issued by CEQ direct agencies to reduce and phase out procurement of single-use plastic products, to the maximum extent practicable, in order to minimize waste, advance pollution prevention and environmental justice, and promote a transition to circular economy approaches. The E.O. sets waste reduction goals for agencies and requires regular reporting on sustainability activities and progress toward those goals. The President's foundational E.O. sets the tone for prioritizing sustainability and waste reduction within Federal Government operations.

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Box 3. Department of the Interior: Secretary's Order 3407 and GSA's Acquisition Regulation: Reduction of Single-Use Plastic Packaging Rule

Secretary of the Interior Deb Haaland issued Secretary's Order 3407 to reduce the procurement, sale, and distribution of single-use plastic products and packaging Department-wide, with a goal of phasing out single-use plastic products on Interior Department-managed lands by 2032. As part of this Order, the National Park Service launched a Request for Proposals (RFP) in 2024 focused on source reduction and circularity in National Parks. The RFP calls for projects and enterprises that embody the Service's commitment to reducing single-use plastic. With these initiatives, the Department of the Interior is taking critical steps to collectively reduce plastic pollution, increase circularity, spur economic opportunities, and meaningfully engage local communities.

The General Services Administration (GSA) issued a final rule to address single-use plastic packaging on the Federal Supply Schedule (FSS). GSA offers tens or hundreds of thousands of products via the FSS, with the one commonality being single-use plastic packaging. To reduce single-use plastic waste, GSA pursued a new clause and provision that is now included in its FSS contracts to encourage and highlight the availability of single-use plastic-free packaging.

Federal agencies are also taking steps to target specific items or pollution pathways, such as eliminating the procurement of certain products and introducing more environmentally friendly systems, like water refill stations as a substitute for single-use plastic bottles. Examples include the Department of Defense Commissary Agency's efforts to eliminate its use of single-use plastic bags across military bases worldwide and the Department of the Navy's Plastic Reduction in Marine Environment/Navy Waste Reduction Afloat Protects the Sea (PRIME/WRAPS) program, which focuses on the reduction of plastic waste generated aboard surface ships and submarines. Federal tools, like EPA's Recommendations of Specifications, Standards, and Ecolabels for Federal Purchasing program, help agencies to identify and procure environmentally preferable products and services. Agencies are also required to purchase items from EPA's Recommendations "to the maximum extent practicable."[42] Furthermore, the Administration is investing in reuse infrastructure to decrease reliance on single-use plastic. For example, EPA's Trash Free Waters program has established a partnership to pilot reusable food ware systems in four United States cities. The goal of this initiative is to demonstrate that reuse systems can be accessible, safe, and equitable for cities.[43] While there is still room for growth, these efforts show how the Federal Government is addressing plastic pollution in its operations.

Improving Environmentally Sound Waste Management

President Biden's Investing in America agenda is making historic investments in strengthening infrastructure, tackling climate change, and creating a more equitable future. This includes EPA's Environmental Justice Grants and Technical Assistance Program, which offers a variety of opportunities for projects that focus on plastic pollution reduction, primarily for community-based organizations working on environmental justice challenges, but also for state, territorial, Tribal, and local governments, and academic institutions working in partnership with those entities. Additionally, EPA is implementing solid waste grant programs, including the Solid

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Waste Infrastructure for Recycling and the Recycling Education and Outreach grants, which include funding for communities already overburdened by pollution (Box 4). This is one example among many created and funded by the Biden-Harris Administration to take action to improve environmentally sound waste management. These programs also advance President Biden's Justice40 Initiative, which set a goal that 40% of the overall benefits of certain federal climate, clean energy, and other investments flow to disadvantaged communities that are marginalized by underinvestment and overburdened by pollution.

Box 4. Environmental Protection Agency: Investing in Infrastructure

EPA is investing $275 million in Solid Waste Infrastructure for Recycling grants as part of President Biden's Investing in America agenda. Program awards will be distributed between states, territories, communities, Tribes, and intertribal consortia, to implement the EPA's National Recycling Strategy and National Strategy to Prevent Plastic Pollution (once finalized). In 2023, EPA made 140 grant selections for projects ranging from recycling, composting, and reuse infrastructure improvements to technical support for local waste management staff. This grant program marks the first time that funding of this scale has been available specifically for the purpose of improving solid waste infrastructure. Local municipalities and their budgets are often overburdened with solid waste management costs, and providing additional support and flexibility is critical for communities to advance solutions that are tailored to their local context. Funded projects included expanding waste collection locations and receptacles, implementing local recycling education and outreach campaigns, using new data systems to track municipal solid waste, providing technical training and certifications to waste management staff, conducting analyses for reuse and deposit-return initiatives, and many others.

In addition to deploying historic funding from the President's Investing in America agenda to combat plastic pollution, agencies are committed to addressing plastic pollution through cross-sector, interdisciplinary, innovative partnerships, both at home and abroad. In 2023, EPA engaged the public with a draft National Strategy to Prevent Plastic Pollution, which identifies actions the agency and domestic stakeholders can take to eliminate the release of plastic waste into the environment by 2040.[44] EPA's National Recycling Strategy identifies strategic objectives and stakeholder-led actions to create stronger, more resilient, and cost-effective domestic recycling systems. These efforts have been supported through grant funding to further advance the Administration's goals to update outdated waste management infrastructure.

Agencies are also making progress internationally. In 2023, the State Department (State) launched the End Plastic Pollution International Collaborative (EPPIC) with $15 million in initial United States funding. EPPIC is a public-private partnership built to catalyze governments, non-governmental organizations, and businesses to support innovative solutions to the plastic pollution crisis. State also provided $1.5 million to the United Nations Environment Programme and the Basel Convention's Plastic Waste Partnership to further advance plastic pollution efforts under those programs. The International Trade Administration (ITA) at the Department of Commerce promotes trade in recycled material as part of circular economies in the United States and abroad, including via a public-private partnership with the Recycled Materials Association (formerly known as the Institute of Scrap Recycling Industries). Additionally, ITA promotes United States exports of environmental technologies through its Environmental Technology

Trade Advisory Committee and research and analysis products such as its Environmental Technologies Top Export Market Rankings, which include waste management and recycling solutions that assist international partners in managing their plastic waste.

Informing and Conducting Plastic Pollution Capture and Removal

Several federal agencies are leading efforts to clean up existing plastic pollution and prevent additional plastic pollution from entering the environment, including the ocean. The National Oceanic and Atmospheric Administration (NOAA) Marine Debris Program is the United States federal lead for addressing the impacts of marine debris.[45] NOAA works with organizations around the United States and globally to prevent, remove, and study marine debris (Box 5). Through the Marine Debris Program, NOAA established the Marine Debris Monitoring and Assessment Project (MDMAP), which engages NOAA partners and volunteers around the world in surveying and recording the amount and types of marine debris on shorelines using a rigorous methodology. At EPA, the Trash Free Waters program provides technical and financial assistance to numerous place-based trash capture projects around the country. Furthermore, the United States Agency for International Development's (USAID) Save Our Seas Initiative, which includes its global Clean Cities, Blue Ocean program, partnerships with key private sector stakeholders such as Circulate Capital, and 12 bilateral and regional programs led by USAID Missions, is reducing, recovering, and diverting thousands of metric tons of plastic through locally-led grants and direct technical assistance to dozens of cities. The Biden-Harris Administration is committed to a cleaner, safer future, through actions here at home, and in close coordination with our global neighbors.

Box 5. National Oceanic and Atmospheric Administration: Marine Debris Clean-up

As part of the President's Investing in America agenda, in 2023, the NOAA Marine Debris Program provided over $70 million in federal funding for 15 transformational multi-year projects. The Program's funding competition focused on two priorities: removing large marine debris and using proven interception technologies to capture marine debris throughout the coastal United States, Great Lakes, territories, and Freely Associated States. Concurrently, NOAA Sea Grant announced its first 29 projects, representing $27 million in federal funding, that support the creation of coalitions and innovative research that will address the prevention and removal of marine debris over time. The NOAA Marine Debris Program and NOAA Sea Grant will continue to administer a combined $200 million in funds through fiscal year 2026, demonstrating a historic investment in the prevention and removal of debris from marine and Great Lakes environments across the nation.

Looking Ahead

The Biden-Harris Administration has laid the foundation for the first whole-of-government effort to combat plastic pollution. This document outlines areas for additional focus and progress in the years ahead and highlights how strategies for combatting plastic pollution can help fulfill other key Administration priorities, such as strengthening energy security and affordability, advancing

environmental justice, protecting public health, conserving the nation's lands and waters, improving sustainability, and tackling the climate crisis.

The actions highlighted in this document align with existing executive actions and federal efforts, including E.O. 14096 on Revitalizing Our Nation's Commitment to Environmental Justice for All, E.O. 14008 on Tackling the Climate Crisis at Home and Abroad, the America the Beautiful Initiative, and President Biden's Justice40 Initiative. The document also aligns with international efforts, including United Nations Environment Assembly Resolution 5/14 ("End plastic pollution: towards an internationally legally binding instrument") and the United Nations Sustainable Development Goal 12.

Principles and Priorities: Charting a Path for Solutions

Just 70 years ago, plastic was a new material that increased the manufacturing of synthetic products at a time of significant commercial transition. Today, those products, created from plastic materials that were designed to be long lasting, are increasingly used to produce disposable, single-use items that most commonly end up in landfills or in the environment, including the ocean.[46] Exponential growth in plastic production and consumption has outpaced society's ability to manage the resulting waste. As a result, plastic pollution is becoming one of the most pressing environmental, occupational, and public health challenges faced today. Groups across sectors are demanding reduction in the consumption of single-use plastic and are advocating for more sustainable options. Research has clearly shown that downstream efforts, such as increasing waste collection and recycling, are insufficient to tackle the plastic pollution crisis.[47] Instead, a holistic approach across the entire lifecycle of plastic is required to reduce and ultimately prevent harm to the environment, economy, and human health. Similar comprehensive concepts have been used by the Federal Government to address other potentially harmful materials, such as the Sustainable Chemistry Strategic Plan, which also emphasizes the importance of collaboration and a strong foundation for future research and action.[48]

***Key Focus Areas*: This document outlines opportunities for federal action during the following plastic lifecycle stages:**

Figure 1: Opportunities for action at points along the plastic lifecycle, adapted from the National Academies of Sciences, Engineering, and Medicine (2022)[49]

1. **Assessing and Reducing Pollution from Plastic Production:** "Upstream" measures, such as more effective regulations on the methods, feedstocks, and chemicals used in plastic production, can lessen associated pollution from key sources at the beginning of the plastic lifecycle.[50] Pollution associated with plastic production includes not only greenhouse gases, but a range of hazardous air pollutants and volatile organic compounds, some of which are known carcinogens.[51] Pairing these measures with improved data collection is necessary to understand the full extent of the environmental and human health risks of plastic production. Example actions for the Federal Government include regulatory updates and rulemaking, health and environmental risk evaluations across the plastic lifecycle, and data collection.
2. **Innovating Materials and Product Design:** The alignment of measurements and standards, transparency across the supply chain, and opportunities for innovation in materials and services can help ensure that products are compatible with waste management systems and have minimal impacts on human health and the environment. Example actions include participating in the development of standards to promote

recyclability and reuse, innovation in materials management,[52] and additional research and development. Efforts to address the materials and product design stage of the plastic lifecycle have the potential to increase adoption of reusable products and improve the plastic recycling rate in the United States, which, as of 2018, was only nine percent.[53]

3. **Decreasing Plastic Waste Generation:** The United States consumes more plastic and generates more plastic waste than any other country.[54] In 2019, the United States consumed an estimated 18% of global plastic products and generated approximately 486 pounds of plastic waste per capita.[55] A key step to decreasing the quantity of plastic waste generated is limiting the initial use of materials that are unnecessary, difficult to manage, or likely to end up as pollution in the environment. Changes in acquisition[56] and consumption can reduce the demand for those products, including within Federal Government operations. Actions outlined in this section include reductions in the procurement of plastic and opportunities to increase reuse within the Federal Government.
4. **Improving Environmentally Sound Waste Management:** As of 2018, the United States produced 35.7 million tons of plastic, and sent 27 million tons of plastic to landfill.[57] To ensure plastic waste is properly handled, various actions are aimed at improving environmentally-sound and worker-safe waste management practices and the associated infrastructure needs. These include efforts to optimize the collection of plastic, enhance plastic recycling, and other measures to prevent plastic waste from entering the environment. Improved waste management will both offset the amount of plastic waste sent to landfills and reduce the amount of waste entering the environment as pollution.
5. **Informing and Conducting Capture and Removal of Plastic Pollution:** In 2016 alone, it is estimated that as much as 23 million metric tons of land-based plastic waste from around the world entered aquatic ecosystems.[58] Actions in this section aim to improve the capture of plastic, both before it enters the waste management system, and to address and prevent its escape during the waste management process. In order to inform and fully accomplish these actions and measure the impact of efforts over time, it will be valuable to collect targeted additional data on the scale and characterization of plastic in the environment, including indoor environments. While more data are needed to solve this problem, currently available data demonstrate the importance of urgent and meaningful action.

No one solution can end plastic pollution, and no single sector can operate in a vacuum. Comprehensively addressing this complex issue requires actions at key stages of the plastic lifecycle, including fossil fuel extraction. The Biden-Harris Administration will continue to advance policies and programs across the entire plastic lifecycle, including those outlined within this document and outside of it.

Key Principles: The IPC highlights the following principles as particularly important to apply in federal agencies' work to reduce plastic pollution:

- **Building Meaningful Partnerships to Support Solutions Across the Plastic Lifecycle:** To advance a comprehensive and effective national effort for combatting plastic pollution, federal, state, Tribal, and local governments will need to work together and individually to develop and advance strategies and solutions that reflect the needs, priorities, and perspectives of all communities and stakeholders. Implementation of the

actions in this document will be more effective and have a deeper positive impact with the inclusion of the input and efforts from a broad range of stakeholders and communities, including communities with environmental justice concerns. The Biden-Harris Administration is committed to meaningful involvement of the public to ensure consideration of the perspectives of all interested stakeholders and affected communities at all relevant stages, e.g., planning through implementation. In pursuit of the actions in this document and to advance the goal of meaningful involvement, federal agencies should also seek state, local, and Tribal partnerships as well as partnerships within the United States territories, that can help identify, scale, and measure the effectiveness of solutions.

- **Advancing Environmental Justice as Part of Addressing the Plastic Pollution Crisis:** Safe and affordable alternatives to plastic are not always accessible. At the same time, many communities are overburdened by the pollution created from plastic production and disposal. The Biden-Harris Administration recognizes that plastic pollution is a serious environmental justice concern and is committed to advancing the goal of environmental justice as part of implementing plastic pollution actions outlined in this document.
- **Respecting the Sovereignty of Tribal Nations and incorporating Indigenous Knowledge in Decision-Making and Research on Plastic Pollution:** The Biden-Harris Administration recognizes that Tribal Nations and other Indigenous Peoples are on the front lines of the plastic pollution crisis. The Administration is committed to honoring federal trust and treaty obligations, engaging in government-to-government consultation, and incorporating Indigenous Knowledge to the extent that Tribal Nations and other Indigenous Peoples choose to share such knowledge. Agencies should seek opportunities to include Indigenous Knowledge as an important contribution to the scientific, technical, social, and economic advancements that are required to combat plastic pollution, following the principles outlined in the Memorandum on Uniform Standards for Tribal Consultation and Guidance for Federal Departments and Agencies on Indigenous Knowledge.
- **Using the Best Available Science on Plastic Pollution:** The actions in this document are supported by the best available scientific evidence and are expected to reduce plastic pollution and associated environmental, occupational, and public health risks. Scientific data show the need to take action on solutions now, and more and improved data collection will be valuable to improve understanding of existing and emerging plastic pollution challenges. The document calls for research and development to close critical information gaps, enhance decision-making, and guide and measure effectiveness. As new data is collected and released, agencies will continue to update and adjust their actions as needed based on the most up-to-date science.
- **Strengthening Federal Interagency Coordination on Plastic Pollution:** Multiple categories of federal activities can affect plastic pollution, including grantmaking, procurement, and rulemaking. Agencies will continue to coordinate and align their work through the IPC, as well as implement the Administration's policies to spur growth of domestic industry and good-paying, union jobs, address the climate crisis, and deliver equity and environmental justice.

Federal Focus Areas and Opportunities for Action to Reduce Plastic Pollution

Section 1: Assessing and Reducing Pollution from Plastic Production

Between 1950 and 2019, global annual plastic production grew from 2 million tons per year to 460 million tons per year, a nearly 230-fold increase. In the last two decades alone, global annual production of plastic more than doubled.[59] By 2050, plastic production is expected to increase by four-fold.[60] Not only will plastic production create more associated waste, but it will also likely increase greenhouse gas emissions. Plastic production is an energy intensive process that is heavily reliant on fossil fuels. More than 75% of the greenhouse gases generated by plastic are emitted in the production stage of the lifecycle before plastic compounds are assembled.[61] By 2060, greenhouse gas emissions from plastic production, if left unchecked, are projected to more than double.[62] The Administration is exploring ways to change the course of these trends (i.e., see Section 3) while also ensuring that it does all it can to address the adverse impacts to human health and the environment plastic production has been causing.

Building on ongoing action to assess and reduce pollution from plastic production, this section highlights areas of recommended focus as federal agencies work to further address pollution associated with the upstream production of plastic, beginning with feedstocks that are converted into the building blocks of plastic products, such as pre-production plastic pellets. Enhanced upstream measures, such as more effective regulations on the feedstocks and chemicals used in production, can lessen the total burden of pollution to manage across the plastic lifecycle, including both upstream and downstream emissions and releases. Immediate action is needed in parallel with the collection of additional data on the environmental and human health risks of plastics manufacturing, and other parts of the plastic lifecycle.

The Biden-Harris Administration aims to evaluate and address pollution resulting from plastic production, as appropriate, in the following ways. Although example IPC participants are listed, this list should not be considered comprehensive as other agencies are encouraged to consider potential authorities and opportunities they could use to coordinate and contribute to these goals, as appropriate.

	Opportunities for Action	Key IPC Participants
	Federal Programs	
1.1	Explore updates, such as to rules, guidance, labeling, or other policies, under the Clean Air Act,[63] Clean Water Act,[64] Resource Conservation and Recovery Act,[65] Safe Drinking Water Act,[66] Toxic Substances Control Act,[67] Consumer Product Safety Improvement Act,[68] Federal Food, Drug, and Cosmetic Act,[69] Agriculture Improvement Act,[70] Occupational Safety and Health Act,[71] Federal	CPSC, DOE, DOL/OSHA, EPA, HHS/CDC/ATSDR, HHS/CDC/NCEH, HHS/FDA, USDA

	Hazardous Substances Act,[72] Labeling of Hazardous Art Materials Act,[73] and other statutes, as appropriate, which may affect pollution related to the production or use of plastic, polymers, precursors, and related chemicals.	
1.2	Explore the full consideration of plastic pollution and related effects as part of regulatory design and analysis, as well as in environmental review processes, such as consideration of the effects of agency activities or decisions on the use or production of plastic or plastic pollution analyzed under the National Environmental Policy Act (NEPA).[74]	All
1.3	Prioritize and evaluate research on primary plastic polymers, precursors, and associated chemicals of concern to assist relevant agencies with mitigating risks to public health or the environment.	DOC/NIST, DOE, EPA, HHS/FDA, HHS/NIH, NSF
1.4	Collect and update data on volumes of plastic polymers, precursors, and feedstocks that the United States manufactures, recycles, imports, and exports as well as the downstream primary and secondary uses of plastic polymers and resins, in packaging and other sectors.[75]	CBP, EPA, DOC/Census, DOC/ITA
1.5	Measure plastic pollution and its public health and environmental impacts in affected communities, including communities with environmental justice concerns, and monitor pollution reduction and removal efforts.	EPA, HHS/NIH
1.6	Encourage industry-led, state-authorized, and voluntary actions to reduce harmful air, land, and water emissions from plastic production, including chemical additives.	DOE, DOT, EPA, HHS, NSF
1.7	Research ways to prevent the discharge of plastic and plastic associated chemicals from entities that transport and package plastic materials.	DOT, EPA, NSF
1.8	Consider ways to leverage federal research and funding to conduct or support epidemiological studies on human health impacts of exposure across the plastic lifecycle, including micro- and nanoplastic and associated additives, to close critical knowledge gaps on health hazards and help identify potential solutions.	EPA, HHS/CDC/NIOSH, HHS/FDA, HHS/NIH, OSTP/NNCO
1.9	Establish a coordinated federal science interagency council or committee that can facilitate the sharing of current information and leading practices on available science, data and research relevant to environmental, health, environmental justice, and equity implications of plastic pollution.	CPO, CEQ, OSTP

Example actions described in this section could help protect workers and communities from chemicals of concern, reduce plastic-related emissions, and ultimately prevent additional plastic pollution from entering the environment. Through effective and appropriate updates to government operations, policies, research, and data collection, and a focus on protecting human and environmental health, the United States can mitigate the adverse and growing impacts of plastic production on people and the environment.

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Section 2: Innovating Materials and Product Design

By the time a consumer first interacts with a product, the material and design have been well established. In order to meet cost and performance needs and global supply chain demands, plastic products and packaging have become increasingly complex and include a large variety of polymers and additives, some of which could pose risks to human health or the environment. This creates challenges for sustainable materials management as mixed materials may contaminate recycling streams and cause costly damage to infrastructure. Many plastic products, including single-use plastic products, cannot be readily recycled in the United States due in part to diversity of materials, lack of access to curbside recycling, and the need for relevant infrastructure.[76] The responsibility for managing these complicated waste streams generally falls to the consumer and state, Tribal, territorial, and local governments when end-of-life products are sent to landfills, incinerated, recycled, or littered.

This section looks at the material design and manufacturing stage of the plastic lifecycle. The following recommended actions promote long-term economic investment and encourage federal agencies to take materials management and human and environmental health considerations into account when activities affect design and manufacturing innovation. Efforts on material and product design innovation should aim to align, as appropriate, with principles of green engineering[77] and sustainable chemistry,[78] and also address emerging technologies, including 3D printing and wearable items. International standards, such as the standards from the International Organization for Standardization (ISO) and the American Society for Testing and Materials International (ASTM) on circular economy, polymers, and sustainability, should be considered in implementing these actions. As work continues to reduce the amount of traditional plastic manufactured, there is a need to be mindful of challenges associated with alternative materials and plastic substitutions that have been or could be developed to take their place. The impact across the entire lifecycle of substitutions and alternative materials, from production to recycling, reuse, or responsible disposal, must be considered.

Federal agencies are exploring innovative measures to improve plastic product performance and use. Complementing ongoing efforts, the Biden-Harris Administration supports efforts in the following areas to advance innovation in the processes leading up to, implementing, and after material and product design.

	Opportunities for Action	Key IPC Participants
	Federal Programs	
2.1	Support and promote the development of end-of-life material and performance specifications; assess the commercial-scale recyclability of these materials, as applicable; share results.	DOC/NIST, DOE, EPA, NSF
2.2	Explore and determine appropriate minimum post-consumer recycled and/or bio-based content requirements for plastic products and packaging; consider ways to decrease the quantity of new plastic required (while maintaining food packaging safety where appropriate) and prompt timelines to implement potential requirements.	DOC/NIST, DOE, EPA, USDA
2.3	Provide technical assistance to states, Tribes, local governments, and regions in developing policies on material design and disposal to promote environmentally preferable and circular options aligned with the goal of sustainable chemistry.	DOC/NIST, EPA, USDA
2.4	Encourage alignment with, and acceptance of international standards (e.g., ISO, ASTM International) for performance or design criteria, labeling, and recycling specifications for plastic products, as appropriate, in the United States and abroad.	DOC/ITA, DOC/NIST, EPA, USDA, USTR
2.5	Promote the full lifecycle analysis of potential alternatives to single-use and other plastic products, and their environmental, occupational, economic, climate, and health impacts.	CPSC, DOC/ITA, DOC/NIST, DOE, EPA, HHS/CDC/NIOSH, HHS/FDA, HHS/NIH, NSF, USDA
2.6	Evaluate and publish information about the potential environmental or human health impacts of plastic additives and contaminants, including in recycled plastic.	CPSC, DOC/NIST, EPA, HHS/FDA, HHS/NIH, USDA
2.7	Promote industry-wide innovation in design and materials management, such as through specifications, and economic incentives to maximize the value of and trade in recycled and recyclable materials.[79]	DOC/ITA, DOC/NIST, DOE, EPA, NSF, USDA, USTR
2.8	Support research and development, testing, and standards development regarding the safety of reusing plastic waste and operating reuse infrastructure.	DOC/ITA, DOC/NIST, DOL, EPA, NSF

These actions can strengthen material circularity that will better preserve natural resources, change consumption patterns, and reduce the environmental and public health impacts of the creation of new plastic products and alternatives. Encouraging the use of performance standards has the potential to ease the burden on waste management systems and increase the quality and quantity of recycled content in the marketplace.

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Section 3: Decreasing Plastic Waste Generation

Currently, over 400 million tons of plastic is estimated to be produced globally each year, much of which is not properly managed at the end of its life.[80] While the United States is home to less than five percent of the world's population, it is estimated to be among the top contributors of plastic waste by country worldwide.[81] In 2018, nine percent of plastic collected through municipal solid waste was recycled in the United States. Around 12% of the United States' municipal solid waste stream is plastic and the national per capita waste generation rate is two to eight times higher than that of other countries. [82]

Single-use plastic represents around 40% of the global plastic market and comprises much of the total amount of plastic waste generated.[83] These single-use consumer products, such as food and beverage packaging and utensils, are among the top littered, identifiable items found in coastline and other environmental clean-ups worldwide.[84] As the largest employer and purchaser of goods and services in the United States, the Federal Government can lead by example in reducing plastic waste generation.[85] President Biden's E.O. 14057 and the Department of the Interior's Secretary's Order 3407, further described in the Progress: Advancing Efforts to Combat Plastic Pollution section above, are notable examples of such efforts to reduce consumption and disposal of plastic.

Building on ongoing efforts, the Biden-Harris Administration encourages additional efforts to reduce plastic consumption and waste generation in Federal Government operations, including events, and programs.

	Opportunities for Action	Key IPC Participants
	Federal Operations	
3.1	Identify available data and data gaps for assessing scope and scale of plastic purchased and used across Federal Government operations.	CEQ, EPA, OMB/OFPP
3.2	Determine product and service categories where alternatives to plastic are currently available to meet federal procurement needs.	CEQ, EPA
3.3	Identify best practices and opportunities to expand reuse, refill, and repair of materials in order to reduce plastic waste generation in Federal Government operations.	EPA, GSA
3.4	Develop priority strategies to replace, reduce, and phase out unnecessary use and purchase of plastic products by the Federal Government, including single-use plastic.	CEQ, GSA
3.5	Consider updates to procurement policies for government-wide implementation of priority strategies to reduce purchase and use of unnecessary plastic products.	CEQ, GSA, OMB/OFPP
	Federal Programs	
3.6	Lead a Federal Government-wide public awareness campaign to educate the American public about plastic pollution, proper management of plastic and alternative materials, as well as health implications, and actions they can take to reduce their use of plastic. This could potentially include information for targeted audiences that	All

	agencies work with or serve, such as healthcare providers and/or educators, and could draw on federal research on plastic pollution.	
3.7	Encourage federal agencies that provide Small Business Innovation (SBIR) Grants to incorporate a topic area related to the reduction of single-use plastic and/or minimization of plastic waste within their annual proposal solicitations period.	DOC, DOD, DOE, DOT, ED, EPA, NASA, NSF, USDA
3.8	Develop more detailed industry classifications for recycling supply chains in the industrial census. More detailed economic reporting can allow more informed decisions when allocating financial resources while measuring the growth of the recycling industry.	EPA, DOC, OMB
3.9	Support innovative measures, research, and programs to expand reuse, refill, and repair of materials in order to reduce plastic waste generation.	DOE, EPA, DOC, NSF, USDA

Ensuring that resources are used more efficiently could ultimately reduce the demand for new plastic materials. Reuse and refill models can be implemented across the Federal Government for a variety of products, such as printer cartridges, cleaning supplies, and consumer goods like beverages.[86] By making reuse and refill more accessible, and reducing the amount of plastic consumed through acquisition, the Federal Government can reduce the demand for new plastic and ultimately divert plastic from landfills and the environment.

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Section 4: Improving Environmentally Sound Waste Management

Collecting, transporting, and managing municipal solid waste is an expensive endeavor that has increasingly strained state, territory, Tribal, and local budgets.[87] Advancements in product design have not been reflected in consistent labeling, community guidance, or waste management infrastructure. Ensuring the effective management of the products and materials currently available is critical to reducing pollution. However, downstream efforts alone will not adequately address the growing plastic pollution crisis. Rather, holistically improving waste management, in concert with outcome-based, advanced product design, as noted in the Innovating Materials and Product Design section, is an essential part of addressing this escalating problem. This section addresses the need to improve solid waste management infrastructure, including optimizing the collection of plastic, promoting safe handling of plastic waste to protect workers, enhancing plastic recycling, and avoiding plastic entry into the environment. EPA is leading the charge on these improved waste management efforts, mostly notably in the National Recycling Strategy and the draft National Strategy to Prevent Plastic Pollution.

Additional actions the Federal Government should evaluate and undertake, as appropriate, to improve environmentally sound waste management include:

	Opportunities for Action	Key IPC Participants
	Federal Operations	
4.1	Work with vendors and waste management companies to improve and standardize data reported on plastic waste generated from agency operations.	All
4.2	Take action to inform employees and ensure appropriate infrastructure that promotes safe handling and proper plastic recycling and disposal at federal facilities and events.	All
	Federal Programs	
4.3	Develop recommendations for a national extended producer responsibility[88] initiative that allows states, Tribes, local governments, and territories to develop approaches best for them, provides a vision for a harmonized national system and goals for plastic waste management, and aims to level the playing field for producers across all states and territories; support the initiative's implementation.	EPA
4.4	Support the development and deployment of, and investment in, technologies and infrastructure for the collection, recycling, and disposal of plastic waste, as well as source separation and industrial composting.	DOC/ITA, DOC/NIST, DOE, EPA, USAID
4.5	Provide environmental and health analysis of end-of-life pathways for plastic products, such as recycling, landfilling, incineration, and trade with developing and other countries.	DOC/ITA, DOE, EPA, HHS

4.6	Develop environmental, occupational, and public health monitoring near waste management operations and sites, including on Tribal lands.	DOL, EPA, HHS/ CDC/NIOSH
4.7	Identify and measure pathways by which plastic pollution enters and persists in the environment.	DOC/NIST, DOC/NOAA, EPA, USAID
4.8	Improve the effectiveness of wastewater treatment plants to remove microplastic and microfibers and promote innovative technologies to reduce leakage into the environment.	EPA
4.9	Examine ways to help prevent United States exports of plastic waste and scrap from becoming pollution and to coordinate internationally to address this problem.	CBP, DOC/ITA, DOJ, EPA, State
4.10	Explore potential ways to illustrate support for United States ratification of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal through normal and recognized executive-legislative relationships, e.g., identify ways this would protect United States interests by better controlling the transboundary movement of plastic waste and scrap.	EPA, State, USTR
4.11	Promote responsible trade in plastic and technologies for the collection, recycling, and disposal of plastic waste.	DOC/ITA, DOC/NIST, EPA, USTR
4.12	Support programs and activities that reduce the amount of plastic fishing gear lost, abandoned, or discarded in the ocean.	DOC/NOAA, USAID
4.13	Explore affordable domestic disposal (e.g., port reception facilities) and recycling options for recovered abandoned, lost, or otherwise discarded fishing and aquaculture gear and end-of-life fishing and aquaculture gear at fishing ports in the United States and its territories.	DOC/NOAA

Through these actions, the Federal Government can reform its management of plastic waste and use of plastic products for which scalable and feasible alternatives do not yet exist. For example, by increasing the availability of collection sites for specific materials, the potential for contamination in waste streams is decreased, reducing the risk of plastic entering the environment.

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Section 5: Informing and Conducting Plastic Pollution Capture and Removal

Plastic pollution may travel through waterways, cross geographic boundaries, and ultimately accumulate in communities and terrestrial, aquatic, and marine ecosystems. Over time, it breaks up into smaller and smaller particles, known as microplastic, making its removal increasingly challenging in terms of both cost and responsibility. This plastic pollution can damage fragile habitats and pose threats of entanglement and ingestion to terrestrial, aquatic, and marine species.[89] Plastic pollution and marine debris can collect in the ocean's gyres, or rotating currents. Based on recent trajectories, without key mitigation actions, the problem will only worsen and undermine efforts taken by the Biden-Harris Administration to support a resilient ocean and sustainable ocean economy that is available to all.[90,91,92,93]

Understanding the types and quantities of waste that end up in the environment, and how concentrations change over time, will help inform the upstream actions listed in Sections 1-4 and identify the most effective sites for capture and removal. This section addresses data gaps and encourages continued agency efforts to remove existing pollution and capture plastic waste before it enters the environment.

Building on ongoing efforts, the Biden-Harris Administration encourages the following actions:

Opportunities for Action		Key IPC Participants
Federal Programs		
5.1	Evaluate opportunities for using more precise modeling approaches to establish a baseline for the amounts and types of solid waste materials that escape into United States waterways and the ocean.	EPA, NASA
5.2	Continue monitoring the amount and types of marine debris on shorelines using a rigorous methodology to inform waste reduction priorities.	DOC/NOAA, EPA, NASA, USAID
5.3	Develop standardized methods for the collection, extraction, quantification, and physical and chemical characterization of micro/nanoplastics.	DOC/NIST, DOT, EPA, HHS/CDC/ATSDR, HHS/CDC/NCEH
5.4	Support plastic pollution removal activities in coastal communities, including communities with environmental justice concerns that are overburdened by plastic pollution.	DOC/NOAA, HHS/CDC/ATSDR, HHS/CDC/NCEH, USAID
5.5	Deploy trash interception devices and expand coordinated efforts to capture, clean-up, and responsibly dispose of leaked plastic, including from the ocean and waterways.	DOC/NOAA, EPA, USAID
5.6	Support the removal and proper disposal of plastic marine debris including derelict fishing gear and other large debris that is generally unable to be collected by hand.	DOC/NOAA, EPA

5.7	Support efforts, such as regional coordination, exploring alternatives to plastic, and outreach and education, to reduce the impacts of marine debris on coastal environments, navigation, human health, safety, and the economy.	DOC/NOAA, HHS/CDC/ATSDR, HHS/CDC/NCEH
5.8	Share best practices, policies, guidance, lessons learned, and technologies for trash interception.	DOC/NOAA, DOI, EPA, HHS, USAID

By determining the baseline amount and types of macroplastic,[94] microplastic, and nanoplastic[95] that escape into waterways and the ocean, the United States can identify pollution sources and pathways and determine the most effective upstream efforts in the future. In the meantime, removal efforts remain critical in preventing further distribution and damage caused by plastic pollution in the environment.

Conclusion

Since day one, the Biden-Harris Administration has made it clear that protecting human health and the environment is a top priority, and addressing the impacts of plastic pollution is essential to achieve this goal. While plastic pollution is a global problem and the associated challenges are great, they also present opportunities to pursue ambitious, data-driven, innovative actions. The Biden-Harris Administration is committed to implementing policies and pursuing initiatives that address the impacts of plastic pollution and ensuring that communities nationwide experience the benefits of these efforts.

By building on existing efforts and identifying new opportunities for action, this document establishes the first United States Federal Government-wide strategy to address plastic pollution for society, the environment, and the economy. It exemplifies the collaboration required to make measurable progress in areas where the Federal Government has a significant ability to effect and contribute to positive change across the nation. Federal agencies are dedicated to exploring and carrying out these actions in appropriate and effective ways, and sharing their knowledge of lessons learned over time. Federal agencies will seek public, state, territorial, and Tribal input, engagement, expertise, and perspectives in the continued implementation of strategies to address plastic pollution.

As outlined in this document, the United States Federal Government is advancing important efforts to combat plastic pollution, and recognizes that more needs to be done. To meet the scope and gravity of the plastic pollution crisis, bold, ambitious, and holistic action must occur at all levels and across all sectors. With growing interest from the public and private sectors, anticipated progress on a worldwide scale, and significant support across a range of federal agencies, action must be taken now to combat plastic pollution to secure an equitable, safe, and healthy future for generations to come.

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Additional Information

All potential federal activities included in this document are subject to budgetary constraints, interagency processes, stakeholder input, and other approvals, including the weighing of priorities and available resources by the Administration in formulating its annual budget, and by Congress in legislating appropriations. This document is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the United States. Although all IPC agencies have contributed to this document in their particular areas of focus, this document in full should not be assumed to reflect the view of each individual agency. This document does not impose legally binding requirements. This is a planning document that should be interpreted and applied consistent with applicable law; to the extent any inconsistency may be implied or found to exist, applicable statutes, regulations, and other legal requirements govern. Mention of case studies; public, private, or nonprofit entities; trade names; or commercial products or services in this document does not and should not be construed to constitute an endorsement or recommendation of any such product or service for use in any manner.

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Emissions rises from a coal-burning power plant in Colstrip, Mont., July 1, 2013. (AP Photo/Matthew Brown, File) AP

By Jake Zuckerman, jzuckerman@cleveland.com

COLUMBUS, Ohio – The U.S. Environmental Protection Agency reversed itself after a loss in court and is now in the process of reinstating a legal rule designed to allow Ohioans to file lawsuits against large scale polluters.

The agency under President Donald Trump repealed the nearly 50-year-old "air nuisance rule" from Ohio's Clean Air Act implementation plan, which allows citizens and the state to sue polluters who emitted enough smoke, grime, acids, fumes, or others sufficient to "endanger the health, safety or welfare of the public."

The EPA finalized the repeal in November 2020, after Trump lost reelection, invoking its "error correction" powers under federal law. The agency alleged that, although the rule remained on the books for five decades and was amended twice in that time frame, it was only included by accident.

But in an about face this month, prompted by a successful legal challenge from environmental organizations, the EPA now says that the repeal itself was an error – not the original 1974 creation of the legal tool. The agency said it failed to consider how both citizens and the state have used the air nuisance rule to improve Ohio's ambient air quality and failed to conduct an "anti-backsliding analysis" required under the Clean Air Act.

"Upon further review, EPA is proposing to determine that its November 2020 action failed to adequately consider the role the Air Nuisance Rule plays in the enforcement of the [national ambient air quality standards] in Ohio," the agency wrote in a regulatory filing.

An EPA spokeswoman declined further comment. The EPA's proposal to reinstate the air nuisance rule is open for a public comment period before it's finalized.

Megan Wachspress, an environmental attorney with the Sierra Club who challenged the EPA's rollback, said she's pleased to see the EPA largely align with the advocacy organization's arguments. The EPA, she said, finally acknowledged the nexus between the rule and ambient air quality, the importance of allowing citizens -- not just the government -- to enforce clean air rules, and the misuse of the EPA's "error correction" powers.

"We're just sorry that it took three and a half years of litigation to get EPA to come to a conclusion they should have had when they were approached by a law firm representing polluters," she said.

Her comment referred to two 2019 advocacy letters to the EPA from a law firm representing a coal facility that was targeted in a lawsuit for alleged violations of the Air Nuisance Rule. Those letters suggest the agency repeal the purportedly erroneous air nuisance rule.

Both citizens and the state have used the air nuisance rule against heavy industry. A Middletown woman named Donna Ballinger used it against an AK Steel plant she said would emit particulate deposits that would fall like rain and cover her cars, deck, windowsills, and her grandchildren's toys when left outside.

The state of Ohio originally represented to the court that Ohio had "never relied on that rule" to ensure compliance with Clean Air Act regulations. However, state attorneys subsequently filed a "notice of additional information" noting Ohio had in fact used the air nuisance rule to file a lawsuit against a steel plant that has emitted enough lead into the air to endanger human health.

And the environmental organizations who challenged the repeal of the rule relied on it regularly.

"Until the EPA removed the air nuisance rule from Ohio's state implementation plan in 2020, parties authorized to enforce Ohio's state implementation plan could and did bring Clean Air Act enforcement actions for violation of the [rule]," a panel of judges with the 6th Circuit Court of Appeals found.

Dave Altman, an environmental lawyer who represented Ballinger, said assuming the EPA finalizes its reinstatement of the rule, that it would mark his most "gratifying" victory in 50 years of practice.

"It was a miscarriage of justice to illegally take this out and deprive the people who need it the most … the people who live on the fencelines, from the only effective tool they have [against polluters]," he said Thursday.

The repeal of the air nuisance rule earned backing of industry organizations like the Ohio Chamber of Commerce, the Ohio Chemistry Technology Council, the Ohio Manufacturers Association, the American Petroleum Institute, and the Ohio Oil and Gas Association.

They characterized the rule as bearing "no reasonable connection" with protecting ambient air quality and only a "general rule prohibiting public nuisances."

Well into President Joe Biden's presidency, the U.S. EPA changed its position, asking the 6th Circuit to remand the matter to the agency for "reevaluation." The justices opted to keep the EPA's repeal in place while ordering the agency to reconsider its action.

As the case worked through the court system, the Ohio EPA, via spokesman James Lee, defended the repeal and said the rule was meant to address things like odors or occasional dust issues in neighborhoods.

“The rule was not meant to be used to achieve compliance with federal air standards,” he said.

An Ohio EPA spokesman said the agency is still reviewing the matter amid the open public comment period, which closes March 25.

Jake Zuckerman covers state politics and policy for Cleveland.com and The Plain Dealer.

MEMORANDUM

TO: The Ohio Manufacturers Association
FROM: Bricker Graydon, Environmental Counsel to The OMA
DATE: March 14, 2024
RE: SEC Climate Disclosure Rules

I. Summary Overview

The U.S. Securities and Exchange Commission's (SEC) widely anticipated climate disclosure rules were released on March 6, 2024. The rules require public companies to release certain information about climate-related risks and expenditures. While the final rules are less demanding than the SEC's proposed rules, released in 2022, they will still obligate many companies to gather new types of data and implement additional reporting mechanisms. Notably absent from the final rules is the previously proposed requirement that large companies report their indirect emissions from their supply chain ("Scope 3" emissions). The SEC estimates compliance costs will range from $197,000 to $739,000, depending on a variety of factors.

The rules have faced widespread criticism. Environmental groups argue that the SEC substantially weakened its rules due to industry pressure. Other groups and industries argue that the SEC went too far and exceeded its statutory authority. The final rules are sure to be plagued by ongoing litigation in the future.

II. Detailed Discussion

A. *Overview of the Rule*

On March 6, 2024, the SEC released the final version of its climate-related disclosure rules, requiring all public companies to disclose certain information regarding the financial effect of climate risks on the company and how the company is managing those risks. The impetus for the widely anticipated rules was the growing demand from investors for these types of disclosures. The SEC published guidance in 2010 that encouraged climate-related disclosure, but that guidance was not widely implemented. While a growing number of companies do release some version of climate-related disclosures already, the SEC has noted that the lack of a formalized reporting system makes these statements difficult to verify and compare. According to the SEC, the new rules improve the "consistency, comparability, and reliability of climate-related information for investors."

The final rules mandate that public companies make the following disclosures in their SEC registration statements and annual reports:

- Material Climate-Related Risks:
    - Climate-related risks that have had or are reasonably likely to have a material impact on the registrant's business strategy, results of operations, or financial condition
- Material Climate-Related Costs:
    - If, as part of its strategy, a registrant has undertaken activities to mitigate or adapt to a material climate-related risk, a quantitative and qualitative description of material expenditures incurred and material impacts on financial estimates and assumptions that directly result from such mitigation or adaptation activities
    - The capitalized costs, expenditures expensed, charges, and losses incurred as a result of severe weather events and other natural conditions, such as hurricanes, tornadoes, flooding, drought, wildfires, extreme temperatures, and sea level rise, subject to applicable one percent and de minimis disclosure thresholds, disclosed in a note to the financial statements
    - The capitalized costs, expenditures expensed, and losses related to carbon offsets and renewable energy credits or certificates if used as a material component of a registrant's plans to achieve its disclosed climate-related targets or goals, disclosed in a note to the financial statements
- Risk Management Practices:
    - The actual and potential material impacts of any identified climate-related risks on the registrant's strategy, business model, and outlook
    - Specified disclosures regarding a registrant's activities, if any, to mitigate or adapt to a material climate-related risk including the use, if any, of transition plans, scenario analysis, or internal carbon prices
    - Any processes the registrant has for identifying, assessing, and managing material climate-related risks and, if the registrant is managing those risks, whether and how any such processes are integrated into the registrant's overall risk management system or processes
    - If the estimates and assumptions a registrant uses to produce the financial statements were materially impacted by risks and uncertainties associated with severe weather events and other natural conditions or any disclosed climate-related targets or transition plans, a qualitative description of how the development of such estimates and assumptions was impacted, disclosed in a note to the financial statements.
- Corporate Governance:
    - Any oversight by the board of directors of climate-related risks and any role by management in assessing and managing the registrant's material climate-related risks
- Climate Policy**:**
    - Information about a registrant's climate-related targets or goals, if any, that have materially affected or are reasonably likely to materially affect the registrant's business, results of operations, or financial condition. Disclosures would include material expenditures and material impacts on financial

estimates and assumptions as a direct result of the target or goal or actions taken to make progress toward meeting such target or goal

- Greenhouse Gas Emissions (GHG):
  - For large accelerated filers and accelerated filers that are not otherwise exempted, information about material Scope 1[1] emissions and/or Scope 2[2] emissions
- Attestation:
  - For those required to disclose Scope 1 and/or Scope 2 emissions, an assurance report at the limited assurance level, which, for large accelerated filer, following an additional transition period, will be at the reasonable assurance level

The rules become effective on April 5, 2024 (60 days after publication in the federal register), but compliance will be phased in, depending on the company's status with the SEC and the contents of the disclosure. Large accelerated filers have the tightest compliance deadlines, with most disclosures required by fiscal year beginning (FYB) 2025. The GHG emissions disclosures are required by FYB 2026, and the limited assurance attestation of these disclosures is required by FYB 2029, followed by the reasonable assurance attestation deadline in FYB 2033. For accelerated filers, most disclosures are required by 2026, followed by the GHG emissions disclosures in FYB 2028, and the limited assurance attestation in FYB 2031. For small reporting companies, emerging growth companies, and non-accelerated filers, all disclosures are required by FYB 2027, except for disclosures regarding material expenditures and impacts relating to mitigation activities, transition plans, and climate targets and goals, which are required by FYB 2028. Filers in these categories are not required to disclose GHG emissions.

The final rules also provide several accommodations. Most notably, the rules provide companies with protection from private liability for disclosures related to transition plans, scenario analysis, internal carbon pricing, and climate targets and goals, as long as such disclosures are *forward-looking*. Notably missing, the rules do not provide compliance exceptions or delays for companies making their initial public offering.

B. *The Rules' Impact*

The final rules are scaled back in several ways from the rules as proposed on March 21, 2022. In particular, the SEC added a materiality element to the GHG emissions disclosures and lengthened compliance deadlines for these disclosures and the required attestations. Further, the SEC removed the requirement that companies disclose GHG Scope 3 emissions, which would have required companies to disclose emissions they are indirectly responsible for throughout their supply chain and based on the products they use. The SEC's final rules also limit GHG disclosure requirements to large companies.

However, the rules will require massive compliance costs, which will put workers' jobs at risk, increase costs for consumers, and decrease payouts to shareholders. This may disproportionately affect smaller companies that do not already have disclosure protocols in place.

[1] Scope 1 emissions are emissions that originate from sources that a company owns or controls.
[2] Scope 2 emissions are a company's indirect emissions, that originate from a company's purchase of electricity, steam, heating, or cooling.

The SEC's climate-disclosure rules will undoubtedly increase compliance costs for all companies, including manufacturers. However, the cost of compliance will vary greatly from company to company based on a number of factors, such as industry, already existing climate governance and climate risk- or cost-related tracking, and whether the company is required to track GHG Scope 1 and 2 emissions. The SEC conservatively estimates that compliance costs could range anywhere from $197,000 to $739,000 annually for the first ten years. Further, it estimates up-front costs will be greater as companies and consultants familiarize themselves with the new rules and establish the necessary data-capturing and reporting mechanisms.

For large manufacturers that are required to report GHG emissions, compliance costs are likely to be closer to the high end of the SEC's estimate. This metric will be difficult to capture, given the complexity in determining indirect emissions. While smaller manufacturers do not have a reporting requirement, they may likely face larger up-front compliance costs to establish climate governance structures and update reporting and data-management systems accordingly. And while compliance costs can certainly be mitigated in certain areas, it is likely that, as compliance is phased in for most companies, investors will expect to receive this information regardless of whether it is required by the regulations.

Another potential effect of the rules is increased risk of litigation for manufacturers due to the "materiality" element of many of the newly required disclosures. The concern is that companies will face mounting legal battles regarding whether they made all the necessary "material" disclosures, which will hinge on what disclosures are considered "material." To mitigate for this risk, outside consultants might be helpful to assist with making these disclosures, especially in the first few years of required compliance. Although the climate-related disclosures are new, public companies are required to make other disclosures of "material" risks, so experienced consultants are well-versed in this determination.

C. *Litigation*

Ten states, led by West Virginia, filed suit on March 8, 2024 in the U.S. Court of Appeals for the Eleventh District, asking the court to find that the SEC exceeded its statutory authority and vacate the final rule. West Virginia is joined by Alabama, Alaska, Georgia, Indiana, New Hampshire, Oklahoma, South Carolina, Virginia and Wyoming. On the flip side, the Sierra Club and the Sierra Club Foundation filed suit on March 14, 2024 over the SEC's failure to include Scope 3 emissions as part of the final rule, arguing that such omission is arbitrary.

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THE NATIONAL LAW REVIEW

EPA Issues Final Rule Requiring TRI Reporting for Seven Additional PFAS

by: Lynn L. Bergeson, Carla N. Hutton of Bergeson & Campbell, P.C. - *Toxic Substances Control Act Blog*

Posted On Wednesday, May 22, 2024

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The U.S. Environmental Protection Agency (EPA) published a final rule on May 17, 2024, to update the list of chemicals subject to Toxics Release Inventory (TRI) reporting to include seven additional per- and polyfluoroalkyl substances (PFAS) for Reporting Year 2024(reporting forms due by **July 1, 2025**). 89 Fed. Reg. 43331.

final toxicity value. As reported in our January 18, 2024, blog item, EPA announced on January 9, 2024, that six PFAS were automatically added for Reporting Year 2024 due to EPA having adopted a final toxicity value during 2023:

- Ammonium perfluorohexanoate; Chemical Abstracts Service Registry Number® (CAS RN®) 21615-47-4;
- Lithium bis[(trifluoromethyl)sulfonyl] azanide; CAS RN 90076-65-6;
- Perfluorohexanoic acid (PFHxA); CAS RN 307-24-4;
- Perfluoropropanoic acid (PFPrA); CAS RN 422-64-0;
- Sodium perfluorohexanoate; CAS RN 2923-26-4; and
- 1,1,1-Trifluoro-N-[(trifluoromethyl)sulfonyl] methanesulfonamide; CAS RN 82113-65-3.

Under FY 2020 NDAA Section 7321(e), EPA must review confidential business information (CBI) claims before adding a PFAS to the TRI list if the chemical identity is subject to a claim of protection from disclosure. EPA states that it previously identified one PFAS for addition to the TRI list based on the NDAA's provision to include specific PFAS upon the NDAA's enactment. Due to CBI claims related to its identity, EPA did not add the PFAS to the TRI list at that time, however. The identity of the chemical was subsequently declassified in an update to the Toxic Substances Control Act (TSCA) Inventory in February 2023. Because its identity is no longer confidential, EPA added the following chemical to the TRI list:

- Betaines, dimethyl(.gamma.-.omega.-perfluoro-.gamma.-hydro-C8-18-alkyl); CAS RN 2816091-53-7.

The final rule will be effective **June 17, 2024**.

Print Close

Biden's latest eco regs blasted by small businesses, manufacturers: 'Will do terrible damage'

By Thomas Catenacci

Published July 03, 2023

Fox News

Small businesses and manufacturers are warning that federal environmental regulations targeting certain chemicals will have a widespread negative impact on the economy.

The regulations — proposed in April by the Environmental Protection Agency (EPA) — would ban most uses of methylene chloride (MCL), a chemical that has various uses in adhesives, paint and coating products, pharmaceuticals, metal cleaning, chemical processing and aerosols. The EPA explained the chemical poses serious risks to health, though it carved out exemptions for military and processing uses.

"The science on methylene chloride is clear, exposure can lead to severe health impacts and even death, a reality for far too many families who have lost loved ones due to acute poisoning," said EPA Administrator Michael Regan after proposing the rule.

"That's why EPA is taking action, proposing to ban most uses of this chemical and reduce exposures in all other scenarios by implementing more stringent workplace controls to protect worker health," he continued.

BIDEN ADMINISTRATION RIGGED INTERNAL ANALYSIS, SOFTENING BLOW OF POWER PLANT REGULATIONS: REPORT

President Biden talks to EPA Administrator Michael Regan during a White House event earlier this year. (Drew Angerer/Getty Images)

Since unveiling the rules, EPA has received tens of thousands of comments from the public, including industry groups strongly opposed. The comment period for the rule concludes on Monday.

The National Federation of Independent Business (NFIB), American Petroleum Institute, and Ohio Manufacturers' Association (OMA) each expressed concern that the regulations would be detrimental to the economy if finalized as is or not substantially modified.

WHITE HOUSE ECO COUNCIL AT ODDS OVER TECHNOLOGY CENTRAL TO BIDEN'S GREEN GOALS

"OMA can appreciate EPA's desire to restrict use of methylene chloride to the general public, retailers, and consumers such as home contractors/remodelers who may not be fully aware of the necessary precautions to safely use this chemical," OMA stated in its comment letter. "However, this proposed rule is a case of 'throwing-the-baby-out-with-the-bathwater.'"

"We have grave concerns that EPA is going beyond its statutory authority with this rule, and usurping [the Occupational Safety and Health Administration's (OSHA)] authority to regulate workplace safety by replacing OSHA's limits with EPA's own limits and practices," it continued. "Therefore, we urge in the strongest terms that the final rule exempts commercial and industrial sectors, that are already highly regulated by OSHA."

OMA added that the EPA's proposed workplace safety standards targeting MCL usage amount to an "onerous, top-down, command-and-control, bureaucratic process." Under the EPA's action, the agency proposed a workplace chemical protection

program to minimize workers' MCL exposure.

"This historic proposed ban demonstrates significant progress in our work to implement new chemical safety protections and take long-overdue actions to better protect public health," EPA Administrator Regan said in April. (Chip Somodevilla/Getty Images)

In addition, the NFIB, which is the largest U.S. small business group, stated the regulations would have "business-closing and job-killing" impacts. The group argued the EPA should withdraw the rule since its determination of health impacts is "fatally flawed," there isn't a viable replacement for MCL and the EPA failed to properly study the impact on the national economy.

"EPA reached the conclusion with respect to the MCL proposed rule that EPA 'did not find that there would be an impact on the national economy,'" the NFIB stated.

"Table 3 in the notice of the MCL proposed rule, listing broad sectors of the economy that EPA plans to prohibit from using MCL, and the specific EPA statement that furniture refinisher business closures alone has an upper bound lost revenue level of $1.8 billion, suffice to render the EPA conclusion unreasonable."

SUPREME COURT DELIVERS BLOW TO KEY BIDEN ENVIRONMENTAL POLICY

Charles Paint Research, a Missouri-based formulator of MCL-based chemical products, said in its own comment letter that the regulations would impact 70% of the products it manufactures and "seriously impact our future existence and that of our clients."

Smoke billows from a chemical plants in Louisiana. Methylene chloride is used in various industrial and consumer processes and products. (Giles Clarke/Getty Images)

And Olin, the world's largest manufacturer of chlorine and chlorine derivatives, said the EPA rule amounts to "arbitrary bans on dozens of vital industrial use cases" for MCL while arbitrarily exempting politically favored industries. The company added that the proposal "will do terrible damage to the national economy that will compound with each future rulemaking."

"The exposure limits as proposed — which are the strictest in the world by orders of magnitude — will result in increased reliance on China for many end products that could have been produced in the United States," Olin wrote in its comment letter.

"The current lack of clarity from the EPA on industry's future production and ability to measure new exposure limits makes it difficult for American companies to develop and bring new and innovative products to market, putting American companies at a disadvantage compared to their international competitors," it continued.

According to Olin, the proposal would outright ban 85% of MCL end-uses. The company further projected the rule could result in drug shortages and impact supply chains for Hepatitis B and HIV medications, medications used to treat mental illnesses, a

medication to treat epilepsy, a medication to treat high cholesterol and over the counter allergy treatments.

Thomas Catenacci is a politics writer for Fox News Digital.

COUNSEL'S REPORT

Frank Merrill & Christine Rideout Schirra, Bricker Graydon
Counsel to the OMA
July 31, 2024

A. Ohio EPA Activities of Note

1. Cleveland Nonattainment Area Reclassification to Serious Ozone Nonattainment

On February 2, 2024, Ohio EPA Division of Air Pollution Control announced draft amended rules that it proposes to promulgate in order to address reclassification of the Cleveland ozone nonattainment area. Ohio EPA anticipates that the Cleveland nonattainment area will fail to meet the 2015 8-hour ozone ambient air quality standard by August 3, 2024, at which time it will be reclassified from moderate to serious nonattainment by U.S. EPA. The Cleveland nonattainment area encompasses Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, and Summit counties.

Reclassification to serious nonattainment triggers additional Clean Air Act requirements for major stationary sources located within the serious nonattainment area.

On May 29, 2024 the OMA hosted an informational webinar with Ohio EPA staff to provide members with the opportunity to ask questions and provide comments to Ohio EPA on this draft rulemaking, together with the particulate matter 2.5 federal rulemaking discussed below.

2. Draft Amended Rules Updating PM 2.5 Air Quality Standard

On June 21, 2024 Ohio EPA made draft amended rules to update the PM 2.5 standard consistent with the updated standard promulgated by U.S. EPA, as discussed below. The Ohio EPA draft rules are available for comment through July 22, 2024.

3. New Nutrients Implementation of Water Quality Standards Rule

Ohio EPA is considering adding a new rule to OAC Chapter 3745-2, which will address how Ohio EPA determines if streams and rivers are impaired for the aquatic life use due to excessive nutrients. The rulemaking is to formalize a weight of evidence approach to analyze the impact of nutrients on streams to bring uniformity to the regulated community. Ohio EPA plans to release a draft version of the rules for comment during fall 2024.

On June 28, 2024, the OMA submitted comments regarding Ohio EPA's nutrient early stakeholder outreach (ESO). The OMA supported Ohio EPA's proposed use of a "weight of evidence" approach to evaluate the impacts of nutrients on streams and stressed the importance of utilizing the 2015 Stream Nutrient Assessment Procedure (SNAP) and resulting rule outline and implementation flow charts for point and nonpoint sources as the guiding force for the current proposed Nutrient ESO. The OMA expressed its concerns regarding certain portions of the 2018

proposed framework regarding large river rulemaking in developing the Nutrient Implementation Standards rule.

4. Draft Amended Rule on Toxic Air Contaminants Adding 1-BP

On May 16, 2024, Ohio EPA made available a draft of an amended rule on toxic air contaminants. Ohio EPA identified the need to add 1-bromopropane (1-BP) to the list of toxic air contaminants due to U.S. EPA's addition of 1-BP to the list of Hazardous Air Pollutants.

B. U.S. EPA Activities of Note

1. U.S. EPA Proposes to Reinsert Ohio Nuisance Rule Back into Ohio's SIP

U.S. EPA issued a proposed rule on February 22, 2024 to reverse its prior November 19, 2020 final action removing Ohio's air nuisance rule from the Ohio State Implementation Plan (SIP). The proposed rule follows a Sixth Circuit decision remanding the 2020 removal action back to U.S. EPA for further consideration. *Sierra Club, et al. v. U.S. EPA, et al.,* (Case No. 21-3057). Now with its current proposed rule, U.S. EPA is proposing to determine that its prior November 2020 final action was in error and to correct that action by reinstating the air nuisance rule back into the SIP.

The OMA supported U.S. EPA's November 19, 2020 final action and filed an amicus brief in the Sixth Circuit matter, urging the court to uphold U.S. EPA's decision. In effect, the reinsertion of the air pollution nuisance rule into Ohio's SIP as U.S. EPA now proposes to do would again require Ohio EPA to include the nuisance provision as a standard term and condition within each air permit that it issues, which enables plaintiffs to file citizen suits alleging violations of the nuisance provision within the permit, even in instances where the facility is operating in accordance with all other limitations set forth within the permit and even where Ohio EPA determines the facility does not operate as a nuisance.

On April 24, 2024, the OMA submitted comments to U.S. EPA together with other Ohio trade groups urging U.S. EPA to abandon its proposed rule and maintain status quo, as opposed to following its proposed rule to reinstate the air nuisance rule back into Ohio's SIP.

2. U.S. EPA Issues Final Air Quality Standard for Particulate Matter

On February 7, 2024, U.S. EPA announced its final air quality standard to govern fine particulate matter (PM 2.5), also known as soot. More specifically, U.S. EPA set an annual health-based national ambient air quality standard for PM 2.5 of 9 micrograms per cubic meter. This is significantly lower than the previous standard of 12 micrograms per cubic meter.

On May 29, 2024, the OMA hosted an informational webinar with Ohio EPA staff to provide members with the opportunity to ask questions and provide comments to Ohio EPA on this draft rulemaking, together with the Cleveland area ozone draft rules discussed above.

On June 21, 2024 Ohio EPA made draft amended rules related to updating the PM 2.5 standard consistent with the updated standard promulgated by U.S. EPA available for comment through July 22, 2024.

3. Biden Administration Released Spring 2024 Unified Agenda of Regulatory and Deregulatory Actions

The Biden Administration unveiled a "wish list" of regulations, which include the following regulations of note:

Rules Implementing Amendments to the Toxic Substances Control Act:

U.S. EPA is proposing revisions to the regulations for decabromodiphenyl ether (decaBDE) and phenol, isopropylated phosphate (3:1) (PIP (3:1)), two of the five persistent, bioaccumulative, and toxic (PBT) chemicals addressed in final rules issued under the Toxic Substances Control Act (TSCA) in January 2021. EPA is not proposing to revise the existing regulations for the other three PBT chemicals (2,4,6-TTBP, HCBD, and PCTP) at this time. RIN: 2070-AL02.

On June 16, 2023, EPA proposed a rule under TSCA to prohibit most industrial and commercial uses of perchloroethylene (PCE). EPA's risk evaluation for PCE, describing the conditions of use is in docket EPA-HQ-OPPT-2019-0502, with the 2022 unreasonable risk determination and additional materials in docket EPA-HQ-OPPT-2016-0732. RIN: 2070-AK84.

On October 31, 2023, EPA issued a proposed rule to prohibit all manufacture, processing and commercial use of trichloroethylene (TCE). RIN: 2070-AK83.

EPA proposed to regulate carbon tetrachloride (CTC) through establishing workplace safety requirements for most conditions of use and prohibit the manufacture and industrial/commercial use of CTC where information indicates use of CTC has already been phased out. EPA's risk evaluation for CTC, describing CTC's conditions of use, is in docket EPA-HQ-OPPT-2019-0499, with the December 2022 unreasonable risk determination and additional information in docket EPA-HQ-OPPT-2016-0733. RIN: 2070-AK82.

EPA is reviewing public comments on the proposed amendments to the new chemicals procedural regulations under TSCA in 40 CFR parts 720, 721, 723, and 725. These amendments are intended to align the regulatory text with the statutory amendments that were made to TSCA in 2016 that impact the TSCA new chemicals review provisions, improve the efficiency of EPA's review processes, and update the regulations based on existing policies and experience implementing the New Chemicals Program. The proposal includes amendments that would reduce the need to redo all or part of the risk assessment by improving information initially submitted in new chemicals notices, which should also help reduce the length of time that new chemicals notices are under review. EPA is also proposing several amendments to the regulations for low volume exemptions (LVEs) and low release and exposure exemptions (LoREXs), which include requiring

EPA approval of an exemption notice prior to commencement of manufacture, making per- and polyfluoroalkyl substances (PFAS) categorically ineligible for these exemptions, and providing that certain persistent, bioaccumulative, toxic (PBT) chemical substances are ineligible for these exemptions, consistent with EPA's 1999 PBT policy. RIN: 2070-AK65EPA.

EPA is proposing to require manufacturers (including importers) of 16 chemical substances to submit copies and lists of certain unpublished health and safety studies to EPA. Health and safety studies sought by this action will help inform EPA's responsibilities pursuant to TSCA, including prioritization, risk evaluation, and risk management. RIN: 2070-AL15.

Update to Hazardous Air Pollutant Reporting Requirements:

This action will address the agency's technology review of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Chemical Manufacturing Area Sources (CMAS). The NESHAP controls hazardous air pollutant (HAP) emissions from process vents, storage tanks, equipment leaks, wastewater streams, transfer operations and heat exchange systems. This action requires EPA to review and revise the standards as necessary (taking into account developments in practices, processes and control technologies) no less often than every 8 years. RIN: 2060-AU73.

This action further addresses the agency's amendments to the NESHAP for Rubber Tire Manufacturing as a result of the D.C. Circuit's opinion in *Louisiana Environmental Action Network v. EPA* ("LEAN"). The NESHAP established emission limitations and work practice requirements based on maximum achievable control technology for control of hazardous air pollutants (HAP) from facilities that are major sources of HAP and that manufacture rubber tires and components integral to rubber tires, as well as tire cord producers and puncture sealant operations. The court in LEAN held that EPA must set limits on uncontrolled hazardous air pollutant emissions when it conducts technology reviews. RIN: 2060-AV70.

C. Judicial

1. U.S. Supreme Court Overturned Precedent Known as Chevron Deference

On June 28, 2024, the U.S. Supreme Court's opinion in *Loper Bright Enterprises v. Raimondo* and *Relentless Inc. v. Department of Commerce* overruled the Chevron Doctrine, a legal precedent that instructed judges to defer to an agency's reasonable interpretation of an ambiguous statute. This ruling overturns decades of precedent, which changes how courts assess the scope of executive actions and regulatory authority. The majority discussed that the Administrative Procedure Act allows for the courts, not agencies, to decide "all relevant questions of law … even those involving ambiguous laws." This opinion abolishes the agency's ability to argue that a court should defer to their construction of an ambiguous statute.

As a result of the *Loper Bright* decision, a party challenging an EPA action may be in a more favorable position against the EPA, where previously a court would defer to EPA

interpretations. Additionally, EPA may feel the need to develop a more supportive record detailing their decision-making than they may have done in the past where EPA discretion was in their favor. Recently promulgated EPA regulations may also be more susceptible to legal challenges.

2. U.S. Supreme Court Ruling on Statute of Limitations for Lawsuits Challenging Agency Actions

The U.S. Supreme Court's July 1, 2024 decision in *Corner Post Inc. v. Board of Governors of the Federal Reserve System*, held that the Administrative Procedure Act's six-year statute of limitations deadline to bring lawsuits challenging agency regulations does not begin until the challenger is harmed by the final agency action. With this decision, administrative agencies can be sued long after the final agency regulation goes into effect. The *Corner Post* decision opens regulations to challenges that were previously thought to be dead under the former understanding that lawsuits were prohibited if filed six years after the regulation was finalized.

3. U.S. Supreme Court Ruling on Right to Jury Trial

The U.S. Supreme Court's July 27, 2004 decision in *U.S. Securities and Exchange Commission v. Jarkesy* found the agency's use of in-house courts to pursue certain securities fraud enforcement actions violated the Seventh Amendment's jury-trial right, finding the defendant entitled to a jury trial in the federal court. This decision restricts the SEC's use of its own in-house administrative tribunal with its own administrative law judges; however, the principles in this decision may be applied more broadly to restrict other federal agencies, including the Environmental Protection Agency, to pursue civil penalties through its own administrative proceedings.

4. U.S. Supreme Court Grants Stay of U.S. EPA Plan to Enforce Clean Air Act's "Good Neighbor" Provision

On June 27, 2024, the U.S. Supreme Court issued a decision on *Ohio v. EPA* and granted the stay of the U.S. EPA plan that required multiple states, including Ohio, to comply with the "Good Neighbor" provision of the Clean Air Act. The "Good Neighbor" provision requires States to incorporate in their State Implementation Plans (SIPs) regulations that forbid emissions that make it harder for downwind states to meet the EPA standard. If a state's SIP is found to violate the Clean Air Act, including the "Good Neighbor" provision, then the U.S. EPA can step in and issue a Federal Implementation Plan (FIP). The stay prevents the EPA from enforcing the plan while the case proceeds in the D.C. Circuit. The majority stated that the stay applicant states are "likely to prevail on their arguments" in granting the stay because EPA failed to adequately explain the continued application of the emission controls in the plan in response to comments. This "failure to explain" theory has been cited by the Supreme Court recently in other decisions involving agency actions and further demonstrates this Court's shift to rein in the administrative state.

On June 27, 2024, the OMA issued a statement supporting the U.S. Supreme Court decision.

5. Lucas County Commissioners, City of Toledo, and ELPC File New Lawsuit Against U.S. EPA Over HABs in Lake Erie and the Maumee TMDL

On May 1, 2024, the Board of Lucas County Commissioners, the City of Toledo, and the Environmental Law & Policy Center (ELPC) filed a complaint in U.S. District Court for the Northern District of Ohio against U.S. EPA alleging that U.S. EPA failed to comply with its obligations under the Clean Water Act to prevent the formation of harmful algal blooms (HABs) in western Lake Erie. The Commissioners, the City of Toledo, and ELPC argue that the current Total Maximum Daily Load (TMDL) that Ohio EPA prepared for western Lake Erie, which was approved by U.S. EPA last year, will not remediate Lake Erie, arguing it fails to limit pollution caused by dissolved reactive phosphorus and does not meaningfully address the concentrated animal feeding operations (CAFOs) that are responsible for polluting the watershed. The lawsuit asks the court to set aside the U.S. EPA's approval of Ohio's TMDL and to order the U.S. EPA to prepare a new TMDL that complies with the Clean Water Act and will strive to improve Lake Erie's HABs.

In 2019, a similar group of Plaintiffs filed a lawsuit in federal court seeking to compel U.S. EPA to require a TMDL to govern the western basin of Lake Erie. After years of litigation, that lawsuit resulted in a consent decree in which U.S. EPA and Ohio EPA committed to completing a TMDL for the Maumee River. The complaint alleges that the TMDL recently finalized by Ohio EPA and approved by U.S. EPA in 2023 fails to achieve pollution reductions that are legally required and that are needed to prevent HABs from continuing to plague western Lake Erie. The complaint further alleges that large animal feeding operations that are largely unregulated and not subject to the Maumee TMDL are a key source of the pollution.

6. 4th Circuit Finds No Knowledge Needed for CERCLA Arranger Liability

On June 25, 2024, the Fourth Circuit, in *68th Street Site Work Group v. Alban Tractor Co., Inc.*, reversed a lower court ruling that found companies that arranged for the disposal of hazardous substances at a dump site needed to "know" or had reason to know that the waste was hazardous to be liable for cleanup costs under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). The Fourth Circuit held that entities can be held liable under CERCLA, even if the entities were not aware that the waste was hazardous at the time of the transport. This decision stresses the importance of diligent waste management practices and methods of disposal of waste containing hazardous substances.

31 July 2024

BATTELLE
It can be done

PFAS Technology and Tools

Presented to:

The Ohio Manufacturers' Association

Analytical Services | Health Assessment | Novel Chemistries | Remediation & Treatment | Site Characterization | Toxicology

Battelle: over 90 years of innovation

Mission: To translate scientific discovery and technology advances into societal benefits.

Nonprofit, charitable trust formed in 1925

National Security
Delivering mission-critical solutions in the air, on the ground, under water, and in cyber space.

Health
Innovating to accelerate discoveries to impact public health, improve patient outcomes, support clinicians and drive critical research.

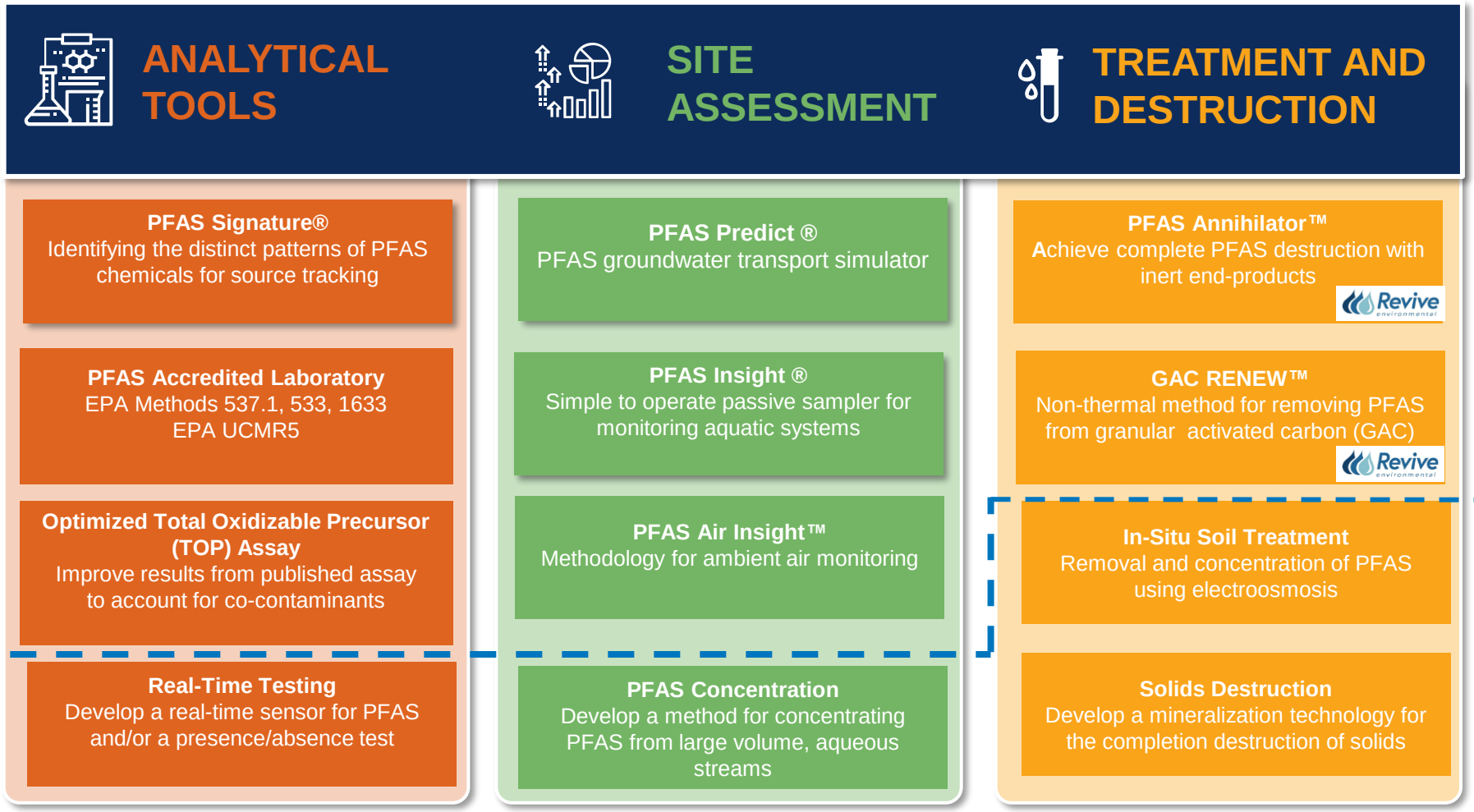
Environment & Infrastructure
Safeguarding assets, building dynamic research networks, and providing solutions to complex environmental challenges.

Lab Management
Delivering scientific discovery and inspiring innovation with the management role we have in nine national laboratories.

Battelle and PFAS

2007	2009	2010	2014	2016	2018-22	2023
Supporting epidemiologists in collecting and understanding health data (e.g., C8 Science Panel)	Carcinogenicity studies for PFOS for the National Toxicology Program (NTP)	Site investigation at Navy Warminster, including ID of mysterious foam as containing PFOA and PFOS	Implementing one of the first formal Remedial Investigation with EPA and state oversight for PFAS contamination	Accredited laboratory for DoD QSM 5.3 and FL, WA, CA, AK, VT, NH, ME, MA, PA, NY, RI	Multi-million dollar corporate investment and commitment to developing PFAS solutions	Commercialization of Technologies. Launch of Revive Environmental for technology deployment PFAS Annihilator™ GAC RENEW™

Battelle PFAS Technology Toolbox



Market Needs and Battelle PFAS Investments

- Analytical Chemistry
- Site Assessment and Characterization Tools
- PFAS Treatment and Destruction Technologies
- PFAS Product Stewardship

PFAS Analytical Chemistry

- Rapid Tests to Determine PFAS Presence/Absence
- Accredited Analysis
  - EPA Method 537.1
  - B-15 Compliant
  - EPA Method 533
  - EPA Method1633
- Non-Target Analysis/Suspect Screening
- Source Tracking and Differentiation/Forensics

PFAS is More Complex Than Traditional Environmental Forensics

Direct and indirect sources have different chemistries, therefore different signatures.
Some of these indirect sources might also contribute to background concentrations.

❖ **Industrial**
- Primary: manufacturing plants
- Secondary: plastic, paper, textile coatings
- Metal plating

❖ **AFFF Usage**
- Fire training areas
- Airports
- Emergency response
- Oil refineries

Direct Sources

❖ **Landfills**
- Leachates
- Landfill gas

❖ **Wastewater Treatment Plants**
- Effluents
- Land application of biosolids

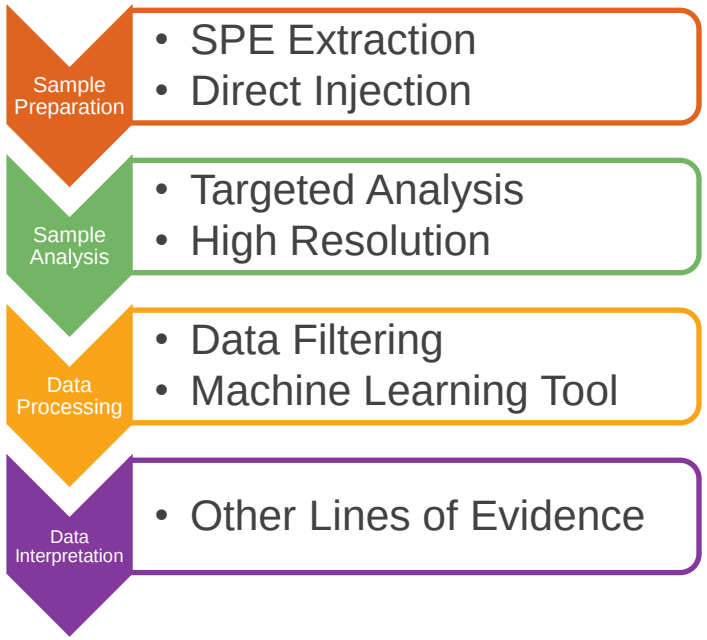
❖ **Waste Incineration**
- Sewage sludge
- Industrial waste

Indirect Sources

Prevedouros et al. 2006

PFAS Signature®

- Source discrimination is done through the combination of analytical chemistry and data analytics
- Liquid chromatography (LC) high resolution mass spectrometry (HRMS) extends the list from 40 to 600 PFAS analytes
- Identifies data gaps that would not have been revealed by EPA Method 1633 targeted analysis alone
- Trained artificial intelligence/machine learning (AI/ML) tools allows for the identification and discrimination of PFAS source(s).

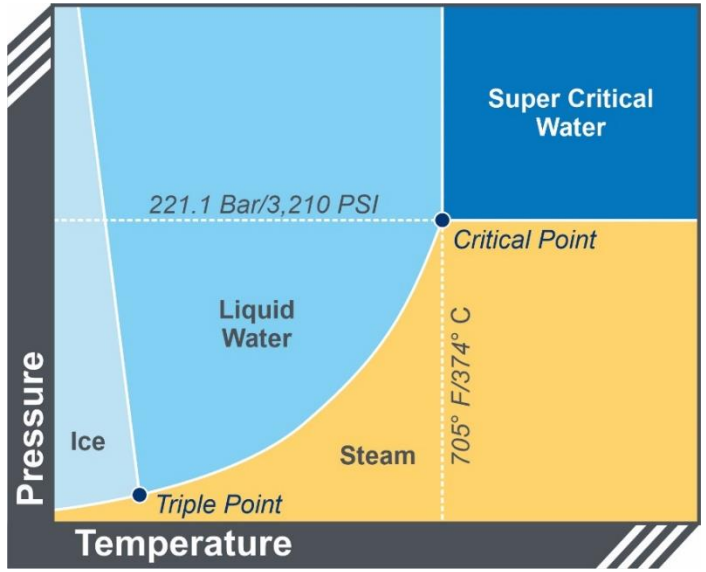


PFAS Annihilator™ Destruction Technology

Harnessing the power of supercritical water oxidation

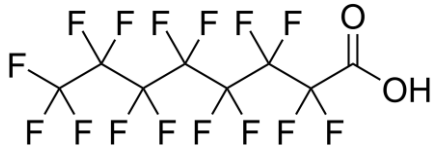
What is Supercritical Water Oxidation?

- Supercritical water exhibits unique properties
  - Gas and liquid phases become indistinguishable
  - Density is about 10% of water above the supercritical point
  - Water no longer behaves as a polar solvent
  - Oxygen is fully soluble

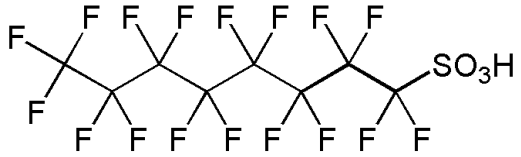


- High temperature in an oxidizing environment overcomes activation energy to break C-F bond

PFOA

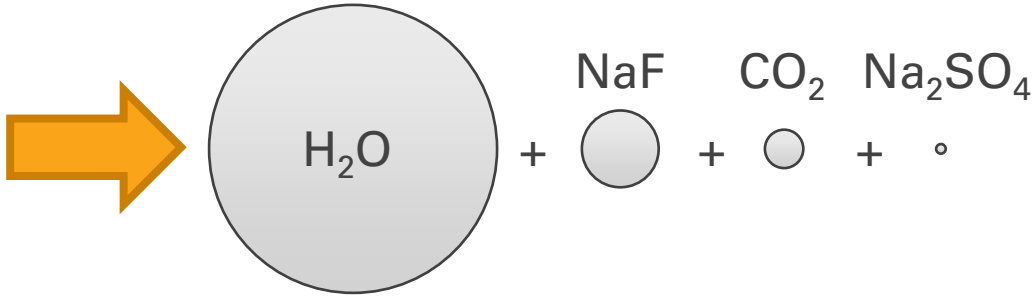


PFOS



+ H_2O_2 (oxygen source)

+ NaOH (Neutralization)



Example Waste Streams for PFAS Destruction

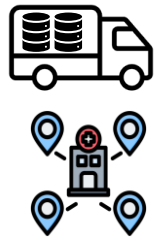
PFAS-contaminated Waste

PFAS Separation + Concentration

Destruction Onsite or at Revive facility

AFFF Concentrate

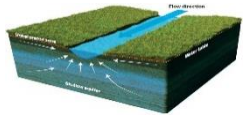
None Required



AFFF Rinsate, Firewater

Landfill Leachate

Industrial Wastewater



Contaminated Groundwater

Separation + Concentration

Example technologies which can generate concentrated aqueous waste

- Foam Fractionation (FF)
- Reverse Osmosis (RO)
- Ion Exchange Resin (IX)

Example AFFF concentrate

Discharge Clean Effluent to POTW

Product Stewardship Offerings

Technical

Hazard Assessment	Identifies hazards, evaluating the risks presented by those hazards, and managing the risks
Lifecycle Assessment	Systematically analyzes the potential environmental impacts of products during their entire life cycles.

Functional

Alternatives Assessment	Compares an existing product with potential alternatives, such as a substitute chemical or a redesign of the product
Supply Chain Evaluation	Evaluates the flow of goods and services, including all the processes of turning raw materials into final products

Business

Cost/Liability Management	Evaluates cost and liability implications (environmental regulatory review, litigation activity, reputation/brand risks, other business risks)
Strategy, Risk Management	Develops a dedicated plan which details how an organization is going to deal with risk, both pre-emptively and as incidents occur

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It can be done

Ohio EPA
Division of Air Pollution Control

Need for Additional Revenue

Ohio Environmental Protection Agency

Revenue Overview

- Ohio EPA has operated an efficient air pollution program with very conservative spending and staffing
- Current funding models rely on high levels of emissions
- Reality is that companies are emitting less and the air is cleaner (great news for all Ohioans) but is also creating funding challenges
- Workload has not lessened and Ohio's economy is growing with high-tech companies like Intel, Amazon, Honda/LG and Joby
- Bottom line: A funding fix is necessary and we need your help

Ohio Environmental Protection Agency

Title V Fiscal Challenges

- Ohio adopted the presumptive minimum for Title V sources in 1993.
- We have been able to maintain that level of fees for 30 years.
- The various emission reduction programs under the Clean Air Act has resulted in substantially less emissions
- Along with improving air quality, the result has been less revenue to the air program including the local air agencies

Ohio Environmental Protection Agency

Title V Fiscal Challenges

- Largest sources of revenue – power plants – many closed with others planning to close
- Title V emission reductions equates to significant decreases in Title V revenue
- Workload not decreasing

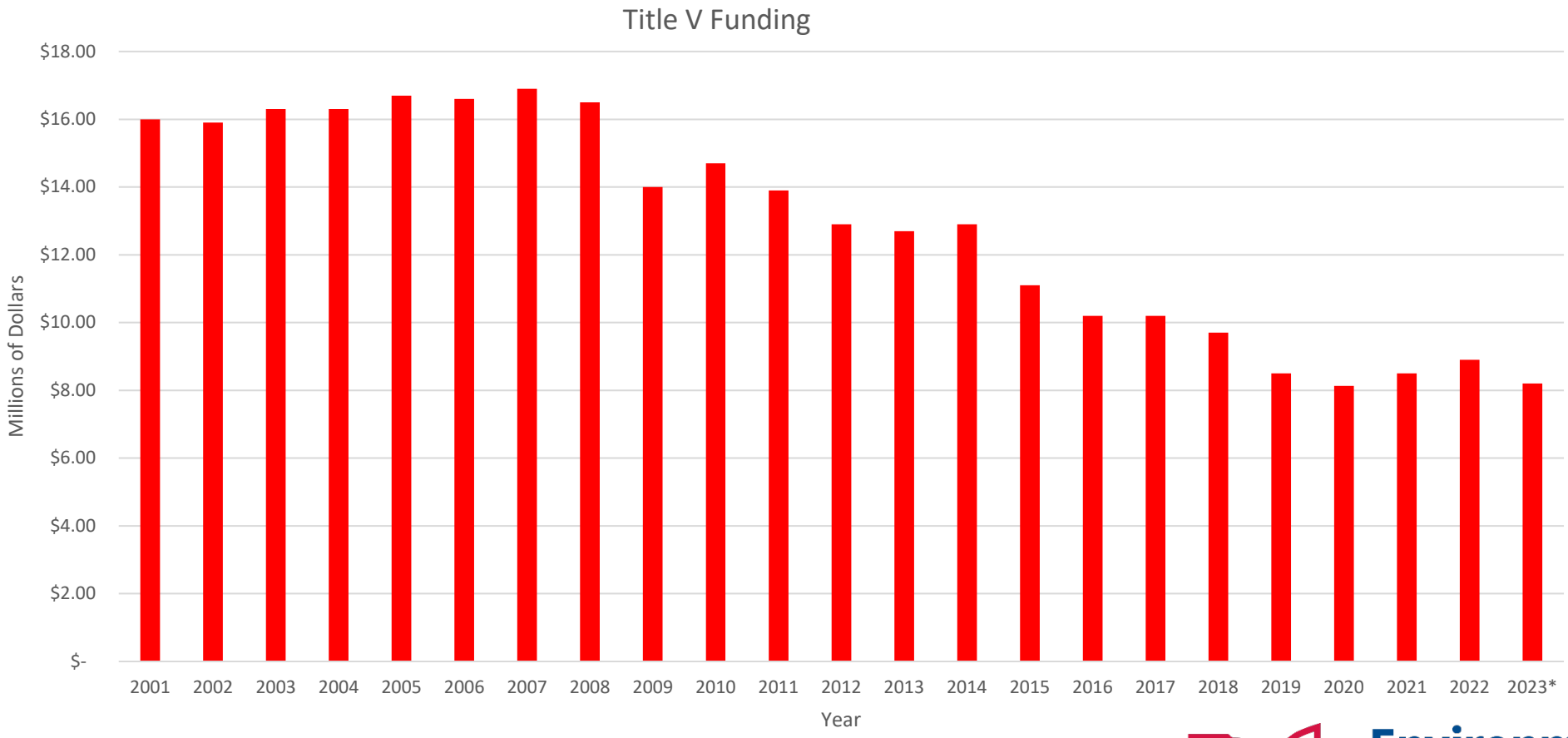
Ohio Environmental Protection Agency

Utility Plant Closures – Lost Revenue

	CY2014	CY2018	CY2021	Closed/Planned Closure
Conesville Power Plant	$422,000	$418,000	$0	Closed 2020
Zimmer Power Station	$410,000	$424,000	$451,000	Closed 2022
Killen Generating Station	$401,000	$415,000	$0	Closed 2018
W.C. Beckjord Station	$382,000	$0	$0	Closed 2014
Avon Lake Power Plant	$380,000	$277,000	$214,000	Closed 2022
W. H. Sammis Plant	$442,000	$285,000	$188,000	Closed 2023
Cardinal Power Plant	$426,000	$420,000	$465,000	Partial Closure in Future
Miami Fort Power Station	$417,000	$425,000	$455,000	Planned 2027

Ohio Environmental Protection Agency

Title V Revenue Dropping



Ohio Environmental Protection Agency

Tightening our belts – DAPC Staffing Reduced Over Time

DAPC Staffing Level:

- FY2010 budgeted level: 220.6 FTEs
- FY2012-13 budgeted level: 206.5 FTEs
- FY2014-15 budgeted level: 190 FTEs
- FY2016-17 budgeted level: 190 FTEs
- FY2018-19 budgeted level: 185 FTEs
- FY2020-21 budgeted level: 179 FTEs
- FY2022-23 budgeted level: 180 FTEs
- FY2024-25 budgeted level: 183 FTEs

Ohio Environmental Protection Agency

Title V Fee Revenue

- Over the years, we have utilized our fee dollars prudently to extend the fees as long as possible.
- We have reached the situation where we can no longer fund the program without an increase in revenue.
- The following is a suggested approach to obtain additional funding over a longer term.
- Attempted to spread the cost over a wider range of facilities.
- Open to other ways to obtain needed revenue.

Ohio Environmental Protection Agency

Additional Fee Revenue

- How much revenue is needed? In order to support both the local air agencies and Ohio EPA , a total of $7.0 million dollars is needed.
- $4.5 million for Ohio EPA
- $2.5 million for the Local Air Agencies
- (Approximate split)

Ohio Environmental Protection Agency

Title V Fee Revenue

- The amount of money collected by Title V sources varies greatly – based on the amount of emissions that are released.
- Some Title V facilities pay a small fee.
  - More than 100 facilities, or 24% of the Title V facilities paid less than $1,000 per year for CY2021 emission fees.
- Title V fees are paid by the largest sources of emissions
- **Title V facilities currently pay approximately $8.5 million/year in fees**

Ohio Environmental Protection Agency

Title V Fee Revenue

Title V Fees Paid for CY2022 Emissions	
Amount Paid	**Number of Facilities**
more than $100,000 or more	20
$50,000 to $100,000	13
$10,000 to $50,000	90
$5,000 to $10,000	80
$2,500 to $5,000	94
$1,000 to $2,500	96
less than $1,000	113
Total Facilities ($8.5 million billed)	**506**

Ohio Environmental Protection Agency

Title V Fee Revenue

- Item 1 – Create an additional Title V base fee of $5,000 per year.
- The base fee would supplement the current emission-based fee.
- The fee would support Title V permitting activities:
  - There are certain requirements associated with Title V permit holders related to compliance reporting and inspections.
  - These activities are required regardless of the quantity of of emissions
- No change is proposed for the Title V emission-based fee.

Ohio Environmental Protection Agency

Title V Fees in Other States

- Michigan has a “Facility Charge” plus an emission fee.
  - “Facility Charge” from $5,250 to $45,000
- Indiana has a base fee plus an emission fee.
  - Indiana’s base fee is $6,100
  - Also has activity specific fees (reviewing modelling, witnessing stack tests…)
- Pennsylvania has “annual operating permit maintenance fee” in addition to an emission fee.
  - The annual operating permit maintenance fee is currently $8,000 per year.
- Tennessee has a base fee, plus an emission fee, and applies a minimum fee.
  - The higher of $4,000 base fee + $/ton emission fee compared or $10,000 minimum fee (2023 fee).

Ohio Environmental Protection Agency

Synthetic Minor Fees

- Synthetic Minor permits are a specific type of PTIO issued with federally enforceable limitations that limit the facility-wide potential to emit.
  - The limitations restrict emissions are used to avoid various regulations, such as Title V permitting.
- Synthetic minor fees are paid by companies with medium level sources of emissions

Ohio Environmental Protection Agency

Synthetic Minor Fees

- There are approximately 780 synthetic minor facilities in Ohio.
- The facilities pay approximately $350,000 annually, compared to $8.5m paid by 500 Title V facilities.
  - Approximately 450 facilities only pay $170 per year.
- Ohio EPA must complete compliance inspections, the review of compliance reports, and work modifying and renewing permits as needed.
- Synthetic minor sources in some cases, require more time developing the permit and tracking compliance than Title V facilities.

Ohio Environmental Protection Agency

Synthetic Minor Fees

SMTV calendar year 2022		
Total Tons Per Year of Regulated Pollutants Emitted	Annual Fee Per Facility	Facilities billed per level
Less than 10	$170	443
10 to 19	$340	174
20 to 29	$670	69
30 to 39	$1,010	46
40 to 49	$1,340	19
50 to 59	$1,680	11
60 to 69	$2,010	16
70 to 79	$2,350	6
80 to 89	$2,680	3
90 to 99	$3,020	1
100 or more	$3,350	5
Total Billed	$352,330	776

Synthetic Minor Fees Increase

- DAPC is proposing a $5,000 base fee, and a 50% increase in the annual emission fee.
  - The new emission fees would range from $255 to $5,025.
  - The $5000 annual base fee would be applied in addition to the base fee.
- The new fee would generate $4,465,000 annually (an increase of $4,121,000.

Ohio Environmental Protection Agency

New Synthetic Minor Fee Proposal

Total Tons Per Year of Regulated Pollutants Emitted	Current Annual Fee Per Facility	Facilities billed per level	50% increase in emission fee	$5,000 base fee	New Total per facility
Less than 10	$170	443	$255	$5,000	$5,255
10 to 19	$340	174	$510	$5,000	$5,510
20 to 29	$670	69	$1,005	$5,000	$6,005
30 to 39	$1010	46	$1,515	$5,000	$6,515
40 to 49	$1340	19	$2,010	$5,000	$7,010
50 to 59	$1680	11	$2,520	$5,000	$7,520
60 to 69	$2010	16	$3,015	$5,000	$8,015
70 to 79	$2350	6	$3,525	$5,000	$8,525
80 to 89	$2680	3	$4,020	$5,000	$9,020
90 to 99	$3020	1	$4,530	$5,000	$9,530
100 or more	$3350	5	$5,025	$5,000	$10,025

PTI Fees

- The current range per emission unit (based on complexity of equipment) is $25-$9,000.
  - $9,000 would only apply to large power plant boilers.
- DAPC collects approximately $800,000 per year from PTI fees.
- We are proposing a 50% increase in PTI fees to maintain the permit processing times.

Ohio Environmental Protection Agency

PTI Fees

- DAPC is proposing a 50% increase in PTI fees.
- The new fee range per emission unit would be $37.50-$13,500 (very few sources pay the highest level of fee).
- The estimated increase in revenue would be $400,000 per year.

Ohio Environmental Protection Agency

Fee Proposal Summary

	Number of facilities	Fee Increase Proposal	Increased Revenue	Total Revenue (Existing + Proposed)
Title V Fee	509	$5,000 Base Fee	$2,545,000	$11,000,000
PTI Fee		50% increase	$400,000	$1,200,000
Synthetic Minor Fee	791	50% increase + $5,000 base fee	$4,121,000	$4,471,000
Total			$7,066,000	**$16,671,000**

Ohio Environmental Protection Agency

When would the fees be effective?
As part of the SFY 26-27 Biennium Budget

Fee	Proposed Increase	Effective Date	Date of Fee Increase/Billing Date
Title V Fee	Base Fee	October 1, 2025	First Billing: October 2025 Second Billing: ~July 1, 2026
PTI Fee	50% Increase	October 1, 2025	Applied to any permits issued after October 1, 2025
Synthetic Minor	Base Fee	October 1, 2025	First Billing: ~October 1, 2025
Synthetic Minor	50% Increase	January 1, 2026	First Billing: ~July 1, 2027

Ohio Environmental Protection Agency

Benefits of the Funding Approach

- No fee increase for approximately 15,000 small companies
- Simple & predictable approach allows companies to budget
- Continuation of an independent permit program without federal intervention (companies not needing to go to Region V in Chicago for permits)
- Companies will work directly with their local environmental contacts on permitting and compliance

Ohio Environmental Protection Agency

Benefits of the Funding Approach

- Permits will be issued timely to meet tight construction timelines
- Continuous improvements to electronic permitting
- Proposed fee increases still allow businesses to operate in Ohio cheaper than surrounding states
- Overall long-term stability of the air program

Ohio Environmental Protection Agency

How You Can Help

- Discuss with your members
- Provide feedback on proposals/concepts
- We will meet with you to discuss and answer questions
- Be prepared to support proposal when released

Ohio Environmental Protection Agency

- Questions?

Ohio Environmental Protection Agency

The Ohio Manufacturers' Association presents

OHIO MANUFACTURERS' ENERGY CONFERENCE 2024

A forum for manufacturers and energy professionals

Sponsor Packages

WHAT:
Ohio Manufacturers' Energy Conference, an in-person event.

WHEN:
Thursday, September 19, 2024

WHERE:
Quest Conference Center
9200 Worthington Road, Suite 400
Westerville, Ohio 43082

WHO:
Energy supply managers, category managers, utility engineers, sustainability specialists, policy experts, company executives, suppliers, consultants, regulators, and more.

HIGHLIGHTS:
With energy at the forefront of economic concerns, this event will showcase state and national experts who will share insights, best practices, and industry trends in energy management, efficiency, and procurement; generation, distribution, and transmission; policy and regulatory developments; and sustainability, ESG, and behind-the-meter opportunities. This in-person event will also provide networking opportunities for professionals as they enhance their competitiveness.

GOLD
$25,000

- Featured sponsor of keynote sessions and breaks
- Custom Event Participation Opportunities
- Lunch Sponsor
- Exhibitor Space
- Eight Complimentary Registrations
- Recognition as gold sponsor during opening and closing remarks
- Your company listed on event site (with gold-sponsor designation, your company logo, link to your site, and optional video)
- Company logo on pre-conference communications
- **Special sponsorship discount for current OMA Connections Partners**

SILVER
$10,000

- Post-event reception sponsor
- Exhibitor space
- Recognition as silver sponsor during opening and closing remarks
- Six complimentary registrations
- Your company listed on event site (with silver-sponsor designation, your company logo, and link to your site)
- Company logo on pre-conference communications
- **Special sponsorship discount for current OMA Connections Partners**

BRONZE
$5,000

- Four complimentary registrations
- Your company listed on event site (with bronze-sponsor designation, your company's logo, and link to your site)
- Company logo on pre-conference communications

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Nick Miller, Director, Development and Member Services, The Ohio Manufacturers' Association • NMiller@ohiomfg.com or (614) 369-5354

The Ohio Manufacturers' Association

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LEADERSHIP FORUM

WEDNESDAY, SEPTEMBER 11. 2024

The Grand Event Center • 820 Goodale Boulevard, Columbus, Ohio 43212

REGISTER NOW! REGISTRATION FEE: MEMBERS - $75 • NON-MEMBERS - $150

SPONSORSHIP OPPORTUNITY • $5,000

Placement of company name included on all pre-forum communications	Placement of company name included on social media promotion for the forum	Placement of company name included on signage during the forum	Highlighted as event sponsor in weekly newsletter	Recognized as sponsor by OMA staff during the forum	Up to two (2) complimentary registrations to the forum, with preferred seating

Special Guests:

Coach Jim Tressel
Coach Jim Tressel is a National Championship winning football coach; Former President of Youngstown State University; Host of the "It's All About the Team" Podcast.

Jonah Goldberg
Jonah Goldberg is a Syndicated political columnist; Co-founder and Editor-in-Chief of The Dispatch; Former National Review Senior Editor; Author of 3 New York Times Bestsellers.

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Nate Mays, Director, Development and Member Services – The Ohio Manufacturers' Association
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