Environmental Permitting in Ohio Workshop K

Robert Hodanbosi, Chief
Division of Air Pollution Control
July 20, 2023



Topics

- Need for renewal of permits
 - Why it is important to have correct renewal applications/permits
- Typical problems





Purpose of Renewal

- Update applicable rules and requirements
- Revise terms with latest language
- Verify emissions units still exist
- Add any new emissions units
- Adjust monitoring, record keeping, reporting, and testing
- Check compliance



Overall Permit Review Process

- Completeness review
- Determine rule applicability
- Determine allowable emissions
- Do emissions calculations
- Draft terms
- Internal review
- Issue renewal





Common Application Problems

- Incorrect forms
 - Find links to forms (Section I and II and EAC)s
 - https://epa.ohio.gov/divisions-and-offices/air-pollutioncontrol/permitting/permit-application-forms
 - No original signature
- Process flow diagram missing or does not match the application forms
- Insufficient information
 - Blank spaces on forms
 - No calculations
 - Missing pages



Additional Application Problems

Emission estimation deficiencies



- Using outdated emission factors/guidance
- Not calculating an emission unit(s) or facility's Potential-to-Emit
 (PTE)
 - Necessary to check Title V applicability
 - Necessary to determine applicability for some MACT regulations
- Failure to consider full operational capacity of equipment



Technical Review

- Check for new applicable rules
- Check for changes to applicable rules
- Check to see if sources changed/materials changed
- Check for new exemptions
- Check for insignificant emissions units, compliance assurance monitoring (CAM)



Technical Review Continued

- Check emissions calculation
- Check to see if Permittee wants changes
- Check for new/updated terms and conditions (Terms and Conditions Library)
- Check for installed sources
- More/less testing required?



Typical Problems at Technical Stage

- Sometimes see changed equipment/operation
- New equipment needing installation permit
- New stack test data / emission factors – in compliance?



This Photo by Unknown Author is licensed under CC BY-SA



Citizen/U.S. EPA Comments

- Some permits need comment period
- Receive comments from citizens, U.S. EPA, etc.
- Most comments are resolved easily
- To resolve others, we need your help (we ask you for specific information to help us respond)
- Either way, you will review our responses



Typical Problems at Permit Writing Stage

- Permittee does not review terms
- Permittee takes too long to review and respond
- Permittee does not check to see if they can live with monitoring/record keeping/reporting approach



This Photo by Unknown Author is licensed under CC BY-SA



Title V Renewal Steps

- Draft anyone comments
- Preliminary Proposed Permit Company comments
- Proposed Permit U.S. EPA comments
- Final (appealable)



FESOP/PTIO Renewal Steps

 Some – Draft – you have an opportunity to comment on conditions

Most – Small sources – just issued as final actions



Permit has been issued...Now what?

- Read and understand your permit
- Set up record keeping now
 - Make as simple as possible
 - Train employees
- Submit timely reports
- Know what is happening at your facility (make sure that you are in the communication loop)
- Foster a good relationship with neighbors around facility



Common Air Pollution Violations

- Installing and operating equipment without obtaining proper permits.
- Not maintaining records required by permits.
- Exceeding permit limits.
- Not maintaining air pollution control equipment.
- Not reporting malfunctions



Photo of Republic Steel, Cleveland from Cleveland State University, Dept. of History, Teaching and Learning Cleveland.



Key Takeaways

- Ohio EPA's goal is compliance, NOT enforcement
- We want a permit that works and that you can live with
- Work with your Ohio EPA representative to get a permit that works for you
- Don't be afraid to ask for assistance



Important Renewal Topics

- Make sure the Title V Renewal is submitted on time. Between 6 and 18 months before expiration. This is a federal deadline. Ohio EPA sends out two reminders that the expiration is coming first at 18 months second at 9 months.
- Make sure that the annual compliance certifications are submitted on time.
- Renewal of state PTOs should also be completed on time reminder sent out six months prior to expiration.



Important Renewal Topics

- Update facility profile
- Develop/contact district office/local air agency each of you should know who the permit review person for your facility
- Note: Some districts are helping each other with permits
- Some of our field offices have had personnel turnover need to make sure that you know who is your facility contact



Questions?

- Robert Hodanbosi, P.E.
- Chief, Division of Air Pollution Control
- Ohio EPA
- 50 West Town St. Suite 700
- Columbus, Ohio 43215
- 614-644-2270
- robert.hodanbosi@epa.ohio.gov
- www.epa.ohio.gov





Permit Renewals on the Regulated Side

JJ Bilimek, CSP | EHS Manager

Topics

Intro to American Nitrile Operations, LLC

Preparing for renewal

Renewal Submission, Draft Review, and Making Draft Changes

Handling Public comments & Environmental Justice





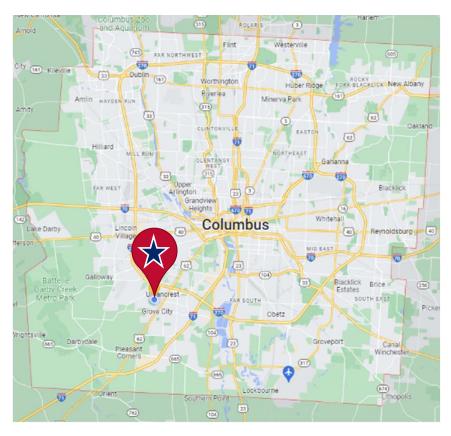
Intro to American Nitrile

Jacob Block, Founder and CEO

Native to Bexley, Ohio (Columbus)

Founded 2021 in a response to pandemic-related medical glove PPE shortages and price gouging by Asian manufacturers and importers.

Producing Medical and Industrial grade gloves.







Glove Manufacturing Process Cycle



Preparing for renewal

Read your permit(s) to understand when things happen:

Usually found in Section A: Standard Terms and Conditions "When does my PTIO Expire...?"

Or found in Section C: Emission Unit Terms and Conditions "Testing Requirements"



Preparing for renewal

- Ohio EPA will send a renewal notice 6 months prior to expiry
- Build yourself reminders! Outlook, iCal,
 EHS Software especially helpful for changes in responsibilities
- Some permits require stack testing to be performed prior to renewal. Requirements vary (for example, 6 or 12 months)
- Contact a reputable Stack Testing company EARLY!



Permittee should Request to Review the Draft before the Public Comment Period.

- It allows the permittee to review the language and ensure the terms are clear and specific enough to meet your compliance obligations
 - Vague Example: permit may only say "continuously monitor"
 - Specific Example: "Continuously Monitor readings at least once per hour"



Note any and / or statements!

The Permit may have more than one way to demonstrate compliance.

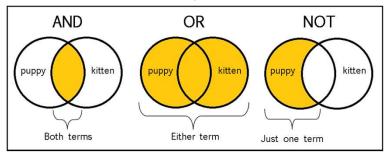
EXAMPLE

Emissions can be monitored by a CEMS

-or-

Calculated using approved method.

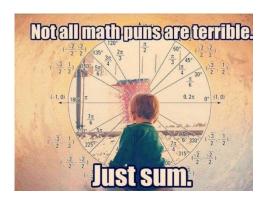
Little Tommy wants a...



7/14/2023

Permittee should Request to Review the Draft before the Public Comment Period.

 Review any calculations in the draft permit and compare against any calculations submitted – ensure no "keystroke" errors have occurred



7/14/2023

Permittee should Request to Review the Draft before the Public Comment Period.

- Focus energy on reading & <u>understanding</u> every word of Section B and C
 - Section A is the Standard Terms on most permits.
 - Highlight compliance action items and build reminders to complete them on-time – consider SOPs

READING AN AIR PERMIT BE LIKE...





Permittee should Request to Review the Draft before the Public Comment Period.

- Ask questions of your permit writer on anything unclear
- This is permittee's chance to make changes more easily before the public comment period



Handling Public comments & Environmental Justice

Know your local municipality

Consider proactively involving them (i.e. BZA, council members, mayor, etc.)

Tour the facility, explain the process being permitted, explain environmental controls

Be open and answer questions

Request any public comments by municipality be submitted early in the comment period to avoid unnecessary delay.



Handling Public comments & Environmental Justice

Know your local municipality

Ohio EPA Receives public comments and responds to them.

Permittee may need to provide additional information such as air modeling.

Consultants should be able to inform you of potential items that may be required. Having the work done ahead of time will save time!

Learn About Environmental Justice

Environmental justice (EJ) is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

Fair treatment means no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies.



President Clinton signing the EJ Executive Order in 1994.

Source:

https://www.epa.gov/environmentaljustice/learn-about-environmental-justice

7/14/2023

Learn About Environmental Justice

Meaningful involvement means:

- People have an opportunity to participate in decisions about activities that may affect their environment and/or health;
- The public's contribution can influence the regulatory agency's decision;
- Community concerns will be considered in the decisionmaking process; and
- Decision makers will seek out and facilitate the involvement of those potentially affected.



President Clinton signing the EJ Executive Order in 1994.

Source:

https://www.epa.gov/environmentaljustice/learn-about-environmental-justice

7/14/2023

Handling Public comments & Environmental Justice

Prepare for Environmental Justice

- Extremely hazardous substances (EHS) like Formaldehyde and Chlorine are more likely to garner more attention and public comments
- Try to understand likelihood of EJ Activists in your area, for your industry, for your facility.



Handling Public comments & Environmental Justice

Prepare for Environmental Justice

- Understand if your project or company is high profile and likely to attract EJ Activists
- Consider receptors of downstream emissions
- Understand your MAGLC maximum allowable ground level concentration

Handling Public comments & Environmental Justice

Prepare for Environmental Justice

Put yourself in "The Public's" shoes – what questions would you ask, and how would you answer them?

Remember: <u>People</u> are THE members of the public.

Questions?

Thank you!

JJ Bilimek, CSP

EHS Manager

American Nitrile





Workshop K Air Permit Renewals

July 20, 2023

DJ Wheeler - Managing Consultant



Title V Renewal Myths

- ► The Title V program does not establish any new requirements
- ► A Title V renewal is mostly a paperwork exercise
- ▶ I can simply make a copy of my initial Title V application
- ▶ I don't need to calculate uncontrolled emissions



Title V Renewal Myths

- ► The Title V program does not establish any nell to mements
- ► A Title V renewal is mostly a papery ork exercise
- ▶ I can simply make a copy of my initial Title V application
- ▶ I don't need to collect uncontrolled emissions



Compliance Assurance Monitoring (CAM)

- ► CAM Rule and Guidance Documents https://www.epa.gov/air-emissions-monitoring-knowledge-base/compliance-assurance-monitoring
- ▶ Definitions 40 CFR Part 64.1
- ► Applicability 40 CFR Part 64.2
- ▶ Monitoring design criteria 40 CFR Part 64.3
- ► Submittal requirements 40 CFR Part 64.4
- ▶ Deadlines for submittal 40 CFR Part 64.5
- ► Approval of monitoring 40 CFR Part 64.6
- ▶ Operation of approved monitoring 40 CFR Part 64.7
- ▶ Quality improvement plan requirements 40 CFR Part 64.8
- ▶ Reporting and recordkeeping requirements 40 CFR Part 64.9
- ► Savings provisions 40 CFR Part 64.10



CAM History

- ▶Final CAM rule published 10/22/1997
- ▶ "Part 64 is intended to provide a reasonable means of supplementing existing regulatory provisions that are not consistent with the statutory requirements of titles V and VII of the 1990 Amendments to the Act...EPA is committed to developing new emission standards subsequent to the 1990 Amendments with methods specified for directly determining continuous compliance whenever possible..."
 [62 FR 54904]



CAM Overview

- ► CAM establishes monitoring procedures to provide reasonable assurance of compliance
 - Identify performance indicators
 - Document continued operation of control device within specified indicator ranges
- ▶ Frequently involves older assets at your facility
- ► Serves as a back-stop to ensure proper performance of control devices



CAM - Applicability

(40 CFR Part 64.2(a))

- ► The unit is located at a major source for which a Title V permit is required; and
- ▶ The unit is subject to an emission limitation or standard; and
- ► The unit uses a control device to achieve compliance with a federally enforceable limit or standard; and
- ► The unit has potential pre-control or post-control emissions of at least 100% of the major source amount; and
- ▶ The unit is not otherwise exempt from CAM.



CAM - Exemptions (40 CFR Part 64.2(b))

- ▶ NSPS and NESHAP requirements established after 11/15/90
- ► Stratospheric Ozone Protection requirements (Title VI)
- ► Acid Rain Program requirements (Title IV)
- ▶ Standards that require continuous demonstration of compliance
- ► Emission limits or standards that apply solely under an emissions trading program or an emissions cap



CAM Emissions & Frequency

- ► Potential POST-controlled emissions less than major source threshold
 - Small Unit
 - Monitor once per day
- ► Potential POST-controlled emissions greater than major source threshold
 - Large Unit
 - Monitor four times per hour

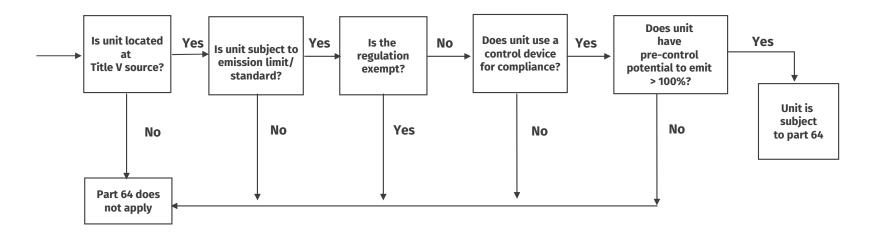


Food for Thought...

► Would data collected more frequently than a permit requires increase or decrease the likelihood for deviations?



CAM Flow Chart (use for each regulation)



- 1. Unit = pollutant-specific emissions unit or unit/pollutant combination
- 2. Control Device → Excludes inherent process equipment and passive pollution prevention control measures
- 3. CAM applicability is determined for each Title V regulated pollutant individually.



Steps in the CAM Process

- ► Applicability determination
- ▶ Preparation and submittal of CAM Plan
 - May trigger performance testing
- ► Review and approval of CAM Plan (by agency)
- **▶** Implementation
- ► Quality improvement plan if monitoring indicates compliance issues



What does CAM require?

- ► Prepare and submit a CAM plan for affected units as part of Title V
 - List of indicators, ranges, and performance criteria
 - Justification for these indicators and ranges
 - Implementation plan
- ► Estimated 27,000 units at 9,000 sources will require CAM plans
- ► Selecting and justifying indicators often requires collaboration with manufacturers
- ► Ohio EPA may require a nominal CAM plan even for exempt standards



CAM Monitoring Examples

Control Technology	Emission Source Unit	Primary Pollutant	Example CAM Strategy	Frequency of Monitoring	Recording Method	Other Monitoring Options
Fabric filter Baghouse	Rotary drying system for granular polymer	PM-10	Pressure drop across the device	Each batch	Datalogger or logbook	Visual emissions, total material collected, broken bag detector
Carbon adsorption system	Industrial wastewater treatment system	VOCs	Time since last regeneration	Continuous	Strip chart at control panel	CEM for VOCs, presence of odors
Flare	Specific process reactor	Carbon monoxide	Visual presence of a flame	Twice per shift	Logbook	Temperature of the flame, outlet CEM for CO
- Brine-cooled condenser	Synthetic fiber spinning operation	VOCs and HAPs	Monitoring the condenser exhaust gas temperature	Continuous	Datalogger	Volume of recovered solvents, inlet and outlet coolant temperature



When are CAM Plans Due?

- ► Potential POST-controlled emissions less than major source threshold (small units)
 - Submit CAM plan as part of the first Title V renewal application
 - Subsequent Title V renewals may also require CAM plans for any units added or modified since the previous renewal
- ► Potential POST-controlled emissions greater than major source threshold (large units)
 - Submit CAM plan as part of the initial Title V application
 - Submit CAM plan as part of any significant Title V modification
- ► Ohio EPA may consider the CAM plan to be a critical component of a complete application



Quality Improvement Plan (QIP)

- ► Two possible types of QIPs
 - Discretionary QIPs at the request of Ohio EPA
 - Automatic QIPs based on permitted thresholds
 - Frequency of excursions
 - Magnitude of excursions
- ▶ Elements of a QIP
 - Procedures for evaluating control performance problems, and
 - Based on the results of the evaluation, one or more of the following:
 - Improved maintenance practices
 - Process operation changes
 - Appropriate improvements to control methods
 - More frequent monitoring
 - Other appropriate steps



QIP Implementation Schedule

- ► Develop and implement QIP as expeditiously as practicable after receipt of request from Ohio EPA or after exceeding automatic trigger
- ► Maintain the QIP on site in a manner available for inspection
- ► Notify Ohio EPA if the time necessary to complete the improvements exceeds 180 days from receipt of the QIP request or the QIP trigger



CAM Reporting

- ▶ Required component of semiannual Title V reports
- ► Include the following information:
 - Number, duration, cause, and corrective actions for excursions or exceedances
 - Number, duration, cause, and corrective actions for monitor downtime
 - Descriptions of any actions taken to implement a QIP during the reporting period
 - If a QIP was completed during the reporting period, also include documentation of completion and the reduction in the likelihood of similar excursions or exceedances





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 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.

Biographical Information

JJ Bilimek, CSP, EHS Manager, American Nitrile 3500 Southwest Blvd, Grove City, OH 43123

jbilimek@americannitrile.com

JJ Bilimek is the corporate Environmental, Health, and Safety Manager at American Nitrile. American Nitrile is a new Ohio-based manufacturing company that will produce 4 Billion disposable nitrile gloves for medical and industrial users at its state-of-the-art Grove City location. JJ is establishing the company's EHS policies and systems as the facility prepares to start-up later this year (2022). He is experienced in managing Title V and Synthetic Minor Title V air permits, and other environmental compliance duties. He is also experienced in traditional hard-hat safety, as well as PSM/RMP and facilitating PHAs. JJ graduated from The University of Findlay with a B.S. in Environmental, Safety, and Occupational Health Management. He obtained his Certification as a Safety Professional (CSP) in 2015.

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.