

Environmental Permitting Conference July 20, 2022

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Division of Air Pollution Control
Ohio EPA



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C. Permitting Update

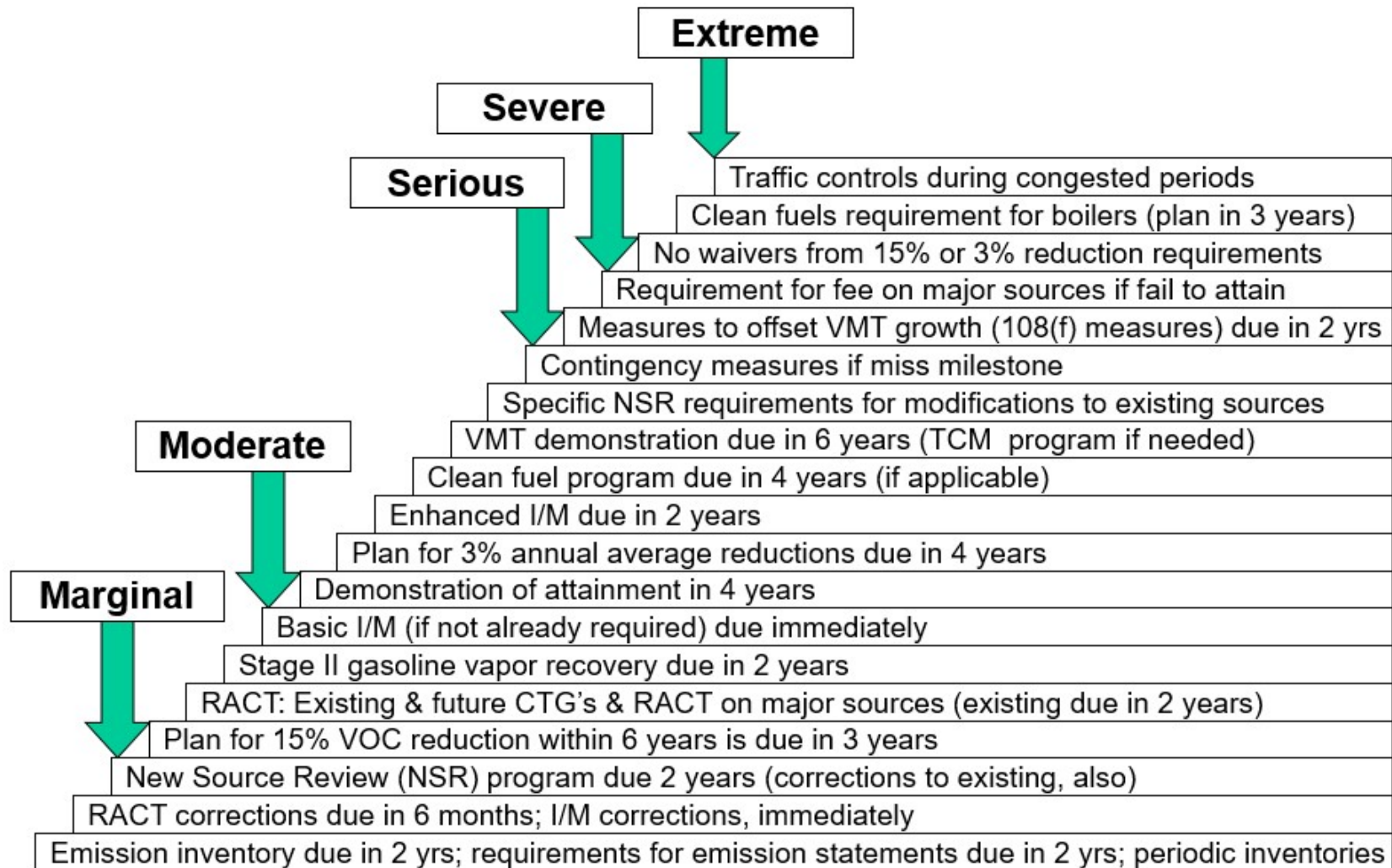
Ozone Background/Refresher

- Ozone is formed from precursor emissions of nitrogen oxides (NO_x) and volatile organic compounds (VOCs) in the presence of sunlight
- 2015 ozone standard
 - Lowered to 70 ppb
 - Based on a 3-year average of annual 4th high values (called “design value”)
- Ozone season is March 1 to October 31
- In recent years, exceedances began in mid-April or later

Ozone Background/Refresher

- Cincinnati and Cleveland are currently designated marginal nonattainment
- Required to meet standard by August 3, 2021 (called “attainment date”)
 - 2020 was last full ozone season (*March 1 to October 31*) before attainment date
- Cincinnati and Cleveland did not meet standard and are not eligible for 1-year extension
 - Cleveland expected to get “bumped up” to moderate nonattainment

Requirements for Ozone Nonattainment Areas (from 1990 Clean Air Act Amendments)



Cleveland Ozone Outlook

Site Name	Site Id	County	2019 4th High	2020 4th high	2021 4th high	2022 4th high needed to violate 2015 standard	2022 4th high (through 6/27/22)	2020-2022 DV (through 6/27/22)
District 6	39-035-0034	Cuyahoga	68	74	70	69	73	72
GT Craig NCore	39-035-0060	Cuyahoga	66	66	59	88	58	61
Berea BOE	39-035-0064	Cuyahoga	63	66	69	78	65	66
Mayfield	39-035-5002	Cuyahoga	70	68	68	77	64	66
Notre Dame	39-055-0004	Geauga	68	65	67	81	64	65
Eastlake	39-085-0003	Lake	71	75	72	66	76	74
Painesville	39-085-0007	Lake	69	68	63	82	62	64
Sheffield	39-093-0018	Lorain	58	59	59	95	63	60
Chippewa	39-103-0004	Medina	54	64	65	84	67	65
Lake Rockwell	39-133-1001	Portage	58	63	67	83	71	67
North High	39-153-0026	Summit	66	62	66	85	69	65

“Bump-up” Anticipated Timeline

- 8/3/21: Attainment date (marginal)
- ~2/3/22: Bump-up to moderate
 - Required 6 months after attainment date (i.e. 2/3/22)
 - EPA behind schedule for “bump-up” – issued proposal in April
- 8/3/24: New (moderate) attainment date (cannot be extended)
 - 2023 is last ozone season before new attainment date

“Mandatory” Moderate Bump-up Requirements

- Triggers additional mandatory requirements under Clean Air Act (CAA):
 - NO_x and VOC Reasonably Available Control Technology (RACT)
 - Implement by 3/1/23 (unless alternate deadline established by U.S. EPA)
 - Rulemakings underway (OAC Chapters 3745-110 NO_x RACT, 3745-21 VOC RACT)
 - Emissions Inspection and Maintenance (I/M) Program (i.e. E-Check)
 - Implement 4 years after bump-up (2026)
 - Additional challenges permitting new and modified sources
 - NSR offset ratio 1.15:1
 - Baseline year reset

U.S. EPA Implementation Proposal for 2015 Ozone Standard

- On April 13, 2022, U.S. EPA proposed a timeframe for the implementation of the 2015 ozone standard “bump up” areas.
- Proposal calls for implementation of requirements on January 1, 2023!

U.S. EPA Implementation Proposal for 2015 Ozone Standard

- Two issues:
 - Ohio EPA has a significant amount of technical work that is needed for submittal – not likely to complete by January 1, 2023
 - Implementation of rules are expected by January 1, 2023. Not practical if state is waiting for official bump-up
 - Comment period closes June 13, 2022
 - Ohio EPA anticipates submitting comments

Cincinnati Ozone Outlook

Site Name	Site Id	County	2019 4th High	2020 4th high	2021 4 th high	2022 4th high needed to violate 2015 standard	2022 4 th high (through 6/27/22)	2020-2022 DV (through 6/27/22)
Middletown Airport	39-017-0018	Butler	67	70	64	79	67	67
Crawford Woods	39-017-0023	Butler	67	67	66	80	70	67
Miami University, Oxford	39-017-9991	Butler	65	64	63	86	66	64
Batavia	39-025-0022	Clermont	71	64	65	84	63	64
Sycamore	39-061-0006	Hamilton	72	70	70	73	69	69
Colerain	39-061-0010	Hamilton	67	70	64	79	68	67
Taft NCore	39-061-0040	Hamilton	71	68	69	76	67	68
Lebanon	39-165-0007	Warren	70	71	69	73	69	69

Cincinnati Redesignation

- Based on the 2019 – 2021, Cincinnati met the the 2015 ozone standard
- Ohio EPA prepared a proposal for the redesignation that was submitted to U.S. EPA
- U.S. EPA proposed that the Cincinnati area should be redesignation on 02/11/2022
- Comment period closed 03/14/2022
- Region V moved quickly to finalize the redesignation – prioritized the proposal/response to comments.

Cincinnati Redesignation

- Redesignation of Cincinnati complete
- Effective date – June 9, 2022
- Southwest Ohio in attainment of standard for the 2015 ozone standard!

Toledo Ozone Outlook

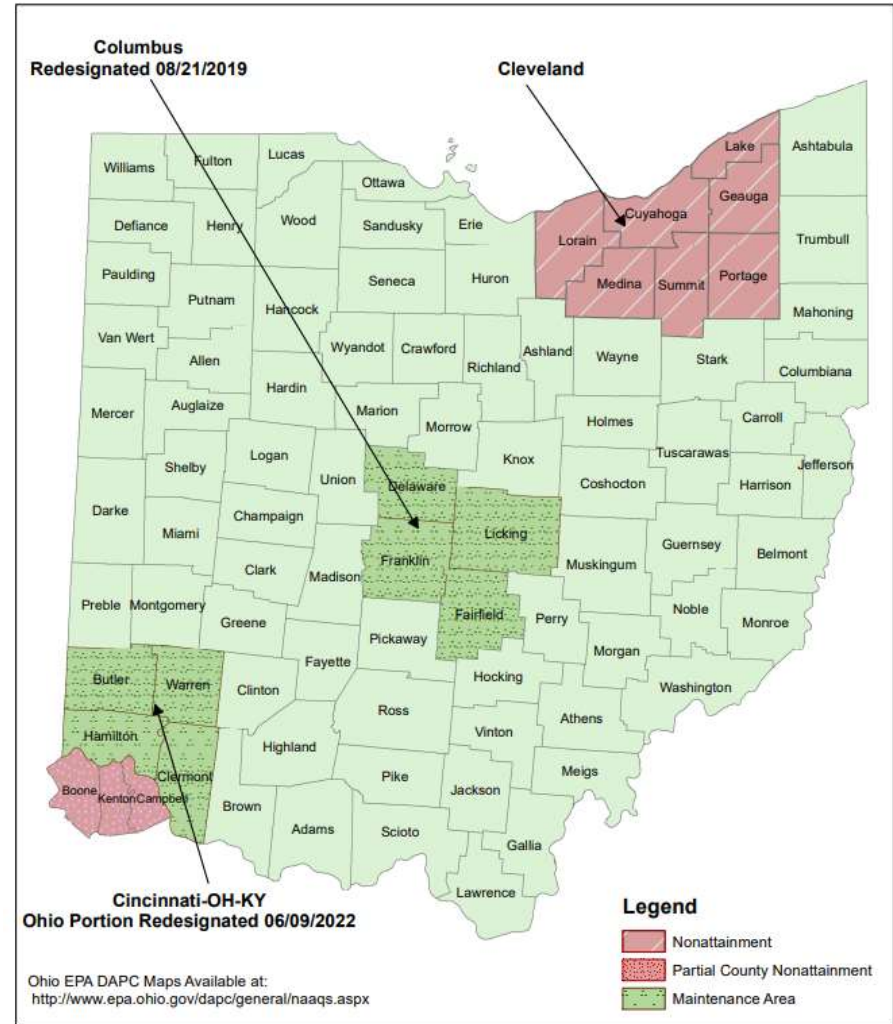
Site Name	Site Id	County	2019 4th High	2020 4th high	2021 4 th high	2022 4th high needed to violate 2015 standard	2022 4 th high (through 6/27/22)	2020-2022 DV (through 6/27/22)
Erie	39-095-0024	Lucas	62	69	63	81	69	67
Waterville	39-095-0027	Lucas	61	65	64	84	65	64
Cooley	39-095-0035	Lucas	65	76	75	62	70	73

2015 Ozone Standard

Implementation Timeline

- 8-hour standard – 0.70 ppm (avg. of 4th high over 3-yrs)
- US EPA finalized non-attainment areas effective August 3, 2018
 - Cleveland measured violations through 2022– bump up to moderate next
- Columbus – Redesignated to attainment 2019
- Cincinnati – Redesignated to attainment June 2022

Ohio 2015 Eight-Hour Ozone (0.070 ppm)
Nonattainment Areas
Effective 08/03/2018



Ozone Summary

- Cleveland will be “bumped up” to moderate nonattainment
- Cincinnati redesignation completed
- RACT rulemaking completed
- Update of Consumer Products and AIM rules
- Primary goal is attainment and avoiding another bump
- Stay informed: <https://epa.ohio.gov/divisions-and-offices/air-pollution-control/state-implementation-plans/state-implementation-plan-sip-2015-eight-hour-ozone-planning>

Cross State Air Pollution Rule

- On April 6, 2022, U.S. EPA proposed the latest Cross State Air Pollution Rule (CSAPR)
- Affects many states including Ohio
- Purpose of the rule is to address 110(a)(2)(D) of Clean Air Act associated with states downwind impact on nonattainment
- In previous rules, U.S. EPA required reductions from utility boilers
- Now, U.S. EPA is looking at large industrial sources of NO_x also.

Cross State Air Pollution Rule

- These would include the following source categories:
- Glass plants
- Cement plants
- Large engines (greater than 1000 hp) in natural gas transport
- Large boilers
- Steel making operations (many operations identified)

Basic Chemical Manufacturing, Petroleum and Coal Products Manufacturing, and Pulp, Paper, and Paperboard Mills

- The proposal has limits for units
- Boilers with design capacity ≥ 100 mmBtu/hr
 - Basic Chemical Manufacturing: NAICS 3251xx
 - Petroleum and Coal Products Manufacturing: NAICs 3241xx
 - Pulp, Paper, and Paperboard Mills: NAICS 3221xx
- 30-operating day rolling average period

Unit type	Proposed Emissions limit (lbs NO _x /mmBtu)
Coal	0.20 lb/mmBtu
Residual oil	0.20 lb/mmBtu
Distillate oil	0.12 lb/mmBtu
Natural gas	0.08 lb/mmBtu

Iron and Steel Mills and Ferroalloy Manufacturing

- Compliance is based on 3-hour rolling average
 - Proposed rule also refers to 30-day rolling average, but we have confirmed U.S. EPA's intent is 3-hour rolling average
- Install, maintain and continuously operate NOx control devices to achieve emission limits
- Submit a work plan within 180 days of the effective date of the rule identifying how the unit will comply
- Install, operate and maintain NOx continuous emission monitoring system (CEMS)
 - 40 CFR Part 60, Appendix B
- Electronic reporting through CEDRI

Cross State Air Pollution Rule

- The proposal is based on a stated cost effectiveness of \$7500 dollars per ton
- The proposal requires additional emission monitoring and reporting – either parametric or continuous emissions monitoring

Cross State Air Pollution Rule

- The comment period on the rule closed June 21, 2022
- Not clear that U.S. EPA fully evaluated the extent of the number of emission units covered by the rule
- We submitted comments in response to proposal
- <https://epa.ohio.gov/divisions-and-offices/air-pollution-control/state-implementation-plans/state-implementation-plan-sip-2015-eight-hour-ozone-planning>

Startup, Shutdown and Malfunction SIP Call

- Started under the Obama administration – declared that 36 states unlawfully had rules that did not properly emissions during the startup, shutdown or malfunction of equipment – this action was done to settle a lawsuit with environmental groups
- Also, Ohio allowed “scheduled maintenance” of control equipment to take controls offline and allow the source to continue to operate
- One of the main objections to the rules was that the rules allowed for “Director’s discretion” - that is, the state had the determination of what type of enforcement action should be taken (if any).

Startup, Shutdown and Malfunction SIP Call

- Ohio asked the Ohio Attorney General to appeal the SIP call – which was done with a number of other states as parties
- Ohio EPA started drafting changes to the rules under the Obama administration SIP call, but then the Trump administration came in and effectively said, the previous SIP call was not correct and froze the litigation, but did not formally withdraw SIP call – since the SIP Call was part of a court settlement

Startup, Shutdown and Malfunction SIP Call

- In January of 2022, the Biden administration reinstated the SIP call – issues a Failure to Submit Notice to Ohio and 11 other states. (SIP Call was not formally withdrawn under Trump Administration).
- The Failure to Submit action – issued as a direct final action with no proposed action, puts us on a 18- month clock to develop rules that U.S. EPA will accept
- If not, then sanctions will be imposed in the nonattainment areas of the state with 2 for 1 offsets, then if an approvable plan is not submitted in another six months, then highway fund sanctions would kick-in.

Startup, Shutdown and Malfunction SIP Call

- Industry has concerns over the threat of enforcement for malfunctions that are not within their control or temporarily taking a piece of control equipment offline when it is not practical to shut down the source.
- Ohio needs to submit an approvable package or be sanctioned in July of 2023 – need to submit to U.S. EPA final package by April of 2023
- Looking at what other states have submitted as approvable packages.
- Put out an interested party package for comment in June.

Particulate Standard Review

- US EPA will be reviewing the PM10/PM2.5 standard
- Many believe previous administration should have tightened standard, but did not.
- New administration set up formal committee to review continue standards – has recommended that standard be tightened
- Looking at 2022 for new standard
- Where will new standard be? Between 8.0 and 10.0 ug/m³?

PM2.5 NAAQS: Current Air Quality Highest Monitor in Each County

PM25-Annual Yearly and Design Value (ug/m3)							
SITEID	County	2018	2019	2020	2021	2018-2020 DV	2019-2021 DV
39-003-0009	Allen	8.32	7.44	5.37	6.9	7.1	6.6
39-009-0003	Athens	6.67	6.38	6.11	6.2	6.4	6.2
39-013-0006	Belmont	7.73	8.66	7.12	8.1	7.8	8.0
39-017-0022	Butler	10.17	10.79	9.76	11.0	10.2	10.5
39-023-0005	Clark	9.61	9.78	7.43	9.6	8.9	9.0
39-035-0065	Cuyahoga	11.08	10.81	10.45	12.6	10.8	11.3
39-049-0038	Franklin	9.06	9.69	7.75	9.9	8.8	9.1
39-057-0005	Greene	8.14	NA	NA	NA	8.1	NA
39-061-0048	Hamilton	12.41	11.93	10.35	10.8	11.6	11.0
39-067-0004	Harrison	7.28	NA	NA	NA	7.3	NA
39-081-0017	Jefferson	8.65	8.99	8.87	11.7	8.8	9.8
39-085-0007	Lake	7.03	6.52	6.19	6.9	6.7	6.5
39-087-0012	Lawrence	6.41	6.74	7.67	8.7	6.9	7.7
39-093-3002	Lorain	7.78	7.18	6.68	7.6	7.2	7.2
39-095-1003	Lucas	8.9	8.84	9.53	8.9	9.1	9.1
39-099-0014	Mahoning	7.83	8.32	7.85	8.8	8.0	8.3
39-103-0004	Medina	7.46	8.06	6.47	6.9	7.3	7.1
39-113-0038	Montgomery	8.28	9.39	9.64	9.9	9.1	9.6
39-133-0002	Portage	7.27	7.64	6.9	7.3	7.3	7.3
39-135-1001	Preble	8.68	8.28	7.43	8.8	8.1	8.2
39-145-0013	Scioto	7.06	6.74	6.57	7.1	6.8	6.8
39-151-0020	Stark	8.84	9.56	8.68	10.2	9.0	9.5
39-153-0017	Summit	8.8	8.74	8.82	8.6	8.8	8.7
39-155-0014	Trumbull	7.73	7.25	6.22	8.7	7.1	7.4

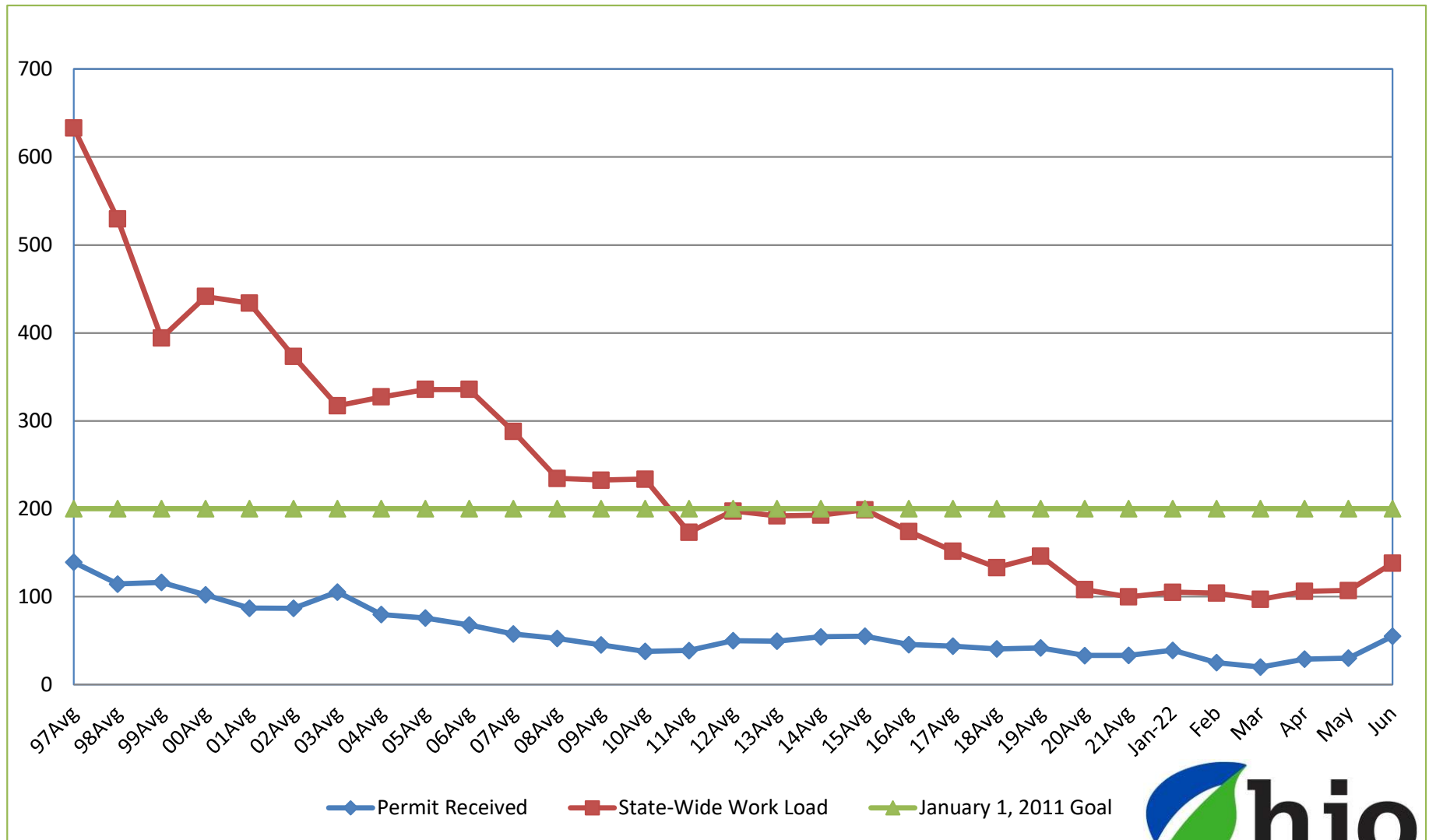
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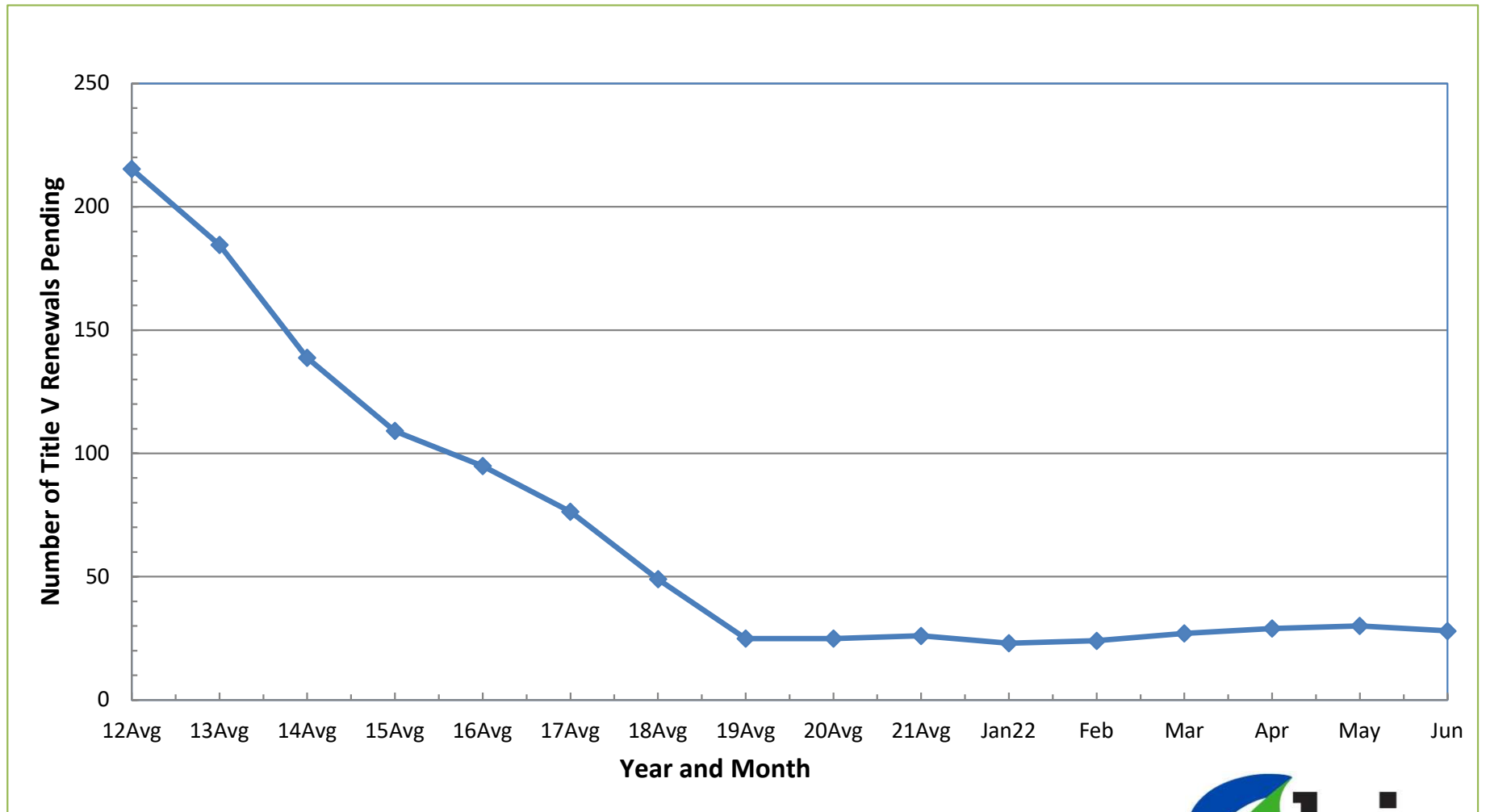
Ozone Standard Review

- US EPA will be also be reviewing the ozone NAAQS
- Some argued with previous administration to have tightened standard, but did not happen
- New administration set up formal committee to review continue standards
- Target date of 2023 for new standard
- Will there be a revised NAAQS also? Not clear at this time.

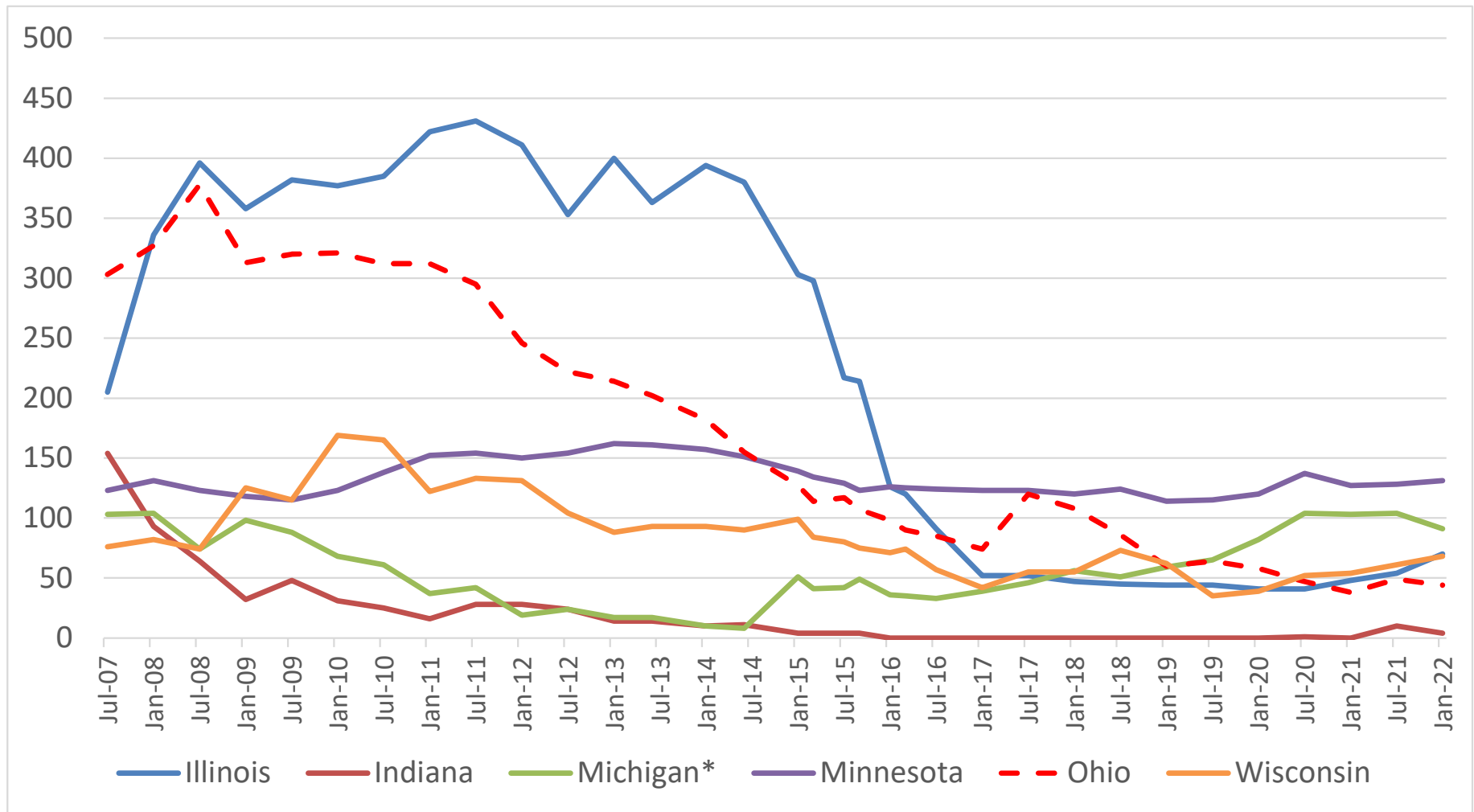
Installation Permit Workload Trends



Title V Permit Processing (Late)



Region V Title V Permit Processing



Questions?



**Marathon
Petroleum Corporation**

Major Air Permitting & Compliance Developments

**Sherry L. Hesselbein, Deputy General Counsel
July 20, 2022**



Topics

Biden Administration Regulatory Review

- Significant air regulations under review

Environmental Enforcement

- National Compliance (Enforcement) Initiatives
- Environmental Justice

Air Regulations Under Review

The Spring 2022 Unified Agenda lists 72 regulations that the U.S. EPA Office of Air and Radiation is either reviewing or has proposed.

RULE	STATUS
Ozone NAAQS (currently at 70 ppb)	EPA is reconsidering the decision to retain the 2015 standards and plans to complete its reconsideration by the end of 2023
PM NAAQS (currently at 12 µg/m ³)	Proposed reconsideration rule targeted for August 2022, and final rule in Spring 2023, but proposal has not been sent to OMB yet
Revised Response to Clean Air Act Section 126(b) petitions from New York	Petition requests EPA to find that emissions from nine states, including Ohio, significantly contribute to ozone non-attainment in their states.
Federal Implementation Plan Interstate Transport for 2015 Ozone NAAQS	Proposed rule published in April; NO _x reductions for EGU and non-EGU sources
Repeal of the Clean Power Plan: Emission Guidelines for GHG Emissions from Existing EGUs	U.S. Supreme Court held that EPA lacked authority to require generation-shifting
Startup, Shutdown & Malfunction (SSM) SIP Call	EPA returned to 2015 policy: exemptions or affirmative defense provisions during SSM periods are not consistent with the CAA

Air Regulations Under Review

RULE	STATUS
MACT Reclassification of Major Sources to Area Sources	Proposal date moved from June 2022 to February 2023. EPA also plans to address parallel PTE definitions in permitting and air toxics program.
PSD and NNSR: Reconsideration of Fugitive Emissions Rule	New proposed rule would require fugitives be counted in all new and modified major source determinations.
Clarifying the Scope of Applicable Requirements under Permit Programs	Clarify definition of “applicable requirement,” including extent to which RMP general duty clause may be implemented in Title V permitting process.
PSD and NNSR: Regulations related to Project Emissions Accounting	Original rule published in November 2020. This is a discretionary rulemaking to address issues raised in January 2021 petition for reconsideration.
Revisions to Minor NSR Permit Program Requirements for SIPs	Federal rules for the minor source permitting requirements in SIPs have not changed for more than 40 years.
Removal of Title V Emergency Affirmative Defense Provisions from Permit Programs	Proposed in April to remove the emergency affirmative defense provisions from the Title V implementing regulations.

Environmental Enforcement

National Compliance Initiatives (2020 – 2023)

■ Air

- Creating Cleaner Air for Communities by Reducing Excess Emissions of Harmful Pollutants
 - Addresses VOC and HAP exceedances (statistics on next slide)
 - Enforcement Alerts, including November 2020 reminder about improper use of AP-42 emission factors in permitting
- Stopping Aftermarket Defeat Devices for Vehicles and Engines
 - Prevent impermissible NOx and PM emissions from vehicles; resolved 40 cases in FY2021

■ Hazardous Chemicals

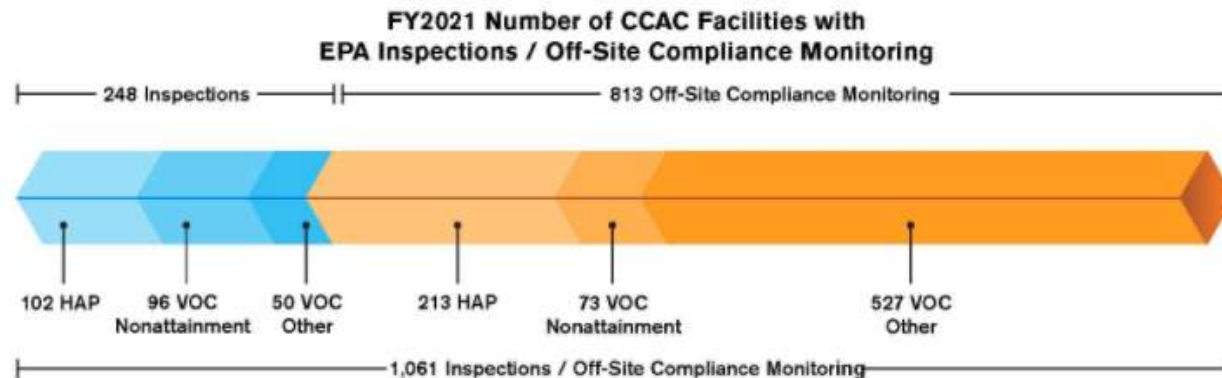
- Reducing Hazardous Air Emissions from Hazardous Waste Facilities
 - OECA’s goal is to “ensure that all RCRA inspections at TSDs and LQGs assess the applicability of the hazardous waste air emission standards for each facility and, where possible, include LDAR monitoring”*
- Reducing Risks of Accidental Releases at Industrial and Chemical Facilities
 - The goal of this initiative is to increase compliance with risk management plan and general duty clause requirements
 - Concluded 117 administrative penalty actions in FY2021

*Source: U.S. EPA Office of Enforcement and Compliance Assurance Draft National Program Guidance, Fiscal Years 2023-2024, June 1, 2022

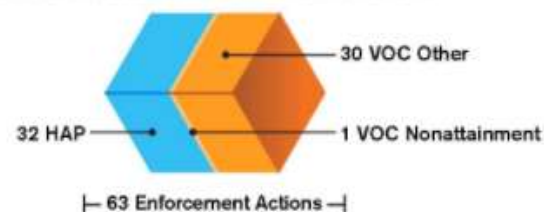


Creating Cleaner Air for Communities (CCAC) Facility Enforcement

- FY 2021 Number of CCAC Facilities with EPA Inspections / Off-site Compliance Monitoring



FY2021 Number of CCAC Facilities with EPA Concluded Enforcement Actions



"HAP": Sources of hazardous air pollutants (HAPs) having significant impact on air quality and health in communities.

"VOC Nonattainment": Significant sources of volatile organic compounds (VOCs) having a substantial impact on air quality and located within an area designated in ozone nonattainment with the National Ambient Air Quality Standards (NAAQS) or in a nonattainment area based upon the Ozone Transport Region.

"VOC Other": Significant sources of VOCs that may affect an area's attainment of the NAAQS and/or may adversely affect vulnerable populations.

<https://www.epa.gov/enforcement/national-compliance-initiative-creating-cleaner-air-communities-reducing-excess>

EPA Enforcement Initiatives

Recent announcements

■ FY 2022-2026 EPA Strategic Plan, March 2022

- Goal 3: Enforce environmental laws and ensure compliance
- Objective 3.1: Hold environmental violators and responsible parties accountable
 - Reduce to not more than 93 the number of open civil judicial cases more than 2.5 years old without a complaint filed.
- Objective 3.2: Detect violations and promote compliance
 - Send 75% of EPA inspection reports to facilities within 70 days of inspection.
 - Conduct 55% of annual EPA inspections at facilities that affect communities with potential environmental justice concerns.

■ EPA EO 13985 Equity Action Plan, April 2022

- Priority Action #5: Integrate community science into EPA's research and program implementation.
 - Expand the availability of data and tools: EPA will continue to expand the availability of data and capacity for community environmental monitoring. This will include free, publicly accessible tools to provide community scientists with environmental and demographic data, mapping tools, tutorials, and information to characterize, map, and develop plans to address environmental conditions in their communities.

Environmental Justice

Strengthening Civil Enforcement



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

April 30, 2021

MEMORANDUM

SUBJECT: Strengthening Enforcement in Communities with Environmental Justice Concerns

FROM: Lawrence E. Starfield
Acting Assistant Administrator

LAWRENCE
STARFIELD

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LAWRENCE STARFIELD
Date: 2021.04.30 08:32:04
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TO: Office of Enforcement and Compliance Assurance Office Directors and Deputies
Enforcement and Compliance Assurance Directors and Deputies
Regional Counsels and Deputies

<https://www.epa.gov/sites/default/files/2021-04/documents/strengtheningenforcementincommunitieswiththejconcerns.pdf>



Environmental Justice

Strengthening Civil Enforcement

■ Increasing facility inspections

- Evaluate the types of programmatic inspections that will address the most serious threats to overburdened communities.
- Inspections will consist of onsite inspections and offsite compliance monitoring tools.

■ Regulated community is seeing an increase in inspections and information requests.

- Under the Clean Air Act, EPA's information gathering authority is established in Section 114.
- Information requests can be used to determine facility's compliance, investigate a potential violation or gather information for enforcement or rulemaking initiatives.
- In addition to air, seeing an increase in information requests related to CERCLA reporting events and TRI reporting.

Environmental Justice

Strengthening Civil Enforcement

■ Increase community engagement

- Provide more information about facilities, pollution and enforcement through press releases and public meetings; and
- Empower communities by increasing awareness of enforcement program resources such as EJSCREEN and EPA's Enforcement and Compliance History Online (ECHO) database.

■ ECHO Database

- Multiple ways in which data can be reviewed and analyzed.
 - By facility
 - By region
 - By media/program
 - By enforcement
- Facilities should review their data and identify any errors.

Environmental Justice

Strengthening Civil Enforcement

■ Partnership with state and local regulators

- EPA will conduct joint planning with regulators but will also step in if EPA believes that co-regulators are not taking timely or appropriate action.

■ EPA brought a separate action against a facility located in an Environmental Justice community in Louisiana.

- Nucor settled air emission violations with the state agency. The civil penalty was roughly \$90,000.
- The community felt that the state agency had not addressed the facility's emissions adequately and petitioned EPA to intervene.
- Days before the state agreement was executed, EPA issued a Notice of Violation to Nucor for violations related to hydrogen sulfide, sulfuric acid mist and sulfur dioxide emissions.

MEC 31st Annual Conference on Environmental Permitting

Major Air Permitting & Compliance Developments

July 20, 2022

Kirk Lowery, Managing Director

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Proposed Ozone Transport “Good Neighbor” Rule

Good Neighbor/Interstate Transport Provisions

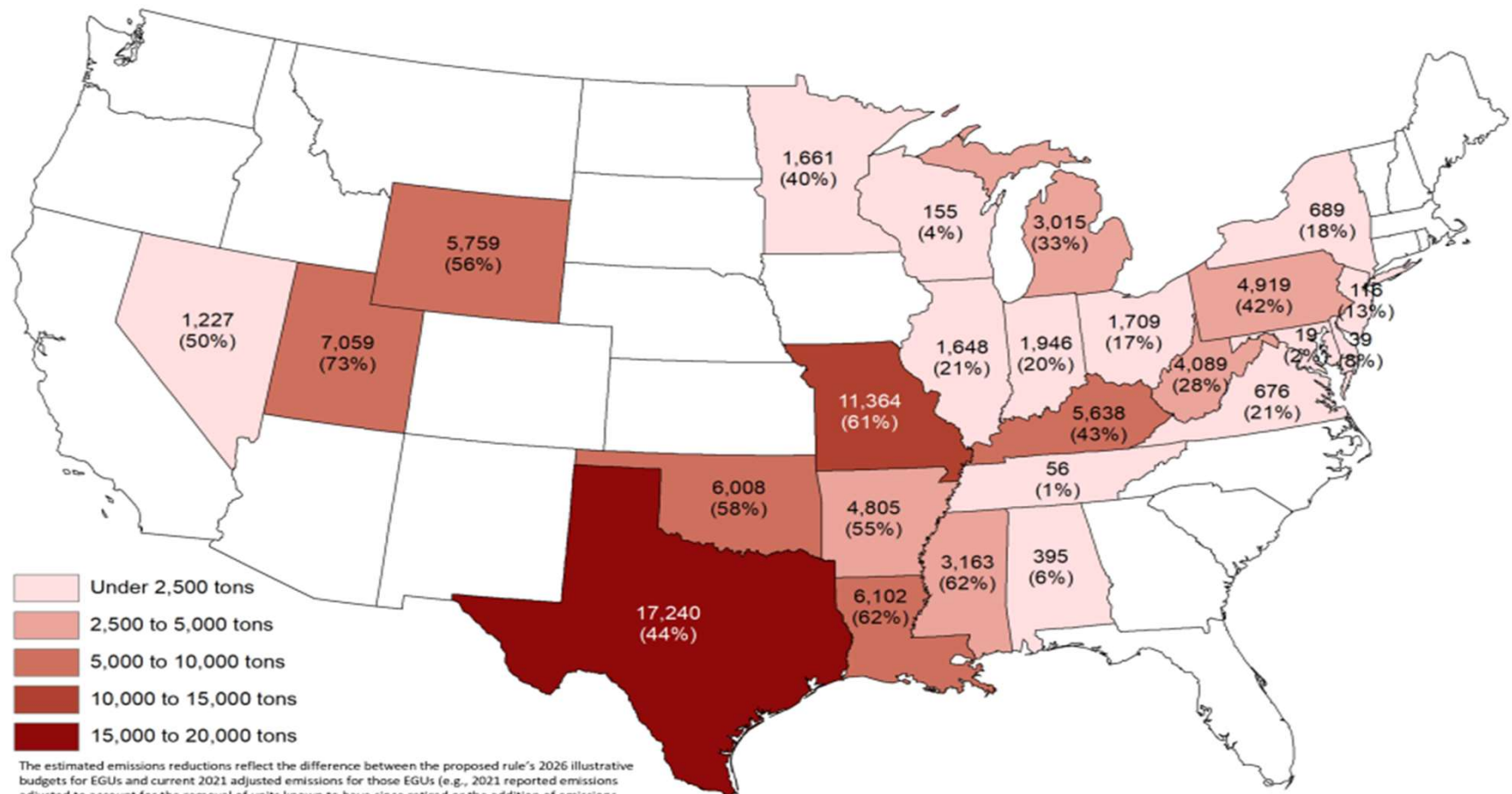
- ▶ Emissions of SO₂, NO_x, & PM_{2.5} can travel long distances thereby affecting air quality in downwind states
- ▶ Clean Air Act (CAA) Section 110(a)(2) “good neighbor” provision requires EPA and states to address interstate transport that affects downwind states’ ability to comply with the NAAQS
 - Federal rules enacted under provision include NO_x Budget Trading Program and Clean Air Interstate Rule (CAIR)/Cross-State Air Pollution Rule (CSAPR)
 - States can file CAA Section 126(b) petition for EPA to enact additional rules to meet good neighbor provision

Good Neighbor Provisions for the 2015 Ozone NAAQS

- ▶ EPA has found that NO_x emissions from 26 upwind states is significantly contributing to downwind nonattainment or interfering with maintenance of 2015 ozone NAAQS (70 ppb, 8-hr avg.)
 - Includes Ohio
- ▶ Proposed rule published on 4/6/2022 (87 FR 20036)
- ▶ Will amend CSAPR rules in 40 CFR 97
- ▶ Federal implementation plan (FIP) includes:
 - Reduced ozone season NO_x budgets for electric generating units (EGUs) beginning in 2023
 - **NO_x emission limits for certain non-EGUs beginning in 2026**
 - States can submit their own SIPs

EGU Reductions in 2026 Relative to 2021

(from <https://www.epa.gov/csapr/good-neighbor-plan-2015-ozone-naaqs#maps>)

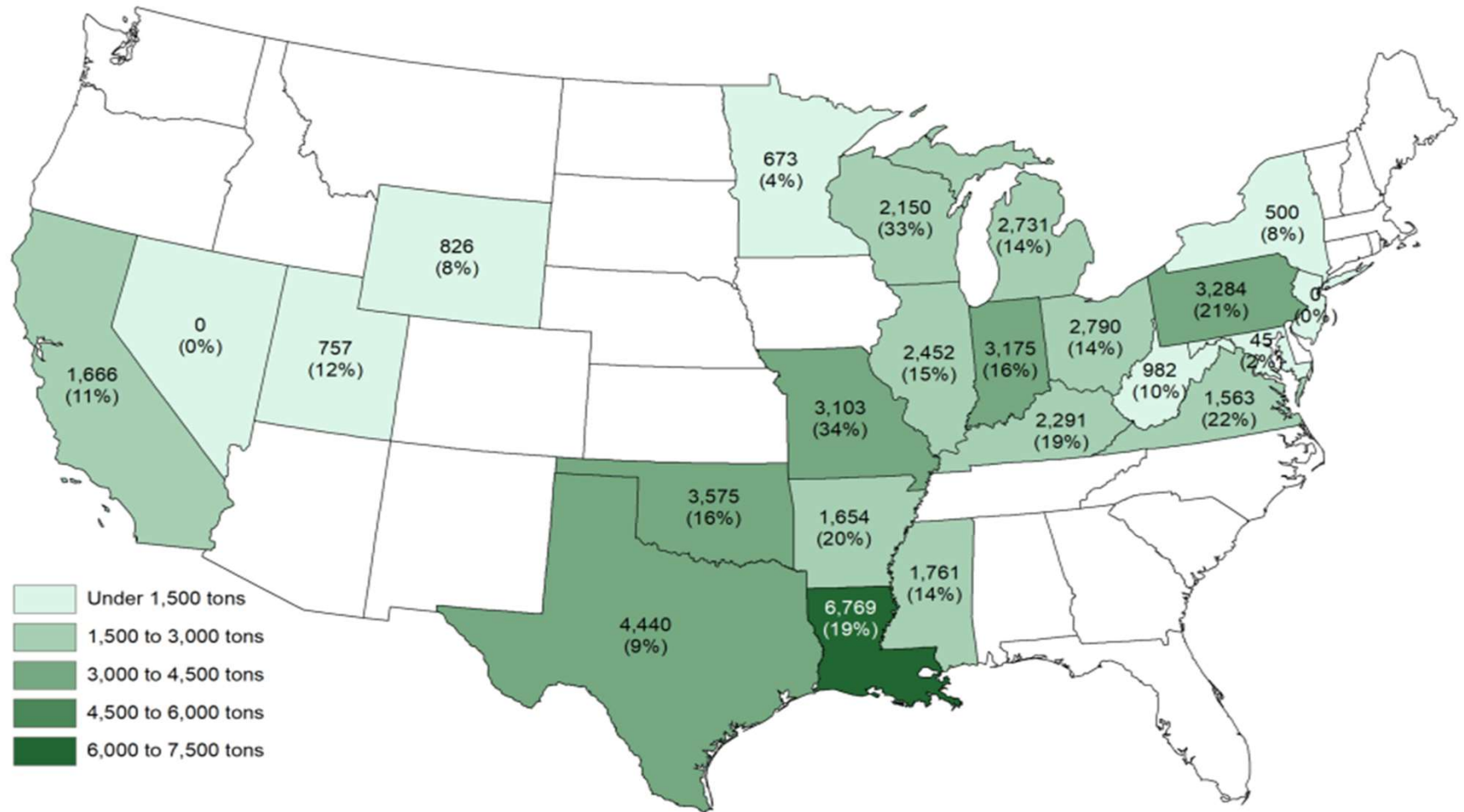


The estimated emissions reductions reflect the difference between the proposed rule's 2026 illustrative budgets for EGUs and current 2021 adjusted emissions for those EGUs (e.g., 2021 reported emissions adjusted to account for the removal of units known to have since retired or the addition of emissions from under-construction new fossil plants). In other words, the estimated reductions reflect changes known to have happened and be happening in the power sector, as well as the impact of the proposed rule. Because these estimated reductions reflect the overall change from current levels of operation, they are higher, on average, than the values reflected in the regulatory impact analysis (emissions reductions relative to projected future levels of operation) and other communications materials for the proposal.

► Ohio – 20% (1,946 tpy) in NO_x reductions from EGUs over 2021 baseline

Non-EGU Reductions in 2026 Relative to Pre-Proposal Levels

(from <https://www.epa.gov/csapr/good-neighbor-plan-2015-ozone-naaqs#maps>)



► Ohio – 14% (2,790 tpy) in NO_x reductions from non-EGUs over 2021 baseline

What Non-EGUs are Covered & What are the Proposed Limits?

Source Type/Applicability	NO _x Limits
Gas-fired IC Engines ≥ 1,000 hp used for pipeline transportation of natural gas	<ul style="list-style-type: none"> • 4-stroke rich burn – 1.0 g/hp-hr • 4-stroke lean burn – 1.5 g/hp-hr • 2-stroke lean burn – 3.0 g/hp-hr
Cement kilns with potential NO _x emissions ≥ 100 tpy	<ul style="list-style-type: none"> • 2.3-4.0 lb/ton clinker depending on kiln type along with equation based daily cap for all kilns at single source/plant
Iron/Steel/Ferroalloy units with potential NO _x emissions ≥ 100 tpy and to facilities containing 2 or more such units that collectively have potential NO _x emissions ≥ 100 tpy – includes furnaces, preheaters, degassers, kilns, coke ovens, and boilers	<p>Varies by unit type; examples include:</p> <ul style="list-style-type: none"> • EAF – 0.15 lb/ton steel • Annealing furnace – 0.06 lb/MMBtu • Coke ovens – 0.15 lb/ton coal charged & 0.015 lb/ton coal pushed • Boilers – 0.08-0.20 lb/MMBtu based on fuel type
Glass furnaces with potential NO _x emissions ≥ 100 tpy	<ul style="list-style-type: none"> • Container/pressed/blown glass & fiberglass furnaces – 4.0 lb/ton glass produced • Flat glass furnace – 9.2 lb/ton glass produced
Industrial boilers ≥ 100 MMBtu/hr at source within NAICS 3251 (chemical), 3241 (petroleum/coal products), & 3221 (pulp & paper)	<ul style="list-style-type: none"> • 0.08-0.20 lb/MMBtu based on fuel type

Proposed Rule Comments

- ▶ Original 60-day comment period extended until 6/21/2022
- ▶ More than 700 comments submitted, with many focused on the non-EGU portion of the rule
 - Regulatory agencies (including Ohio EPA)
 - Non-governmental organizations (e.g., environmental activist groups)
 - Industrial sources/groups
 - Private citizens

Apparent Technical Deficiencies

- ▶ Incomplete non-EGU inventory that will result in significant over-control
- ▶ Unreasonable emission limits/monitoring
 - Theoretical application of additional controls to limits established A) as RACT or B) limits established for new units that would then apply to existing units (i.e., more stringent than RACT)
 - 3-day rolling average limits for iron/steel sources (30-day rolling for all other source types)
 - CEMS required for iron/steel sources

Apparent Technical Deficiencies

- ▶ Application of technically infeasible control technologies; examples include:
 - SCR/SNCR on nearly all iron/steel furnace types, coal charging/pushing
 - SCR/SNCR on multi-fuel boilers
- ▶ Inaccurate cost-effectiveness calculations
 - 2016 \$ (inflation, inflation, inflation)
 - Underestimated retrofit costs for existing units
- ▶ Unrealistic compliance deadline of 2026; ignores
 - Supply chain issues with large scale implementation
 - Permitting timelines

Environmental Justice (EJ) in Ohio

Translation of Federal EJ Definitions

Environmental Justice - assure new rules, policies, public investments, and industrial, commercial, and municipal operations do not cause disparate adverse environmental, health, or safety impact on vulnerable communities

- minority, low-income, indigenous, linguistically isolated, limited education, young, elderly, distressed communities
- climate exposed
- overburdened communities (e.g., >100 in 1 million cancer risk, >8 $\mu\text{g}/\text{m}^3$ $\text{PM}_{2.5}$)
- limited access to open spaces, water resources, playgrounds, outdoor recreational facilities

Ohio EPA & EJ

- ▶ Ohio EPA is/has:
 - Building partnerships with community organizations
 - Ensuring EJ concerns are addressed via permit technical review process and public involvement activities (e.g., public comment periods, public hearings)
 - Considering EJ areas when developing annual ambient monitoring network plan
 - Used EPA's EJSCREEN to distribute funds from VW "defeat device" settlement
 - Continuing to wait for additional, specific guidance from the federal EPA or state-level EJ law granting additional authority
- ▶ What is not occurring (that has occurred in some other states):
 - No EJ specific rules are currently being developed
 - No EJ specific guidance/policy has been developed

Potential Ohio EJ Issues & Complications

- ▶ Potential for EPA, public, and NGO pressure on Ohio EPA to address environmental impacts on EJ communities
- ▶ Increased permitting timelines to allow for EJ meetings, comments, and requests for hearings
- ▶ Potential results in EJ communities:
 - Possibly a special category of permits
 - More refined dispersion modeling analyses (air quality analyses)
 - Increased monitoring (stack monitoring, fence line monitoring)
 - Increased emission control stringency
 - Increased reporting
 - Increased inspections and information collection data requests

Questions?





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Biographical Information

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Bob Hodanbosi became chief of the Division of Air Pollution Control (DAPC), Ohio Environmental Protection Agency (Ohio EPA) 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 Amendments. In 2004, Bob was selected to represent state permitting authorities on the Title V Permit Performance Task Force that was formed by the U.S. EPA's Clean Air Act Advisory Committee (CAAAC). Bob has also had the opportunity to testify at U.S. House and Senate committees on Clean Air Act impacts on facilities in Ohio. From May 1987 to September 1992, his position was assistant chief of DAPC and manager of the Air Quality Modeling and Planning Section, DAPC, Ohio EPA. From April 1978 to May 1987, as manager of the Air Quality Modeling and Planning Section, his main duties included: development of the technical support for air pollution control regulations for criteria air pollutants; atmospheric dispersion modeling; air quality designations under Section 107 of the Clean Air Act; development of new source review procedures; Since the 1980's, Bob has represented Ohio EPA on the Ohio Coal Development Office, Technical Advisory Committee. From January 1977 to April 1978, his position was supervisor of the Environmental Assessment Unit, DAPC, Ohio EPA. The main responsibilities of this position involved the supervising of all air quality evaluation and atmospheric dispersion modeling activities for DAPC. From June 1973 to December 1976, he held a position in the Northeast District Office/Engineering Services Section, DAPC, Ohio EPA. The main function of this position involved the engineering review of air pollution permit applications. Bob has lectured extensively on topics relating to the requirements under the Clean Air Act and the controls needed to meet air quality standards. Finally, Bob is a current member of CAAAC through August of 2021.

PROFESSIONAL ASSOCIATIONS

Mr. Hodanbosi is a member of the American Institute of Chemical Engineers and Air & Waste Management Association, and is registered as a Professional Engineer in the states of Ohio and West Virginia. Bob is current President of the Association of Air Pollution Control Agencies.

EDUCATIONAL BACKGROUND

Mr. Hodanbosi received his Master's of Science degree in Chemical Engineering at the Cleveland State University in 1977, and a Bachelor in Chemical Engineering at the Cleveland State University in 1973. In addition, he completed post-graduate courses in fluid mechanics and turbulence at the Ohio State University, 1978 to 1982.

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Sherry Hesselbein is Deputy General Counsel, overseeing the Health, Environmental, Safety, Security and Product Quality group in Marathon Petroleum's Legal Department. She joined Marathon in 2010 as the remediation attorney, with an emphasis on RCRA and CERCLA compliance. She then counseled the refining operations organization on environmental compliance and served as the Legal Department's subject matter expert on the Clean Air Act. Sherry has also advised the company on fuels compliance and product quality matters before assuming her role as supervisor of the group. Sherry has held multiple temporary assignments within Marathon including Environmental Supervisor at the Catlettsburg, Kentucky Refinery. Prior to joining Marathon, Sherry was an associate in the Columbus office of Ulmer & Berne LLP practicing in the areas of environmental and construction law and an assistant attorney general with the Ohio Attorney General's Office Environmental Enforcement Section.

Sherry holds a J.D. from The Ohio State University Moritz College of Law and a B.S. in earth, atmospheric and planetary science from the Massachusetts Institute of Technology. She is a member of the Women for Economic and Leadership Development (WELD).

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Kirk Lowery is the Managing Director of Trinity Consultants' East Region, which includes consulting offices in Ohio, Kentucky, Pennsylvania, Virginia, Maryland, New Jersey, New York, and Massachusetts. He has over 27 years of environmental experience with a focus in the air quality regulatory arena, including air permitting (NSR/PSD/Title V), NSPS/NESHAP/MACT compliance, emission inventories, enforcement/litigation support, compliance/due diligence auditing, refrigerant management, and state/local air quality regulations. Kirk also managed the air quality compliance program for The Boeing Company's Wichita, Kansas facility for five plus years.

Kirk is a certified Professional Engineer in the states of Ohio, Kentucky, and New Jersey. He received a B.S. degree in aeronautical & aerospace engineering and an M.S. degree in environmental engineering, both from Purdue University.