Sustainability & Environmental Health and Safety Symposium March 30, 2022

Bob Hodanbosi, Chief

Division of Air Pollution Control



Contents

- A. Program Issues
 - a. Cincinnati Redesignation
 - b.Cleveland/Cincinnati Bump-up
 - i. Additional rules being promulgated
 - c. S,S, & M SIP call
 - d.CSAPR Update
- B. Future issues New particulate or ozone standard?
- C. New development projects



Ozone Background/Refresher

- Ozone is formed from precursor emissions of nitrogen oxides (NOx) 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

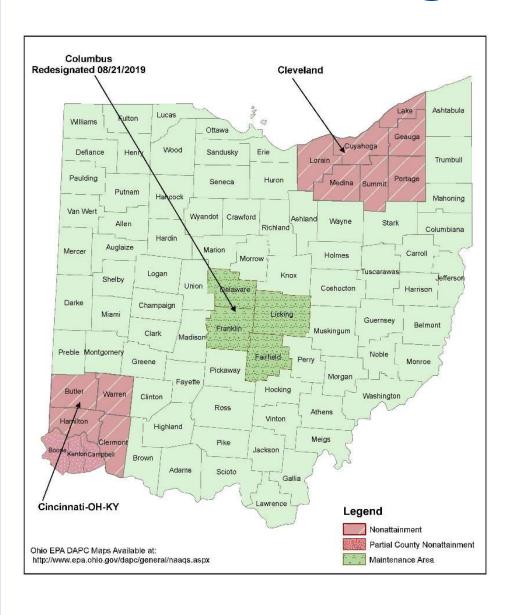
- Cincinnati and Cleveland are currently designated marginal nonattainment
- Required to meet standard by August 3, 2021 (called "attainment date")
 - 2020 was last full ozone season (March 1 to October 31)
 before attainment date
- Cincinnati and Cleveland did not meet standard and are not eligible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

Protection Agency

Overview of CAA Ozone Nonattainment Area Planning &

Control Requirements by Classification Major **NSR Offset** Source Ratio Threshold EXTREME TRAFFIC CONGESTION CONTROLS (if appropriate) 1.5:1 10 tpy (20 years to attain) Extreme CLEAN FUELS REQUIREMENT FOR BOILERS **PENALTY FEE PROGRAM FOR MAJOR SOURCES** 1.3:1 SEVERE 25 tpv Severe (15/17 years to attain) VMT GROWTH DEMONSTRATION (& TCMs if needed) VMT REPORTING NSR REQUIREMENTS FOR EXISTING SOURCE MODS 1.2:1 CLEAN FUELS PROGRAM OR SUBSTITUTE MEASURE FOR LARGER POP. AREAS 50 tpy Serious MILESTONE DEMONSTRATIONS and SERIOUS MODELED DEMO OF ATTAINMENT CONTINGENCY MEASURES FOR RFP (9 years to attain) 3% ANNUAL REP UNTIL ATTAINMENT ENHANCED I/M for larger population areas **ENHANCED MONITORING PLAN** CONTINGENCY MEASURES FOR FAILURE TO ATTAIN BASIC VEHICLE I/M for larger population areas Stage II Gasoline Vapor Recovery 1.15:1 100 tpy Moderate 15% VOC ROP or 15% VOC/NOX RFP (OVER 6 YEARS) MODERATE (6 years to attain) VOC/NOX RACT for MAJOR/CTG SOURCES ATTAINMENT DEMONSTRATION NONATTAINMENT NEW SOURCE REVIEW PROGRAM **EMISSIONS STATEMENTS** 1.1:1 MARGINAL 100 tpy Marginal (3 years to attain) BASELINE EMISSIONS INVENTORY (EI) PERIODIC EMISSIONS INVENTORY UPDATES

Ozone Background/Refresher



On 8/3/18, U.S. EPA designated 3 areas as "marginal nonattainment": Cincinnati, Cleveland and Columbus

- Columbus was redesignated to attainment on 8/21/19
- Cincinnati and Cleveland continue to exceed the standard
- Cincinnati achieved standard
 at the end of 2021

Ohio Environmental Protection Agency

Cleveland Ozone Outlook

Site Name	Site Id	County	2018 4th High	2019 4th high	2020 4 th high	2021 4th high needed to violate 2015 standard	2021 4 th high (through 7/27/21)	2019-2021 DV (through 7/27/21)
District 6	39-035-0034	Cuyahoga	72	68	74	71	69	70
GT Craig NCore	39-035-0060	Cuyahoga	63	66	66	81	59	63
Berea BOE	39-035-0064	Cuyahoga	66	63	66	84	67	65
Mayfield	39-035-5002	Cuyahoga	75	70	68	75	67	68
Notre Dame	39-055-0004	Geauga	73	68	65	80	67	66
Eastlake	39-085-0003	Lake	76	71	75	67	71	<mark>72</mark>
Painesville	39-085-0007	Lake	69	69	68	76	63	66
Sheffield	39-093-0018	Lorain	69	58	59	96	59	58
Chippewa	39-103-0004	Medina	66	54	64	95	65	61
Lake Rockwell	39-133-1001	Portage	66	58	63	92	63	61
Patterson Park	39-153-0020	Summit	69	66	62	85	62	63



"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 confirms bump-up expected to be finalized early 2022
- ~2/3/23: Attainment demonstration due
 - Already past due at time of bump-up (original deadline 8/3/21)
 - U.S. EPA can adjust some deadlines as part of bump-up
 - In recent action extended some SIP deadlines to $^{\sim}$ 1 year after bumpup
- 8/3/24: New (moderate) attainment date (cannot be extended)
 - 2023 is last ozone season before new attainment date
- U.S. EPA behind schedule on "bump-ups"



"Mandatory" Moderate Bump-up Requirements

- Triggers additional mandatory requirements under Clean Air Act (CAA):
 - NOx 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 NOx RACT, 3745-21 VOC RACT)
 - Enhanced monitoring plan (EMP)
 - Submit 2 years after bump-up (2023)
 - 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



Cincinnati Ozone Outlook

Site Name	Site Id	County	2018 4th High	2019 4th high	2020 4th high	2021 4th high needed to violate 2015 standard	2021 4 th high (through 7/27/21)	2019-2021 DV (through 7/27/21)
Middletown Airport	39-017-0018	Butler	76	67	70	76	62	66
Crawford Woods	39-017-0023	Butler	73	67	67	79	66	66
Miami University, Oxford	39-017-9991	Butler	70	65	64	84	64	64
Batavia	39-025-0022	Clermont	69	71	64	78	65	66
Sycamore	39-061-0006	Hamilton	80	72	70	71	69	70
Colerain	39-061-0010	Hamilton	75	67	70	76	63	66
Taft NCore	39-061-0040	Hamilton	72	71	68	74	68	69
Lebanon	39-165-0007	Warren	75	70	71	72	69	70



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
- We are requesting that Region V moves quickly to finalize the redesignation note they prioritized the proposal.

Protection Agency

Voluntary Ozone Reduction Initiatives With LAA/MPOs

- Locomotives
 - Idle-limiting or shut-off devices (develop MOUs with railroads, encourage sources to apply for funding assistance)
- Harbor Craft
 - Rebuild/replace engines (encourage sources to apply for funding assistance)
- Lawn/garden, Light Commercial Equipment
 - Rebates/discounts on electric equipment
- Heavy Duty Diesel Trucks
 - Idle reduction (encourage municipalities to adopt ordinances, work with fleet operators to develop MOUs)
- Non-road Diesel Construction Equipment
 - Idle reduction (encourage municipalities to adopt ordinances, work with major companies to develop MOUs)

Protection Agency

Ozone Summary

- Cleveland will be "bumped up" to moderate nonattainment
- Cincinnati should be redesignated
- RACT rulemaking is underway
- Possible update of Consumer Products and AIM rules
- Voluntary ozone reduction initiatives
- Primary goal is attainment and avoiding another bump
- Stay informed www.epa.ohio.gov/dapc/sip/2015/ModO3Plan



Cross State Air Pollution Rule

- On March 11, 2022, U.S. EPA proposed the latest Cross State Air Pollution Rule (CSAPR)
- Affects many states including Ohio
- In previous rules, U.S. EPA required reductions from utility boilers
- Now, U.S. EPA is looking at large industrial sources of NOx also.



Cross State Air Pollution Rule

- These would include the following source categories:
- Glass plants
- Cement plants
- Large engines
- Steel making operations (many operations identified)
- Comment period is for 60 days after publication in Federal Register

Protection Agency

- 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 whether a violation occurred or not



- 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



- The Biden administration reinstitutes 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 approveable plan is not submitted in another six months, then highway fund sanctions would kick-in.



- Industry has concerns over the threat of violations 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.
- In discussions with U.S. EPA to explore maximum flexibility
- Working on package to put out for public comment target is in April (late)



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
- Where will new standard be?



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

PM25-Annual Yearly and Design Value (ug/m3)							
						2018-2020	2019-2021
SITEID	County	2018	2019	2020	2021	DV	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	<mark>10.2</mark>	<mark>10.5</mark>
39-023-0005	Clark	9.61	9.78	7.43	9.6	<mark>8.9</mark>	9.0
39-035-0065	Cuyahoga	11.08	10.81	10.45	12.6	<mark>10.8</mark>	<u>11.3</u>
39-049-0038	Franklin	9.06	9.69	7.75	9.9	<mark>8.8</mark>	9.1
39-057-0005	Greene	8.14	NA	NA	NA	<mark>8.1</mark>	NA
39-061-0048	Hamilton	12.41	11.93	10.35	10.8	<mark>11.6</mark>	<mark>11.0</mark>
39-067-0004	Harrison	7.28	NA	NA	NA	7.3	NA
39-081-0017	Jefferson	8.65	8.99	8.87	11.7	<mark>8.8</mark>	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	<mark>9.1</mark>	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
	Montgomer						
39-113-0038	У	8.28	9.39	9.64	9.9	<mark>9.1</mark>	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	<mark>8.1</mark>	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	<mark>8.7</mark>
39-155-0014	Trumbull	7.73	7.25	6.22	8.7	7.1	7.4

IF standard lower to:

11.0 10.0 9.0 8.0



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
- Will there be a revised NAAQS also? Not clear at this time.

Protection Agency

New Development Projects

- There are several (many) development projects occurring throughout the state
- New Albany semiconductor plant is only one......
- Several other large projects also in permitting stage
- New source permits remain the top priority



Questions?





Ohio: Major Air Permitting, Regulatory & Compliance Developments

Sherry L. Hesselbein, Deputy General Counsel March 30, 2022



Topics

Biden Administration Regulatory Review

Significant air regulations under review

Environmental Enforcement

- National Compliance (Enforcement) Initiatives
- Environmental Justice
- Examples of EPA implementing these initiatives



Air Regulations Under Review

On January 21, 2021, the White House issued a non-exclusive list of agency actions that federal agencies were directed to review.

RULE	STATUS
Ozone NAAQS (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 (12 μg/m³)	EPA is reconsidering the standard. Proposal in Summer 2022, and final rule in Spring 2023
MACT Reclassification of Major Sources to Area Sources	On the Unified Agenda with an estimated proposal date of June 2022
Cost Benefit Analysis in CAA Rulemaking	EPA rescinded the rule
NSPS OOOOa Policy and Technical Rule	Policy rule was voided under Congressional Rule Act; EPA revising OOOOa
Repeal of the Clean Power Plan: Emission Guidelines for GHG Emissions from Existing EGUs	U.S. Supreme Court recently heard oral arguments on EPA authority to regulate GHG emissions from power plants
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



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)
- Stopping Aftermarket Defeat Devices for Vehicles and Engines
 - Prevent impermissible NOx and PM emissions from vehicles; resolved 31 cases in 2020

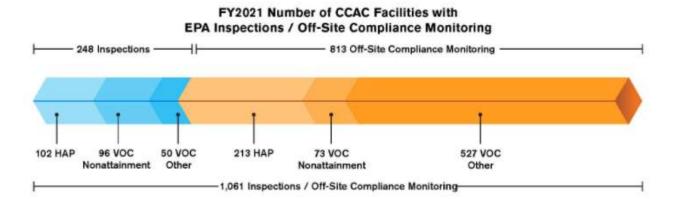
Hazardous Chemicals

- Reducing Hazardous Air Emissions from Hazardous Waste Facilities
 - Enforcement of RCRA requirement to control and monitor organic air emissions from TSD facilities
- 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

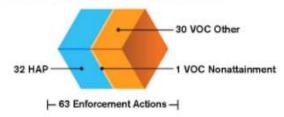


Creating Cleaner Air for Communities (CCAC) Facility Enforcement

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



FY2021 Number of CCAC Facilities with EPA Concluded Enforcement Actions



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



[&]quot;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.

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

Environmental JusticeStrengthening 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

wrence E. Starffeld LAVINLY

Acting Assistant Administrator

LAWRENCE

STARFIELD

Digitally signed by LAWRENCE STARFIELD Date: 2021.04.30 08:32:04

-04'00'

TO: Office of Enforcement and Compliance Assurance Office Directors and Deputies

Enforcement and Compliance Assurance Directors and Deputies

Regional Counsels and Deputies



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.





The Shape of Things to Come

"It is, therefore, the policy of my Administration...to reduce greenhouse gas emissions..."

"With respect to the Administrator of the Environmental Protection Agency, the following specific actions should be considered: (i) proposing new regulations to establish comprehensive standards for methane and volatile organic compound emissions from existing operations in the oil and gas sector..."

[Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, January 20, 2021]



The Shape of Things to Come

"As global leaders convene at this pivotal moment in Glasgow for COP26, it is now abundantly clear that America is back and leading by example in confronting the climate crisis with bold ambition...With this historic action, EPA is addressing existing sources from the oil and gas industry nationwide, in addition to updating rules for new sources, to ensure robust and lasting cuts in pollution across the country."

[U.S. EPA Administrator Michael S. Regan]



Regulating GHGs through NSPS

"The EPA interprets CAA section 111(b)(1)(B) to provide authority to establish a standard for performance for any pollutant emitted by that source category as long as the EPA has a rational basis for setting a standard for the pollutant."

[81 FR 35842]

"...because the EPA is not listing a new source category in this rule, the EPA is not required to make a new endangerment finding..."

[81 FR 35841]



Regulating GHGs through NSPS

Industry	GHG Reporting Rule	NSPS Subparts	GHGs Regulated in NSPS?
Electric Generating Units	Subpart D	TTTT	Yes
Petroleum & Natural Gas Systems	Subpart W	0000a	Yes
Primary Aluminum	Subpart F	S	Not Currently
Cement Production	Subpart H	F	Not Currently
Ferroalloy Production	Subpart K	Z	Not Currently
Glass Production	Subpart N	CC, PPP	Not Currently
Iron and Steel Production	Subpart Q	N, Na, AA, AAa	Not Currently
Lead Production	Subpart R	L, R	Not Currently
Lime Production	Subpart S	НН	Not Currently



Regulating GHGs through NSPS

Industry	GHG Reporting Rule	NSPS Subparts	GHGs Regulated in NSPS?
Nitric Acid Production	Subpart V	G, Ga	Not Currently
Petrochemical Production	Subpart X	NNN, RRR	Not Directly
Petroleum Refineries	Subpart Y	J, Ja	Not Currently
Phosphoric Acid Production	Subpart Z	Т	Not Currently
Pulp and Paper Manufacturing	Subpart AA	BB, BBa	Not Currently
Coal Mines	Subpart FF	Possibly Y?	Not Currently
Zinc Production	Subpart GG	Q	Not Currently
Municipal Solid Waste Landfills	Subpart HH	WWW, XXX	Not Directly



Multipollutant Control

"...we evaluated a number of approaches for considering the costeffectiveness of the available multipollutant controls for reducing both methane and VOC emissions...

One approach...assigns all costs to the emission reduction of one pollutant...

A second approach...apportions the annualized cost across the pollutant reductions addressed by the control option in proportion to the relative percentage reduction of each pollutant controlled...half of the control costs are allocated to methane, and the other half to VOC...

If a device is cost-effective under either of these two approaches, we find it to be cost effective."

[86 FR 63154-63155]



Regulating Existing Sources

"When the EPA establishes NSPS for a source category, the EPA is required to issue [emission guidelines] EG to reduce emissions of certain pollutants from existing sources in that same category...

The EPA must issue regulations to establish procedures under which States submit plans to establish, implement, and enforce standards of performance for existing sources...

For the EG, the EPA is proposing...presumptive standards that the States may use in the development of State plans...

In this way, the presumptive standards included in the EG serves a function similar to that of a model rule..."

[86 FR 63117-63118]



NSPS OOOOb Affected Facility	Well Sites	Gathering & Boosting	Gas Processing	Transmission & Storage
Hydraulically Fractured Wells	X			
Centrifugal Compressors	CPFs	X	X	X
Reciprocating Compressors	CPFs	X	X	X
Pneumatic Controller	X	X	X	Χ
Pneumatic Pumps	X	X	X	X
Storage Vessels	X	X	X	Χ
Equipment Leaks	X	X	X	X
Sweetening Units	X	X	X	
Liquids Unloading	X			
Associated Gas from Oil Wells	Χ			

NSPS OOOOb Affected Facility	Standard
Hydraulically fractured wildcat wells, delineation wells, or low pressure wells	Completion combustion
Other hydraulically fractured wells	REC, completion combustion unless GOR < 300 scf/bbl
Centrifugal compressors with wet seals (not on single well sites)	95% reduction (Certification if equipped with CVS)
Reciprocating compressors (not on single well sites)	Change rod packing when leak rate exceeds 2 scfm or route emissions to process (Certification if equipped with CVS)
Pneumatic controllers at gas processing plants	Zero bleed rate
Pneumatic controllers not at gas processing plants	Zero bleed rate
Pneumatic pumps at gas processing plants	Zero bleed rate

NSPS OOOOb Affected Facility	Standard
Pneumatic pumps not at gas processing plants	95% reduction if control or process available onsite (Certification if equipped with CVS)
Storage vessels or batteries > 6 tpy VOC	95% reduction (Certification if equipped with CVS)
Equipment leaks at gas processing plants	Leak Detection and Repair (LDAR) program (Bimonthly OGI monitoring)
Fugitive emissions at well sites	Sites < 3 tpy: Initial survey Option 1: Sites ≥ 3 tpy: Quarterly LDAR Option 2: Sites ≥ 3 tpy and < 8 tpy: Semiannual LDAR; Sites ≥ 8 tpy: Quarterly LDAR
Fugitive emissions at compressor stations	Quarterly LDAR
Sweetening units	Reduce SO ₂ as calculated
Liquids Unloading	Zero emissions or minimize venting with best practices
Associated Gas at Oil Wells	Route gas to sales line, use as onsite fuel source, use for other useful purpose, or route to flare with 95% reduction

Proposed EG 0000c

- ▶All standards are identical to OOOOb except for:
 - Storage vessel applicability based on 20 tpy methane (including W/B)
 - No standards for well completions or liquids unloading
 - Piston pumps excluded from pneumatic pump requirements
- ►EPA is soliciting on how compliance demonstrations might differ for older facilities, for example:
 - Replacement parts for leak repairs may take longer to obtain
 - Certifying existing closed vent system
 - Additional time needed for retrofitting certain equipment



Proposed EG 0000c Implementation

- ► EPA will provide additional direction to agencies regarding the timeframe for submitting state plans
- ▶Eligible tribes can submit plans as well
- ►EPA will establish Federal plan if not state or tribal plan is submitted/approved
- ►EPA is requiring states to engage with the public in a meaningful way (beyond just a public hearing), including overburdened and underserved communities



NSPS OOOOc Affected Facility	Well Sites	Gathering & Boosting	Gas Processing	Transmission & Storage
Centrifugal Compressors	CPFs	X	X	X
Reciprocating Compressors	CPFs	X	X	X
Pneumatic Controller	X	X	X	X
Pneumatic Pumps	X	X	X	X
Storage Vessels	X	X	X	Χ
Equipment Leaks	X	X	X	X
Sweetening Units	X	X	X	

Χ

Associated Gas from Oil Wells

Proposed Rule Timeline

- ▶ NSPS 0000a
 - Already in effect comply with more stringent of 2016 methane rules and 2020 VOC rules
- ▶ NSPS 0000b
 - Published November 15, 2021
 - Comments due January 31, 2021
 - Supplemental Proposal in 2022
 - Final Rule expect by end of 2022
 - Demonstrate compliance with rule (???)



Proposed Rule Timeline

- ► NSPS 0000c
 - Published November 15, 2021
 - Comments due January 31, 2021
 - Supplemental Proposal in 2022
 - Final Rule expect by end of 2022
 - Agencies submit proposed plans (???)
 - EPA approves or denies plans (???)
 - Demonstrate compliance with agency's rules (no more than two years after submittal deadline)



How to Stay Updated

- ► EPA Oil & Gas Website
 - Fact sheets, rule summaries, presentation slides, and other technical materials
 - https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry
- ▶ Federal Register
 - Includes published rules, submitted comments, and all supporting documentation for rule development
 - https://www.regulations.gov/docket/EPA-HQ-OAR-2021-0317





Biographical Information

Robert F. Hodanbosi, Chief, Division of Air Pollution Control, Ohio EPA Lazarus Government Center, 50 West Town Street, Suite 700, Columbus, Ohio 43215 (614) 644-3585 Fax: (614) 644-3681 bob.hodanbosi@epa.ohio.gov

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. 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.

PUBLICATIONS

- Hodanbosi, R.F. and Peters, L.K., "Evaluation of RAM Model for Cleveland, Ohio," Journal of Air Pollution Control, March 1981
- Hodanbosi, R.F. and Bradley, R.L., "Evaluation of RAM Model for Cleveland, Ohio, Part II," Journal of Air Pollution Control, April 1984
- "Research Guidelines for Regional Modeling of Fine Particulates, Acid Deposition and Visibility", U.S. EPA, Office of Research and Development, June 1980, pp. 47-52
- Edgerton, S.A. Czvczwa J.M., Rewch, J.D., Egan, D.A. Koval, P.J., and Hodanbosi, R.F., "Determination of Polychlorination of Dibenzo-p-dioxins and dibenzofurans
- and Associated Health Risks in Ambient Air in Ohio," Presentation at 81st
- General Meeting of Air Pollution Control Association, June 1988
- Kelly, T.J., Czvczwa, J.M., Sticksel P.R., Sverdrup, G.M., Koval, P.J., and Hodanbosi, R.F., "Atmospheric and Tributary Inputs of Toxic Substance to Lake Erie," J. Great Lakes Res.17(4):504-516, International Association Great Lakes Research, 1991.
- Hays, K., Hodanbosi R., Sloan J., "The National Ambient Air Quality Standards at 50", em, The Magazine for Environmental Managers, A&WMA, December 2020.

Biographical Information

Sherry L. Hesselbein, Assistant General Counsel, HESS&PQ Law Marathon Petroleum Corporation 539 S. Main St., Findlay, OH 45840 shesselbein@marathonpetroleum.com 419-421-4616

Sherry Hesselbein is Assistant 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).

DJ Wheeler, Managing Consultant Trinity Consultants 110 Polaris Parkway, Suite 200 Westerville, Ohio 43082 Phone: 614.568.8851

Fax: 614.433.0734 dwheeler@trinityconsultants.com

Mr. Wheeler provides air quality permitting and compliance services for industries such as oil and gas, metallurgical coke production, secondary aluminum recycling, petroleum refineries, steel mini-mills, and gas-fired electricity generating units. He has developed air dispersion modeling assessments for PSD demonstrations as well as state-level impact analyses. Mr. Wheeler currently operates as a Managing Consultant in Trinity's Columbus, Ohio office. He received a Bachelor's degree in chemical engineering from the University of Michigan.