

Ever Changing World of Air Permit

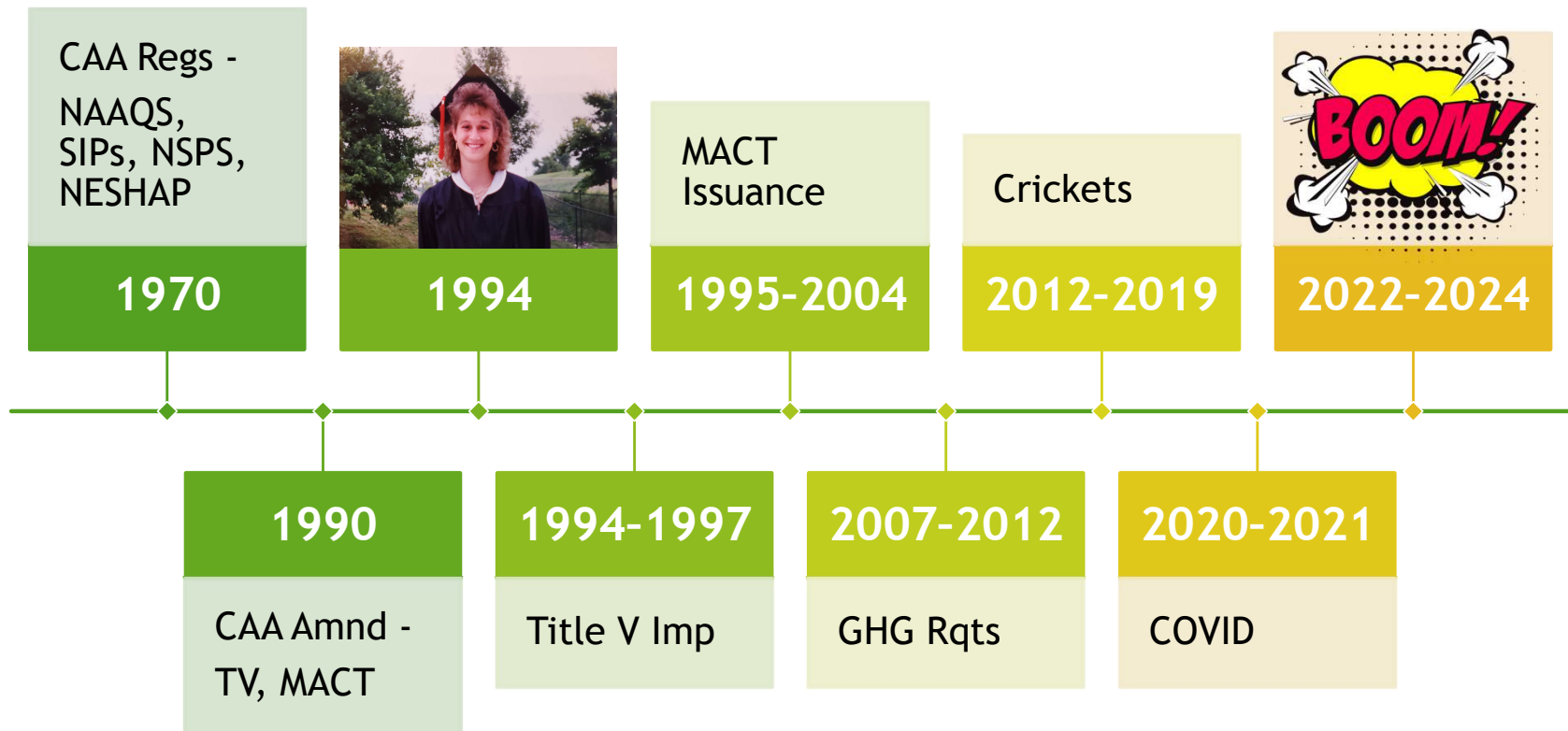


- Hope Manning, VP, Engineering & Consulting, EQM
- Sheri Bussard, Environmental Engineer, University of Cincinnati
- Amy Kesterman, Permit Area Supervisor, Southwest Ohio Air Quality Agency

Intro/Agenda

- ▶ Sheri Bussard
 - ▶ History of rules
 - ▶ Federal Rule Changes
- ▶ Amy Kesterman
 - ▶ State Impact of Changes at the Federal Level
 - ▶ States Rule Changes
- ▶ Hope Manning
 - ▶ New Guidance causing changes
 - ▶ How this impacts permitting
- ▶ How to stay up to date

History - Air Quality Regulations



Current Trends

Air Quality Regulations

- NESHAP/NSPS Revisions
- HAP Program Changes
- GHG Reporting Updates
- NAAQS Lowering
 - Ozone
 - PM 2.5

NESHAP/NSPS Revisions

- U.S. EPA must review these standards once every 8 years.

- Revise if necessary, taking into account developments in practices, processes, and control technologies.

- 2019-2022 - Chemical Manufacturing NESHAPS

- 2020-2022 - Coating NESHAPS

- October 2022 - Boiler NESHAP

2023 NESHAP/NSPS Proposed Revisions

Date	NESHAP 40 CFR 63	NSPS 40 CFR 60	Category
1/5/23	AAAAA		Lime Manufacturing
4/3/23	UUUUU		Coal- and Oil-Fired Electric Utility Steam Generating Units (aka MATS)
4/25/23	F, G, H, I U & W	VV III, NNN, RRR	Hazardous Organics (HON)/ Synthetic Organic Chemical Manufacturing (SOCMI)/ Group I and II Polymers and Resins (P&R) Industries
4/27/23+	FFFF		Miscellaneous Organic Chemical Manufacturing
4/27/23+	EEEE		Organic Liquids Distribution (Non-Gasoline)
5/15/23	RRRRR		Taconite Iron Ore Processing
5/18/23	DDDD		Plywood and Composite Wood Products
6/26/23	ZZZZ	IIII, JJJJ	Stationary Reciprocating Internal Combustion Engines
7/31/23	FFFFFF		Integrated Iron and Steel Manufacturing Facilities
8/16/23	CCCCC		Coke Ovens: Pushing, Quenching, and Battery Stacks
10/4/23		Kc	Volatile organic liquid (VOL) storage tanks (constructed/modified/reconstructed >10/4/23)
11/10/23	XXXX		Rubber Tire Manufacturing



NESHAP/NSPS Revisions

New standards
(rubber and
plywood/wood
products)

New categories
(SOCMI, tanks)

New requirements
for ethylene oxide
(SOCMI)

Removal of SSM
exemptions and
replacing with work
practice standards
(Sierra Club lawsuit)

New requirements
to measure fugitive
HAP emissions at
the facility fence
line (EJ)

New reporting
templates in CEDRI
(RICE MACT stack
test data
requirements - ERT)

HAP Program Changes - OIAI/MM2A

- Major Source = HAP PTE \geq 10 tpy one HAP OR \geq 25 PTE all HAPs combined
- Area Source = smaller emitters
- MACT standards apply to major sources, few for area sources
- What happens if emissions decrease (controls/process changes)?
- 1995 - Once In Always In (OIAI)
- 2018 - reversed OIAI and allowed reclassification
- 9/21/23 - proposed revisions, Major MACT to Area Source (MM2A) framework
- MM2A would require sites to establish federally enforceable permit conditions that contain safeguards to prevent emission increases above the levels allowed by the major source NESHAP a source was subject to prior to reclassification.

GHG Reporting 40 CFR Part 98

- 2009 U.S. EPA implemented the GHG Reporting Program
- Large emitters in 41 industrial categories required to report emissions annually
- 2010-2016 - Rounds of technical corrections, data accuracy corrections, updates to specific subparts
- Proposed revisions 6/21/22, 5/22/23, 8/1/23
 - improve the quality of the data collected
 - establish or amend confidentiality determinations
 - update global warming potentials (GWPs)
 - expand the GHGRP to new source categories
 - revise subpart W (Petroleum and Natural Gas Systems), Subpart C (General Stationary Fuel Combustion Sources) and subpart A (General Provisions)

GHG Reporting 40 CFR Part 98

- ▶ New Subpart B - Energy Consumption
 - ▶ Facilities that meet the applicability requirements for reporting direct emissions under another source category of the GHGRP and that purchase metered electricity or metered thermal energy products would be required to report under this proposed subpart.
 - ▶ At this time, the EPA is proposing to allow reporters to rely on existing purchase contracts for which metering and billing requirements are already in place.
 - ▶ Includes development of a metered energy monitoring plan (MEMP), part of which is making sure meters meet certain ANSI standards.

Revisions to NAAQS

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- NAAQS is the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harming public health.
-
- CAA 1970 established NAAQS for particulate matter, ozone, nitrogen oxides, sulfur dioxide, carbon monoxide, and lead, and required states to develop regulations (SIPs) to attain/maintain the NAAQS.
-
- Reviewed every 5 years; if lowered, states have 2 years to demonstrate compliance using ambient air quality monitoring.
-
- Then areas are designated attainment, marginal moderate, serious, or severe non-attainment based on ambient air quality monitoring results.
-
- Important because the designation affects Title V thresholds and NNSR triggers for facilities located in the area.

Ozone NAAQS (2015) - State

- 8-hour ozone standard was lowered in 2015 to 70 ppb
- August 2018 - Cincinnati/Columbus/Cleveland areas were designated non-attainment
- August 2021 - deadline for meeting the standard
- Columbus area met standard in April 2019; Cincinnati and Cleveland did not meet the standard, meaning they would be downgraded to moderate non-attainment
- This triggered more stringent VOC and NO_x emission regulations in these areas (adopted March 2022)
- Cincinnati area met standard in June 2022
- Cleveland area did not meet standard, was classified as moderate non-attainment

Ozone NAAQS (2015) - Federal

- U.S. EPA established a Federal Implementation Plan (FIP) addressing regional ozone transport for meeting the 2015 ozone NAAQS (called the Good Neighbor Plan).
- This initiative expanded the Cross-State Air Pollution Rule (CSAPR) to cover EGUs in the previously affected 12 states to double that number of states.
- It also established NO_x control requirements for non-EGU sources like engines, kilns, furnaces, and boilers in a variety of industries like glass, cement, steel, chemical manufacturing, refining, metal ore mining, pulp and paper, and natural gas pipelines.
- Finalized June 2023 (implementation being contested)
- Supreme Court is set to hear an argument on a stay of this regulation in late February

PM_{2.5} NAAQS (2024)

- Annual PM_{2.5} standard lowered from 12 µg/m³ to 9 µg/m³, final February 7, 2024. Could affect almost 20% of the country (569 counties).
- In many areas background concentration is barely below the proposed the new standard, meaning there will be very little room for new projects and industrial growth.
- Estimated 80% of PM_{2.5} emissions are from non-point sources like wildfires and road dust.
- If issued during a permit process that used modeling, would have to remodel.

State Impact of Changes at the Federal Level

- Ohio EPA developed RACT rules for NO_x and VOC sources in order to achieve compliance with National Ambient Air Quality Standards (NAAQS) for Ozone
- Reasonably Available Control Technology (RACT)
- RACT rules are Once In, Always In
- In March 2022, new RACT rules became effective in Butler, Clermont, Hamilton, and Warren counties
- These four counties are the only counties in the State where a number of RACT rules became newly effective

VOC RACT rules newly applicable to Butler, Clermont, Hamilton, and Warren counties

- OAC rule 3745-21-09(F)(2): Paper, Film, and Foil Coating Lines
- OAC rule 3745-21-09(I)(4): Surface Coating of Metal Furniture
- OAC rule 3745-21-09(K)(6): Surface Coating of Large Appliances
- OAC rule 3745-21-09(Y)(4): Flexographic, Packaging Rotogravure, and Publication Rotogravure Printing Lines
- OAC rule 3745-21-19: Aerospace Manufacturing and Rework Facilities
- OAC rule 3745-21-20: Shipbuilding and Ship Repair Operations
- OAC rule 3745-21-21: Fixed Roof Tanks and External Floating Roof Tanks
- OAC rule 3745-21-22: Offset Lithographic Printing and Letterpress Printing Facilities
- OAC rule 3745-21-23: Industrial Solvent Cleaning Operations
- OAC rule 3745-21-24: Flat Wood Paneling Coatings
- OAC rule 3745-21-26: Miscellaneous Metal and Plastic Parts
- OAC rule 3745-21-27: Boat Manufacturing
- OAC rule 3745-21-28: Miscellaneous Industrial Adhesives and Sealants
- OAC rule 3745-21-29: Automobile and Light-duty Truck Assembly Coating Operations, Heavier Vehicle Assembly Coating Operations and Cleaning Operations Associated with these Coating Operations

What effect do these changes have?

- New emission limitations, recordkeeping, reporting, and possibly control requirements
- Template-style permits, such as Permit by Rule or General Permits, might no longer be available to facilities with operations that are subject to these rules in these 4 counties
 - For example:
 - PBRs for Small and Midsize Printing facilities
 - GP for Miscellaneous Metal Parts and Products Coating Lines

What effect do these changes have?

PBRs for Small and Midsize Printing facilities

Applicable rule
Paragraph (A)(3) of rule 3745-31-05 of the Administrative Code
Paragraph (Y)(2)(b) of rule 3745-21-09 of the Administrative Code (flexographic presses only)
Paragraph (A)(3) of rule 3745-21-22 of the Administrative Code (letterpress and lithographic printing lines located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit counties only)
Paragraphs (A) to (I) of rule 3745-21-22 of the Administrative Code

There is now a Paragraph (Y)(4) that applies, and is not yet updated in PBR.

OAC rule 3745-21-22 now applies to the 4 counties, and is not yet updated in PBR.

What effect do these changes have?

GP for Miscellaneous Metal Parts and Products Coating Lines

Miscellaneous Metal Parts and Products Coating Line Subject to OAC rule 3745-21-09(U)(1) and uncontrolled or restricted VOC emissions <10 TPY (GP 3.10)

Miscellaneous Metal Parts and Products Coating Line Exempt from OAC rule 3745-21-09(U)(1) and uncontrolled or restricted VOC emissions <10 TPY (GP 3.11)

Miscellaneous Metal Parts and Products Coating Line Subject to OAC rule 3745-21-09(U)(1) and uncontrolled or restricted VOC emissions > 10 TPY (GP 3.12)

Miscellaneous Metal Parts and Products Coating Line Exempt from OAC rule 3745-21-09(U)(1) and uncontrolled or restricted VOC emissions > 10 TPY (GP 3.13)

OAC rule 3745-21-09(U) no longer applies to the 4 counties.

OAC rule 3745-21-26 now applies to the 4 counties, and is not an applicable rule in the GP.

Compliance is the Goal!

- Agency representatives can determine which rules apply to operations at a facility
- Rules could have applicability thresholds
- Rules could include Compliance Options
- Possibility to request a restriction to avoid being subject to a rule
- Rules could include an option/requirement to conduct a RACT Study
- When a new RACT applies - must be issued with 30-day public comment period for now

New Guidance/Reporting Updates

- Federal Enforceability - increase in permit conditions
 - Ohio - Synthetic Minor Calcs or operational limits
- Attainment Areas
 - Jumping in and out of attainment
 - Interstate Areas (Cincinnati, Chicago, etc.)
 - Impact of PM 2.5 rule update
- AERR Draft Updates
 - Mandatory air emissions reporting (even if no permit)
 - Report directly to feds, bypass state
 - Removes confidential business information



Why Permit Applications Longer Timeframe

- Updated/new forms missing
- Facility Wide PTE not included in application (impact on Major Source analysis)
- Not including updated information
 - Based on rule changes/new guidance (know or unknown)
 - Facility profile not reflect current site
- More review from central office (new personnel in central office review group)
- Questions/clarifications for Nox/VOC RACT revisions



How to Avoid Issues

- Hold meetings
 - Pre-meetings with the agency
 - ▶ Discuss any rules changes
 - ▶ Discuss any state/federal guidance that may impact permit
 - ▶ Discuss timing and requirements
 - Conversations through process
 - Notification when application was submitted
- Provide best information that is available
- Update facility profiles while in application process



Staying In the Know

Contact your District Office/Local Air Agency early and often!

Subscribe to updates via Ohio EPA's Customer Support Center

Announcements on Ohio EPA's Division of Air Pollution Control (DAPC) website

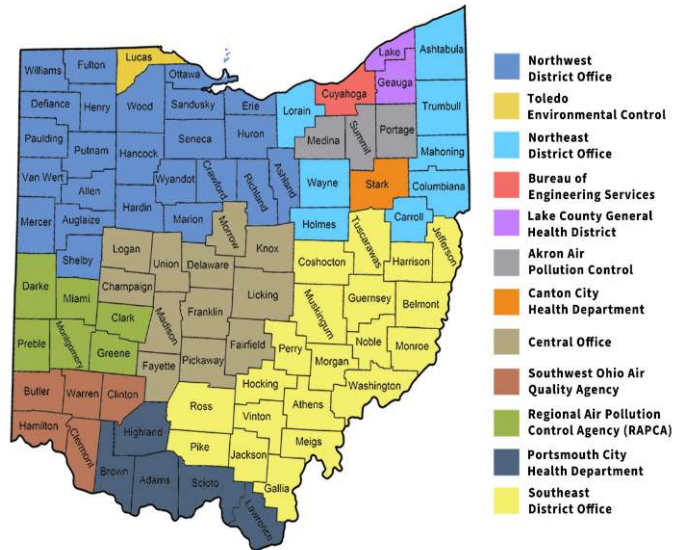
State of Ohio's Rules E-Notification System

Review Effective Rules on Ohio EPA's DAPC website

Staying In the Know (Cont.)

<https://epa.ohio.gov/divisions-and-offices/air-pollution-control/permitting/ohio-epa-district-offices-and-local-air-pollution-control-agencies>

Contact your District Office/Local Air Agency early and often!



Subscribe to updates via Ohio EPA's Customer Support Center

<https://ohioepa.custhelp.com/>



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Customer Support Center

Get Started

Staying In the Know (Cont.)

Announcements
on Ohio EPA's
Division of Air
Pollution Control
(DAPC) website



Air Pollution Control | Announcements

<https://epa.ohio.gov/divisions-and-offices/air-pollution-control/announcements>

State of Ohio's
Rules E-
Notification
System



<https://governor.ohio.gov/priorities/common-sense-initiative/enotifications>

Staying In the Know (Cont.)

<https://epa.ohio.gov/divisions-and-offices/air-pollution-control/regulations/effective-rules>

Ohio EPA / Divisions & Offices / Air Pollution Control / Regulations / Effective Rules / DAPC Effective Rules

DAPC Effective Rules

Regulations

April 06, 2023 | [Ohio EPA](#)

Welcome

Ohio EPA air pollution regulations are located in the Ohio Administrative Code (OAC) in Chapters 3745-14 to 3745-26, 3745-31, 3745-71 to 3745-80, 3745-100 to 3745-105, 3745-108, 3745-109, and 3745-112 to 3745-114. Additional chapters are added as needed to address new laws and requirements related to air pollution control. Individual rule chapters are presented in the table below.

Early Stakeholder Outreach

Interested Party Review

Proposed Rules

Effective Rules

Additional Information

Search Tips

To search for rules in the table below, type the number or keyword into the search bar. The table can also be sorted by any column - click on the arrow to the right of the column title.

[Expand All Sections](#)

Chapter References

- Chapter 3745-14 — NOx Budget Program
- Chapter 3745-15 — General Provisions on Air Pollution Control
- Chapter 3745-16 — Stack Height Requirements

Review Effective Rules on Ohio EPA's DAPC website

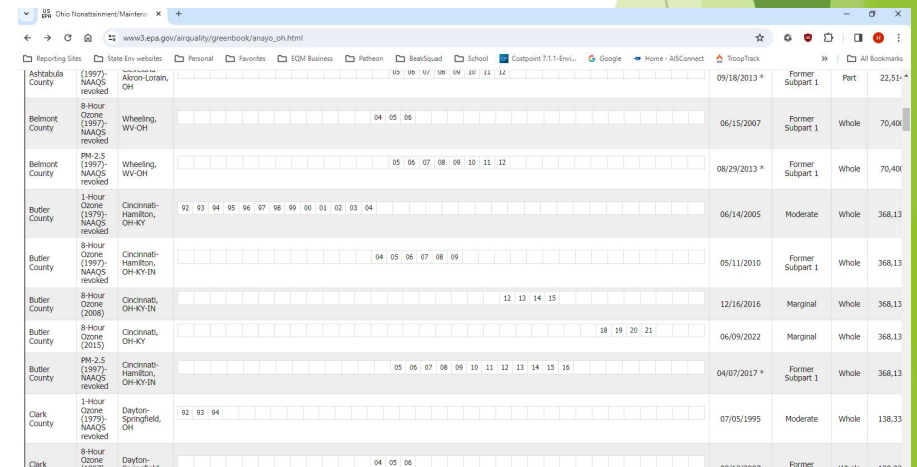
Staying In the Know (Cont.)

Federal
List Serve

Industry Organizations
(CIBO, AWMA)

Attainment
Status Website

Attainment Website



The screenshot shows a web browser window displaying the EPA Attainment Status Website. The table lists various reporting sites in Ohio, including Ashland, Belmont, Butler, and Clark counties. Each row provides details on the pollutant type (e.g., 8-Hour Ozone, PM-2.5), the specific site name, the attainment date, and the current status (e.g., Former, Marginal, Whole).

Reporting Site	State Env. website	Personal	Favorites	EQM Business	Patheon	BealSquad	School	Coastpoint 7.1.1-Env...	Google	Home - AISConnect	TopoTrack	All Bookmarks			
Ashland County	(1997) NAAQS revoked	Alton Logan, OH									09/18/2013 *	Former Subpart 1	Part	22.51	
Belmont County	8-Hour Ozone (1997) NAAQS revoked	Wheeling, WV-OH						04 05 06				06/15/2007	Former Subpart 1	Whole	70.40
Belmont County	PM-2.5 (1997) NAAQS revoked	Wheeling, WV-OH						05 06 07 08 09 10 11 12				08/29/2013 *	Former Subpart 1	Whole	70.40
Butler County	1-Hour Ozone (1979) NAAQS revoked	Cincinnati-Hamilton, OH-KY						92 93 94 95 96 97 98 99 00 01 02 03 04				06/14/2005	Moderate	Whole	368.13
Butler County	8-Hour Ozone (1997) NAAQS revoked	Cincinnati-Hamilton, OH-KY-IN						04 05 06 07 08 09				05/11/2010	Former Subpart 1	Whole	368.13
Butler County	8-Hour Ozone (2008)	Cincinnati, OH-KY-IN						12 13 14 15				12/16/2016	Marginal	Whole	368.13
Butler County	8-Hour Ozone (2015)	Cincinnati, OH-KY						18 19 20 21				06/09/2022	Marginal	Whole	368.13
Butler County	PM-2.5 (1997) NAAQS revoked	Cincinnati-Hamilton, OH-KY-IN						05 06 07 08 09 10 11 12 13 14 15 16				04/07/2017 *	Former Subpart 1	Whole	368.13
Clark County	1-Hour Ozone (1979) NAAQS revoked	Dayton-Springfield, OH						92 93 94				07/05/1995	Moderate	Whole	138.33
Clark County	8-Hour Ozone (1997) NAAQS revoked	Dayton-Springfield, OH						04 05 06				08/13/2007	Former Subpart 1	Whole	138.33

Questions?

Biographical Information

Sheri L. Bussard, Environmental Engineer
University of Cincinnati Utilities
Central Utility Plant, 3000 Glendora Avenue, Cincinnati, OH 45221
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Ms. Bussard is the environmental engineer for the University of Cincinnati Utilities department. She is responsible for the utility's Predictive Emission Monitoring Systems (PEMS) as well as compliance with the site's Title V air permit and other applicable state federal and state regulations.

Prior to joining the University of Cincinnati, Ms. Bussard worked in consulting with a breadth of multimedia environmental compliance knowledge, focused primarily in air and EPCRA. Ms. Bussard received a B.S in Civil Engineering and an M.S. in Environmental Engineering from the University of Cincinnati.

Amy C. Kesterman, Permit Area Supervisor
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Amy Kesterman is a Permit Area Supervisor in the Permits, Inspections, and Compliance Section of the Southwest Ohio Air Quality Agency (Agency), a Division of the Hamilton County Department of Environmental Services and Local Air Agency for Ohio EPA. Ms. Kesterman has been with the Agency since 2006 serving as an Environmental Compliance Specialist, and then as Permit Area Supervisor. She is responsible for reviewing minor, synthetic minor, and major source air permits; and for supervising Environmental Compliance Specialists who perform on-site inspections of air pollution sources and control equipment, determining source compliance with air permits and air pollution regulations, assessing source emissions, responding to air quality complaints, and reviewing and processing permit applications for complex source installations and modifications.

Ms. Kesterman serves as a point of contact at the Agency for assisting industry representatives with navigating Ohio EPA's electronic tool, Air Services. She periodically serves as a guest lecturer for the University of Cincinnati's Environmental Studies program and other outreach forums.

Ms. Kesterman was awarded a Hamilton County Employee of the Year Award in 2013 for her individual effort to go the extra mile in providing excellent service in her work. In 2014, Ms. Kesterman was awarded her second Hamilton County Employee of the Year Award as a member of an Agency team being recognized for their innovative team approach to processing an air permit for General Electric Aviation.

Ms. Kesterman received a B.S. in Environmental Studies from the University of Cincinnati.

Biographical Information

**Hope Manning, CEP, Vice President, Engineering and Consulting
Environmental Quality Management, Inc.,
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Hope has over 16 years of technical and compliance management experience in the environmental field in both consulting and industry. She has been involved in a broad range of programs including air compliance and permitting, NESHAP Boiler GACT compliance, NPDES permitting and compliance, SPCC, and SWPP Plans generation, and EPCRA SARA Title III, Section 312 and 313 reporting, and auditing. Currently Hope leads the Engineering and Consulting group at EQM which is comprised of individuals who have expertise in air, water, SPCC, and EPCRA reporting. She is also the primary environmental auditor for EQM. Prior to her joining EQM in 2015, Hope was the Corporate Environmental Compliance Manager at Darling Ingredients, Inc., and was responsible for environmental compliance to federal, state, and local requirements for over 50 locations in over 15 states. These activities included assisting in minor and major permitting, regulatory compliance, regulatory interpretation, regulatory reporting, permit compliance and internal auditing. Prior to her time at Darling Ingredients, Inc., Hope was the Water Quality Specialist for The Seminole Tribe of Florida. She was responsible for the water quality program for all surface waters on the Seminole Tribe of Florida reservation lands. Because the Seminole Tribe of Florida is a federally recognized Indian Tribe, she dealt directly with USEPA Region 4 personnel on behalf of the Seminole program.

Hope holds a Bachelor of Science Degree in Chemical Engineering from The University of Cincinnati.