

# ARKANSAS AIR PERMITTING PROGRAM

# **Frequently Asked Questions**

Office of Air Quality

April 23, 2021

Version Info

References within this guidance to regulatory provisions are up-to-date as of April 23, 2021

# **About this Guidance**

This permitting guidance document is intended to highlight some of the most common questions that an owner or operator of a facility has when applying for an air permit in Arkansas. Permitting provisions found in Arkansas Pollution Control and Ecology Commission (APC&EC) Rules 18, 19, 26, and 31 as well as federal regulations referenced within the Rules are the foundation for this document, and should always be consulted for specific projects. You may also contact the Division of Environmental Quality (DEQ) Office of Air Quality (OAQ) Permits Branch with any questions comments using the following link: https://www.adeq.state.ar.us/air/permits/forms/questions-intro.aspx

If inconsistencies exist between this guidance document and the currently effective APC&EC Rules or State Code, APC&EC Rules and Arkansas statutes take precedence over this guidance document. Currently, the current APC&EC Rules may be found at: <a href="http://www.adeq.state.ar.us/regs/">http://www.adeq.state.ar.us/regs/</a>. State statutes may be found at:

https://advance.lexis.com/container?config=00JAA3ZTU0NTIzYy0zZDEyLTRhYmQtYmRmM S1iMWIxNDgxYWMxZTQKAFBvZENhdGFsb2cubRW4ifTiwi5vLw6cI1uX&crid=6973fa82e75d-43d7-966f-24fce0fda207&prid=ce134e2b-2590-40be-8441-fc32d6cef537.

For additional resources related to the Arkansas Air Permitting Program, visit the DEQ OAQ Permits Branch webpage at: <a href="https://www.adeq.state.ar.us/air/permits/">https://www.adeq.state.ar.us/air/permits/</a>.

This document does not constitute legal advice.

<sup>&</sup>lt;sup>1</sup> APC&EC is in the process of transitioning from the term "regulation" to "rule" in compliance with Act 315 passed in the Arkansas 2019 legislative session. Therefore, some "rules" referred to in this document may continue to be titled as a "regulation" until amended by APC&EC to make the transition in terms.



# **List of Acronyms and Abbreviations**

**DEQ** Arkansas Department of Energy and Environment, **Division of** 

**Environmental Quality** 

**ADH** Arkansas Department of Health

**APC&EC** Arkansas Pollution Control and Ecology Commission

**AQCR** Air quality control regions

**AQRV** Air Quality Related Value

Ark. Code Ann. Arkansas Code Annotated

**BACT** Best Available Control Technology

**BEI** Biological Exposure Indices

**BSER** Best System of Emission Reduction

**CAA** Clean Air Act

**CAIR** Clean Air Interstate Rule

**CAO** Consent Administrative Order

**CAS** Chemical Abstracts Service

**CEM** Continuous Emissions Monitoring

**CFR** Code of Federal Regulations

CH4 Methane

**CO** Carbon monoxide

CO2 Carbon dioxide

CO2e Carbon dioxide equivalent



**CON** Gas-phase condensable particulate matter

**CSAPR** Cross-State Air Pollution Rule

**EG** Emissions guidelines

**EGBE** Ethylene glycol monobutyl ether

**EPA** U.S. Environmental Protection Agency

FIL Filterable particulate matter

**FLM** Federal Land Manager

**GC-5** General condition five

**GHG** Greenhouse gases

**HAP** Hazardous air pollutants

**HCFC** Hydrochlorofluorocarbons

**HFCs** Hydrofluorocarbons

**HRI** Heat rate improvement

**LAER** Lowest Achievable Emissions Rate

N2O Nitrous oxide

**NAAQS** National Ambient Air Quality Standards

**NESHAP** National Emissions Standards for Hazardous Air Pollutants

NO2 Nitrogen dioxide

**NOI** Notice of Intent

**NOV** Notice of Violation

NOx Nitrogen oxides



**NSPS** New Source Performance Standards

OAQ Arkansas Department of Energy and Environment, Division of

Environmental Quality, Office of Air Quality

**ODS** Ozone-depleting substances

**PAER** Presumptively Acceptable Emission Rate

**PAIL** Presumptively Acceptable Impact Level

**PAL** Plantwide Applicability Limitations

**PFCs** Perfluorocarbons

**PM** Particulate matter

PM2.5 Fine particulate matter

PM10 Coarse particulate matter

**POM** Polycyclic organic matter

**ppb** Parts per billion

**PRI** Primary particle pollution (includes FIL and CON components)

**PSD** Prevention of Significant Deterioration

**RACT** Reasonably Available Control Technology

**RMP** Risk Management Plan

**RO** Responsible official

**SAED** Surfactant alcohol ethoxylates and their derivatives

SDS Safety Data Sheets

**SF6** Sulfur hexafluoride



SIL Significant Impact Level

SIP State Implementation Plan

SO2 Sulfur dioxide

**TLV** Threshold limit value

**tpy** Tons per year

**VOC** Volatile organic compounds



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#### I. AR Permit System Overview

# A. Permitting Under the Arkansas Water and Air Pollution Control Act

The powers and duties of the Director of the Division of Environmental Quality (DEQ) are set forth in Arkansas Code Annotated (Ark. Code Ann.) § 8-1-202. Within this statute, the Director of DEQ is tasked with "administration of permitting, licensing, certification, and grants programs deemed necessary to protect the environmental integrity of the state."

Ark. Code Ann. §§ 8-4-101 et seq. and §§ 8-4-201 et seq., which apply also to water pollution rules, are incorporated by reference in <u>Subchapter 3</u> of the Arkansas Air and Water Pollution Control Act. As a result, the following statutes apply to the air permitting program:

- Ark. Code Ann. § 8–4–203. Permits Generally—Definitions
- Ark. Code Ann. § 8–4–204. Permits—Revocation
- Ark. Code Ann. § 8–4–205. Permit Hearings
- Ark. Code Ann. § 8–4–230. Temporary variances and interim authority

Rules promulgated by the Arkansas Pollution Control and Ecology Commission (APC&EC) determine how those duties are specifically implemented.

# **B.** Arkansas Federally Approved and Delegated Programs

In Arkansas, federal requirements pertaining to provisions of the Clean Air Act (CAA) are implemented through both federally approved and federally delegated programs. An "approved" program is one that is crafted by the State to meet certain federal air pollution control requirements and is then submitted to, and approved by, the U.S. Environmental Protection Agency (EPA). DEQ then implements the program, and it updates and resubmits the program plan as new federal requirements are promulgated. Arkansas has an approved Prevention of Significant Deterioration (PSD) program and an approved Title V program², so changes to the federal rules for these programs are not automatically applicable in Arkansas without a formal rulemaking to update provisions in the corresponding Rules³.

For a delegated program, the State submits a request to EPA for delegation of authority to implement and enforce federal rules with a justification of the State's ability and strategy to meet federal requirements of a specific program. For those programs that Arkansas is delegated federal authority, DEQ may implement and enforce federal requirements directly without APC&EC action to update state Rules. Programs are delegated to DEQ through agreements with EPA. DEQ has not accepted delegation of NESHAP for area sources.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> For a list of delegation documents for Arkansas, see https://www.epa.gov/ar/delegation-documents-state-arkansas



<sup>&</sup>lt;sup>2</sup> 40 CFR 52 Subpart E

<sup>&</sup>lt;sup>3</sup> APC&EC Rule 8.817, *Incorporation by Reference* 

Title V permits by design are required to contain all "applicable requirements" of a source. This can encompass CAA rules that the state has not accepted responsibility for enforcing. A notable example is the Ozone Depleting Chemicals rules under Title VI of the CAA. States do not enforce these rules, but they could still be an applicable requirement.

#### C. Arkansas Pollution Control and Ecology Commission (APC&EC) Rules

The APC&EC retains the authority to promulgate environmental rules in the State of Arkansas. APC&EC powers and duties are outlined in Ark. Code Ann. § 8–1–203. The APC&EC is a separate and distinct legal entity from DEQ. Arkansas's air pollution control program is comprised of three<sup>5</sup> rules:

- Rule 18: Arkansas Air Pollution Control Code
- Rule 19: Rules of the Arkansas Plan of Implementation for Air Pollution Control
- Rule 26: Rules of the Arkansas Operating Air Permit Program

In addition to the four primary air rules, air permitting is also impacted by the following rules:

- Rule 8: Administrative Procedures
- Rule 9: Fee Regulation

OAQ has a single permit system that incorporates all relevant requirements from Rules 18, 19, and 26 and any relevant EPA air quality rules into one permit for each permitted stationary source. Rule 26 outlines permitting procedures for sources required to obtain an operating permit under 40 CFR Part 70. Rules 18 and 19 both contain requirements to obtain a permit and permitting procedures. However, Rule 18 requires permitting and registration requirements for additional pollutants and stationary sources that are not otherwise required to obtain a permit under federal law. Depending on the stationary source, there may be a requirement for a registration even if a permit is not required. Procedures and emission limits included in Rules 18, 19, and 26 may not be consistent. Where permit threshold limits are based solely on ton per year rates, DEQ uses actual emissions in comparing to these thresholds.

In the event that an area of the state is designated nonattainment at a future date, DEQ will rely on 40 CFR § 51 Appendix S for any major source permitting in the nonattainment area until revisions to APC&EC adopts and EPA approves revised rules for nonattainment new source review.



<sup>&</sup>lt;sup>5</sup> Rule 31, Nonattainment New Source Requirements, became effective May 28, 2006, and was promulgated by the APC&EC to address the 1997 eight-hour ozone NAAQS nonattainment designation of Crittenden County in 2004. Nonattainment NSR applies to new major stationary sources and major modifications at existing stationary sources for designated pollutants when the stationary source is located in an area that is not in attainment with one of the NAAQS. While still technically in effect, provisions in Rule 31 are outdated and based on air quality standards that were in effect during 2006. Furthermore, no areas in the state are designated as being in nonattainment for the current NAAQS. DEQ is in the process of withdrawing Rule 31 provisions from the state implementation plan (SIP), and petitioning the APC&EC to withdraw Rule 31 from Arkansas's air Rules.

#### 1. Rule 18: Arkansas Air Pollution Control Code

Rule 18 contains regulatory provisions for the control of air pollution that the APC&EC has determined are necessary and desirable under State law. Provisions in Rule 18 are not federally enforceable requirements when incorporated into Title V Operating Permits. Instead, Rule 18 is a stand-alone and independent permitting system and set of requirements apart from those set forth in Rules 19, 26, and 31.

Rule 18 has requirements for permits that are based on annual actual emissions (in tons per year [tpy]). Some types of sources are required to obtain a permit regardless of annual actual emissions because they are subject to a NESHAP or NSPS that has been delegated to DEQ.

<u>Rule 18</u> also has registration requirements. A registration is not a substitute for a permit when a permit is required.<sup>6</sup> Requirements derived solely from <u>Rule 18</u> are not federally enforceable, regardless of whether those requirements are included in a Title V Operating Permit.

#### 2. Rule 19: Rules of the Arkansas Plan of Implementation for Air Pollution Control

Rule 19 contains provisions that are intended to meet a variety of federal requirements, including certain permitting requirements. Rule 19 contains the bulk of the rules incorporated by reference into the Code of Federal Regulations as the Arkansas State Implementation Plan (SIP), which is further detailed in Section I.E. of this guidance document. The following chapters of Rule 19 are included in the SIP and establish procedures for certain permitting actions:

- Chapter 4: *Minor Source Review* contains thresholds at Rule 19.401, above which stationary sources are required to obtain permits. This chapter outlines the procedures for permitting actions that are not subject to prevention of significant deterioration (PSD) requirements and for stationary sources that are not subject to 40 CFR Part 70.
- Chapter 9: *Prevention of Significant Deterioration* (PSD) contains the EPA-approved process for review of a permit for a new major source or a major modification of an existing source that is "major" for purposes of PSD. Chapter 9 includes a combination of regulatory language adopted by APC&EC and federal PSD program requirements that have been incorporated by reference.
- Chapter 11: *Major Source Permitting Procedures* requires that a facility subject to <u>Rule 26</u> must have permit applications processed under the procedures contained in <u>Rule 26</u>. This includes any stationary source that requires a permit under 40 CFR Part 70.

<sup>&</sup>lt;sup>6</sup> Registration thresholds were established when APC&EC raised permit thresholds in 2008. Registration thresholds are set at the former permit thresholds prior to the 2008 rulemaking.



# 3. Rule 26: Rules of the Arkansas Air Operating Permit Program

Rule 26 contains the implementing regulations for the approved Title V Operating Permit Program under 40 CFR Part 70. Rule 26 also sets forth certain new source review requirements for stationary sources that are subject to Part 70 but may not be subject to PSD for new source or modification.

- 4. Rules 8 and 9, and the Arkansas Code
- Rule 8 contains administrative procedures, including procedures in Chapter 2 that apply to permits issued by DEQ generally. These requirements are in addition to the procedures established by Rules 18, 19, and 26 for air permits.
- Rule 9 establishes the rule setting permit fees. See Chapter 5 for Air Permit Fees.
- See <u>Section I. A.</u> of this document for information about provisions in Arkansas Code that apply to DEQ's air permitting program.

# D. One vs. Two Permit System

1. Pre-Construction Permits vs. Operating Permits: What are the different processes and how do they work if only one permit is issued?

Air permits in general can be classified as "construction," "operating," or a combination of both. Generally, construction permits contain information related to the source specification, emission limits, and other information necessary to properly construct the source. Operating permits contain information related to continued monitoring and compliance of the sources. Construction permits are specific to a particular operation. So a facility could have multiple construction permits. Operating permits usually incorporate all of a facility's operations. Both types of permits can apply to Part 70 sources or minor sources depending upon the permitting agency.

While many states issue separate construction and operation permits, Arkansas is frequently referred to as having a "one permit system," because DEQ issues a single air permit that covers both construction and operation requirements. This is true of Part 70 sources and minor sources, though the minor source permits are not given the name "operating" since that usually implies a Title V (major) source permit. This means that either a minor source permit or a Title V permit issued under <a href="Rule 26">Rule 26</a> includes both construction (generally Title I requirements), as well as operating requirements (including Title V requirements, as applicable).

<sup>&</sup>lt;sup>7</sup> 40 CFR Appendix A to Part 70: Approval Status of State and Local Operating Permits Programs. https://www.ecfr.gov/cgi-bin/text-idx?SID=ef367b1c40672e93732804ab55f6045c&pitd=20180719&node=pt40.17.70&rgn=div5#ap40.17.70\_111.a



Rule 19.103 explains the single permit system, which includes both federal and state requirements. If a facility is subject to permitting under **Rule 19**, it must be permitted and comply with one permit that contains conditions derived from the federally-mandated requirements contained in **Rule 19**, as well as conditions based on state law.

In addition, because DEQ issues only one permit, it contains all applicable requirements of the Arkansas Code and Rules 18, 19, and 26. Some of these requirements are not considered "federally enforceable," even though they are included in a permit.

2. Which parts of a permit are Title V-derived requirements and which parts are construction-permit-based?

Generally, Title V-derived requirements include monitoring, recordkeeping, and reporting requirements. Construction-based requirements can include those as well as emission limits. Since DEQ-issued Title V permits incorporate all applicable requirements, including construction requirements, there is no clear line between the two in a one permit system. Within the permit, a citation to the relevant regulatory provision is listed adjacent to each specific condition for reference.

# E. State Implementation Plan (SIP)

#### 1. What is a SIP?

A state implementation plan, or "SIP," is a compilation of state and/or local rules, statutes, non-regulatory provisions, quasi-regulatory measures, and other state-enforceable requirements that have been submitted to EPA, approved by EPA, and codified in the CFR.

Arkansas's SIP is codified at 40 CFR 52 Subpart E. Materials submitted for inclusion in the SIP are incorporated by reference into the CFR as they existed on the date of EPA approval.

The SIP is the framework by which a state implements certain programs under the CAA, including those intended to ensure attainment and maintenance of national ambient air quality standards (NAAQS) and the protection of visibility in designated scenic areas.

#### 2. Is Rule 19 the Arkansas SIP?

No. Portions of Rule 19 have been approved into the SIP. Certain Arkansas statutes, portions of Rule 26, and other DEQ-enforceable measures have also been approved into the SIP. These are incorporated by reference as in effect on the date that EPA approved the SIP revision containing the relevant provisions.

See 40 CFR 52 Subpart E for the current Arkansas SIP.



#### 3. Who enforces the SIP?

The state has the primary responsibility for enforcing the SIP. However, the EPA is authorized to take enforcement action for violations of the SIP. In addition, members of the public can also file citizen suits under the CAA to address violations of SIP requirements that apply to facilities.

SIP requirements that apply to stationary sources are incorporated into the air permit for each facility. EPA monitors compliance of SIPs through review of state-issued air permits. EPA ensures that the permits are written in accordance with applicable SIP provisions and may bring enforcement actions against affected sources that violate the provisions of, or fail to obtain, an air permit.

# 4. What is SIP Gap?

If previously SIP-approved provisions are revised, then a state must submit those revisions to EPA for approval so that the changes may be incorporated into the SIP. EPA may approve or disapprove the change based on whether the state adequately demonstrates that the change is consistent with CAA requirements. Until EPA approves these SIP revisions, the previously approved SIP requirements continue to be enforceable by EPA and by third parties through citizen suits even as the state enforces the changed requirements that are not yet approved by EPA. The SIP Gap is a term used to refer to the discrepancy between revisions to the SIP that have been submitted to EPA for approval and the SIP provisions as codified in the Code of Federal Regulations at any given time.

#### F. Relation to Federal Rules

1. Delegated, Approved, Implemented as an "Applicable Requirement" Please see <u>Section I. B.</u> for information about delegated and approved programs, and those provisions implemented as applicable requirements.

#### 2. Part 70 (Title V Operating Permit Program)

a. Arkansas "approved" Title V program

Arkansas has an EPA-approved Title V Operating Permit Program.<sup>8</sup> <u>Rule 26</u> contains the provisions that implement Arkansas's program. This program was granted full approval by EPA and became effective on December 10, 2001.<sup>9</sup> These approvals are reflected in 40 CFR Part 70 Appendix A.

<sup>&</sup>lt;sup>9</sup> Clean Air Act Full Approval of Operating Permits Program and Approval and Promulgation of Implementation Plans; State of Arkansas; New Source Review (NSR), 66 FR 51312-01.



<sup>&</sup>lt;sup>8</sup> Clean Air Act Final Interim Approval of Operating Permits Program; the State of Arkansas, 60 FR 46771-01;

# b. When was Arkansas's Title V program approved?

EPA's approval of the Arkansas Title V Operating Permit Program occurred in a series of rulemaking actions that were published in the Federal Register. The state of Arkansas submitted a title V operating permit program on October 29, 1993. The EPA granted interim approval of the Arkansas Title V program in 1995. <sup>10</sup> The EPA granted final approval of the Arkansas title V program in 2001. <sup>11</sup>

# 3. Prevention of Significant Deterioration (PSD)

#### a. What is included in the Arkansas PSD rules?

Arkansas's PSD Rules are outlined in Chapter 9 of Rule 19. Generally, APC&EC has incorporated by reference federal rules for PSD new source review with some exceptions. Under APC&EC Rule 8.817, sections incorporated by reference are construed as though the referenced law were set forth line-by-line, word-for-word as it existed on the effective date of APC&EC adoption of the referenced law into the APC&EC rule, unless a contrary intent is expressly stated. Therefore, if any changes were made to the adopted federal rules, these changes would not be in effect as a matter of state law unless APC&EC adopts the changes as part of a formal rulemaking. Arkansas's PSD rules are approved by EPA as of August 23, 2019. 12

# b. How do Arkansas PSD rules differ from 40 CFR 52.21?

Rule 19 does not incorporate 40 CFR 52.21 by reference in its entirety. The primary differences are that:

- Rule 19.904(G)(4) corresponds to the requirements of 40 CFR 52.21(b)(49)(iv) and (G)(5) corresponds to the requirements of 40 CFR 52.21(b)(49)(v) before it was withdrawn from the CFR. Rule 19.904(G)(5) is currently stayed due to the rescission clause in Rule 19, Chapter 1.
- Rule 19.903 contains the definition for Regulated NSR Pollutant, corresponding with requirements of paragraph 40 CFR 52.21(b)(50). APC&EC must adopt a new NAAQS before it becomes effective in Regulation No. 9, Chapter 19. Between the time that EPA promulgates a new NAAQS and APC&EC adopts that NAAQS, "regulated NSR pollutant" has a different meaning in Rule 19 than in the corresponding CFR provisions. The list of what is included in (b)(50)(i) corresponds to the lists under 19.903(B)(1) and (B)(6). The last sentence in 19.903(B)(1) corresponds to (b)(50)(i)(b).
- Rule 19.903(B)(2)-(5) correspond to **40 CFR 52.21**(b)(50)(i)(b)(ii)-(v).



<sup>&</sup>lt;sup>10</sup> 60 FR 46771 (September 8, 1995)

<sup>&</sup>lt;sup>11</sup> 66 FR 51312 (October 9, 2001)

<sup>12 84</sup> FR 44235

- Rule 19 contains an "as of" date for Rule 19.903(B)(2), but not for B(3) or (B)(4).
- o <u>40 CFR 52.21(b)(50)(i)(b)(iv)</u> refers back to the term "subject to regulation." See noted differences in the previous bulleted item. This could be interpreted more narrowly than the language in 19.903(B)(4).
- o Rule 19.903(B)(5) has an "as of" date for pollutants listed under § 108 of the CAA, where none exists in the corresponding federal language.

See Rule 19 Chapter 9 to determine which sections apply in Arkansas.

- 4. New Source Performance Standards (NSPS) and National Emissions Standards for Hazardous Air Pollutants (NESHAP)
  - a. Delegation letters

Federal Register notices detail specific delegation authorities, but delegation letters provide further detail about a specific delegation agreement. EPA Region 6 delegation documents for the State of Arkansas are provided in PDF format on the following EPA webpage: <a href="https://www.epa.gov/ar/delegation-documents-state-arkansas">https://www.epa.gov/ar/delegation-documents-state-arkansas</a>.

b. NESHAPs for source categories under 40 CFR Parts 61 and 63

In 2014, DEQ entered into a Memorandum of Agreement (MOA) with EPA Region 6 regarding the enforcement of standards delegated under § 112 of the CAA. Under the MOA, DEQ has the ability to implement and enforce the delegated Part 63 standards upon incorporation into a source's Title V permit. DEQ accepts delegation of new Part 63 standards unless DEQ notifies Region 6 that it does not intend to implement and enforce a standard. 40 CFR § 63.99(a)(4)(i)lists the specific Part 63 standards that have been delegated unchanged to DEQ.

The delegations are subject to all of the conditions and limitations set forth in federal law as described in the MOA, dated September 17, 2014, entered into between DEQ and the EPA regarding § 112, *Clean Air Act Implementation*. Some authorities cannot be delegated and are retained by EPA. These include both certain general provisions as well as specific parts of some standards. DEQ's authority to implement and enforce a delegated Part 63 standard is effective when the standard is incorporated into the source's Title V (Part 70) Operating Permit.

DEQ has neither requested delegation of the accidental release program under CAA § 112(r), nor Part 63 standards applicable to area sources not required to obtain a Title V permit.

 $<sup>^{13}\</sup> https://www.epa.gov/sites/production/files/2016-03/documents/2014\_mact\_epa-adeq\_moa.pdf$ 



ENVIRONMENTAL QUALITY

DEQ received delegation of Part 61 NESHAP via SIP approval dated January 14, 1982, with the exception of the following Subparts pertaining to emission standards for certain Radionuclides, for which DEQ did not request delegation: B, H, I, K, Q, R, T, and W. On March 25, 1982, EPA Region 6 granted delegated authority for enforcing all future NESHAP standards promulgated by EPA without making a formal request to EPA.<sup>14</sup>

For a list of currently delegated NESHAPs standards, please see:

- <a href="https://www.epa.gov/ar/national-emission-standards-hazardous-air-pollutants-neshap-part-63-arkansas">https://www.epa.gov/ar/national-emission-standards-hazardous-air-pollutants-neshap-part-63-arkansas</a>
- <a href="https://www.epa.gov/ar/national-emission-standards-hazardous-air-pollutants-neshap-part-61-arkansas">https://www.epa.gov/ar/national-emission-standards-hazardous-air-pollutants-neshap-part-61-arkansas</a>

# c. "Once in, always in"

Generally, DEQ administers its delegated NESHAP subparts in a manner consistent with EPA's memorandum, <u>Guidance for Reclassification of Major Sources as Area Sources under Section 112 of the Clean Air Act</u> dated January 25, 2018. Under this guidance, sources of HAP that were previously classified as "major sources" may be reclassified as "area sources" at any time, provided the facility limits its potential to emit below major source thresholds.

#### d. New Source Performance Standards (NSPS)

Under CAA § 111, EPA develops technology-based standards which apply to specific categories of stationary sources, the New Source Performance Standards (NSPS). The NSPS apply to new, modified and reconstructed facilities in specific source categories (e.g., manufacturers of glass, cement, rubber tires, and wool fiberglass, fossil fuel-fired power plants, oil and natural gas industry, and municipal solid waste landfills). Facilities subject to NSPS are required to perform an initial performance test to demonstrate compliance. To demonstrate continuous compliance, some NSPS require sources to utilize continuous emission monitors (CEM). Sources may also be required to monitor control device operating parameters to demonstrate continuous compliance.

NSPS for subject facilities can be accessed here:

https://www.epa.gov/stationary-sources-air-pollution/new-source-performance-standards

States that are delegated for NSPS have the primary role for enforcing these standards through their permitting programs.

<sup>&</sup>lt;sup>14</sup> 47 FR 7665: February 22, 1982 https://www.epa.gov/sites/production/files/2016-05/documents/47fr7665-7666.pdf



On September 14, 1981, DEQ received delegation of authority for implementation and enforcement of NSPS and NESHAP (except demolition and renovation of buildings containing asbestos) to DEQ.<sup>15</sup> On March 25, 1982, EPA Region 6 granted delegated authority for enforcing all future NSPS and NESHAP standards promulgated by EPA without making a formal request to EPA.<sup>16</sup>

#### 5. Programs not delegated to DEQ

DEQ is not delegated the following programs:

- Accidental release program under CAA § 112(r)
- Part 63 standards applicable to area sources not required to obtain a Title V permit.
- NSPS for New Residential Wood Heaters, Subpart AAA

This list may not be comprehensive. Contact DEQ Office of Air Quality (OAQ) for more information.

a. Regulated activities that are in addition to permitted conditions

The following are programs that DEQ does *not* implement or include in permitting actions, but that have requirements that may be relevant to permitted facilities. For instance, Title V permit applications will include questions to determine if the source has specific "applicable requirements" related to stationary sources; notably § 112(r) and Ozone Depleting Chemicals (Title VI).

- CAA § 112(r): Accidental Release Prevention/Risk Management Plan Rule<sup>17</sup>
- Most mobile source requirements
- Vehicle emission standards, catalytic converter removals
- Indoor air pollutants (such as mold, radon, lead paint, etc.)/indoor air quality
- OSHA/Occupational health requirements
- Freon-associated certification programs
- Sewer vents on homes
- Trees/landscaping issues
- Radiation
- b. Does DEQ administer the CAA § 112(r): Accidental Release Prevention; Risk Management Plan Rule?

<sup>&</sup>lt;sup>17</sup> See EPA's Risk Management Plan Rule Factsheet at: https://www.epa.gov/sites/production/files/2013-10/documents/caa112\_rmp\_factsheet.pdf



<sup>&</sup>lt;sup>15</sup>New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants: Region 6 EPA Delegation Letter for Arkansas, September 14, 1981. https://www.epa.gov/sites/production/files/2016-03/documents/1981\_ar\_nsps\_neshap\_full\_delegation\_ltr\_0.pdf

<sup>&</sup>lt;sup>16</sup> 47 FR 7665: February 22, 1982 https://www.epa.gov/sites/production/files/2016-05/documents/47fr7665-7666.pdf

No, Arkansas Department of Emergency Management (ADEM) administers the accidental release prevention requirements; risk management program requirements are contained in CAA § 111(r).

CAA § 112(r) requires EPA to publish regulations and guidance for chemical accident prevention at facilities that use certain hazardous substances. These regulations and guidance are contained in the Risk Management Plan (RMP) rule.

- A link the federal register notice of the federal rule can be found here: https://www.govinfo.gov/content/pkg/FR-2004-04-09/pdf/04-7777.pdf
- A link to the fact sheet about the rule can be found here: <a href="https://www.epa.gov/sites/production/files/2013-10/documents/caa112\_rmp\_factsheet.pdf">https://www.epa.gov/sites/production/files/2013-10/documents/caa112\_rmp\_factsheet.pdf</a>

#### c. Ozone-Depleting Substances

DEQ does not regulate ozone-depleting substances solely for that purpose. However, some of these substances may be regulated as VOC or other pollutants.

In the United States, ozone-depleting substances (ODS) are being phased out and are regulated as class I or class II controlled substances.

Contact EPA for more information.

#### d. Mold

The <u>Arkansas Department of Health</u> (ADH) has administers the State's mold program. The ADH identifies and quantifies exposures to environmental contaminants, conducts risk assessments and risk communication, provides surveillance for adverse health effects, and provides health-based guidance on levels of exposure to such contaminants.

#### e. Indoor air quality

DEQ does not regulate indoor air quality. The ADH can provide more information on issues affecting indoor air quality in the State of Arkansas.

#### f. Radon

DEQ does not regulate indoor air quality. The ADH can provide information on radon, which affects indoor air quality.

#### 6. Acid Rain Trading Program

Acid rain results when sulfur dioxide (SO2) and nitrogen oxides (NOx) are emitted into the atmosphere and transported by wind and air currents. The SO2 and NOx react with water, oxygen and other chemicals to form sulfuric and nitric acids. These then mix with water



and other materials before falling to the ground. Acid rain causes acidification of lakes and streams, which is harmful to aquatic communities, and contributes to damage of plants, sensitive forest soils, and manmade structures.

Title IV of the 1990 CAA Amendments established the Acid Rain program, which requires emissions reduction of SO2 and NOx from power plants. The Acid Rain program created a cap and trade program in which affected facilities may trade allowances within a total cap of 8.95 million tons of SO2 set for all electricity generating units (EGU) within the contiguous United States.

In Arkansas, Chapter 12 of <u>Rule 26</u> incorporates by reference 40 CFR Parts 72 and 76 (including the provisions of 40 CFR Parts 73, 74, 75, 77, and 78 that are referenced in 40 CFR Parts 72 and 76), as they were in effect on October 15, 1999.

# 7. The Cross-State Air Pollution Rule (CSAPR)

The Cross-State Air Pollution Rule (CSAPR) is a federal implementation plan (FIP) promulgated to address air pollution from upwind states that crosses state lines and affects air quality in downwind states. SO2 and NOx emissions react in the atmosphere and contribute to the formation of fine particle (soot) pollution. NOx also contributes to ground-level ozone (smog) formation. These emissions and the soot and smog they form can affect air quality and public health locally, regionally, and in states hundreds of miles downwind.

The CSAPR as finalized in 2011 addressed interstate transport obligations for affected states for the 2006 24-hour PM2.5 NAAQS, the 1997 annual PM2.5 NAAQS, and the 1997 8-hour ozone NAAQS. CSAPR replaced EPA's 2005 Clean Air Interstate Rule (CAIR), following the direction of a 2008 court decision that required EPA to issue a replacement regulation. CSAPR implementation began on January 1, 2015.

On September 7, 2016, the EPA revised the CSAPR ozone season NOx program by finalizing an update to CSAPR for the 2008 ozone NAAQSs, known as the CSAPR Update.

Arkansas electric generating units must comply with CSAPR (FIP) requirements for NOx during the ozone season.<sup>18</sup>

<sup>&</sup>lt;sup>18</sup> Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 FR 48208-01; Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS, 80 FR 75706-01.



#### 8. Asbestos

EPA delegated authority to DEQ to implement and enforce the part of the Asbestos NESHAP for the demolition and renovation of structures containing asbestos. This delegation is based on implementation of APC&EC <u>Rule 21</u>, the Arkansas Asbestos Abatement Rule, which is applicable to:

- Owners and operators conducting a demolition or renovation activity;
- Persons conducting inspections, air monitoring, developing management plans, and designing and/or conducting an asbestos abatement response for demolition and renovation activities;
- Persons responsible for the management and disposal of asbestos-containing waste materials;
- Training providers for asbestos professional accreditation courses.

Rule 21 also incorporates certain federal regulations by reference.

#### 9. Lead

Lead Compounds are a listed HAP. Lead is also a criteria pollutant under the NAAQS. <sup>19</sup> Facilities with lead emissions greater than 0.5 tpy are required to obtain a permit under Arkansas rules and those with greater that 1 tpy of lead compounds require at least a registration. Lead compounds are evaluated in accordance with the DEQ <u>non-criteria pollutant control strategy</u>. Lead is evaluated in accordance with SIP and NSR rules.

Arkansas is in attainment for the lead NAAQS.

#### a. Lead Waiver

On November 12, 2008, The U.S. EPA strengthened the NAAQS for ambient air lead emissions. The revised standard is now set at 0.15 microgram per cubic meter (µg/m3) based on a rolling three-month average for both the primary (health-based) and secondary (welfare-based) standards. In conjunction with the 2008 revision of the lead NAAQS, on December 14, 2010 (75 FR 81134), the EPA also promulgated new source-oriented monitoring network design criteria (40 CFR Part 58, Appendix D, Section 4.5). Source oriented monitoring is required for those facilities which emit 0.5 tpy or more of lead into the ambient air. The rule further requires that this monitoring be conducted at or near the maximum off-site ambient air lead concentration, as predicted by modeling. Source-oriented monitoring is not necessary if a facility is either

<sup>&</sup>lt;sup>19</sup> The primary and secondary NAAQS for lead are 0.15 micrograms per cubic meter Pb (lead) in total suspended particles as a 3-month average. On September 16, 2016, based on its review of the air quality criteria for lead, the EPA issued a decision to retain the existing 2008 standards without revision.



below half-a-ton per year of actual lead emissions or the facility has an active lead waiver. Lead emissions are to be determined based on either the most recent NEI or other scientifically justifiable methods and data, such as the State Emission Inventory (State EI) or the Toxics Release Inventory (TRI). Section 4.5(a)(ii) of Appendix D to 40 CFR part 58 provides the following provisions for a waiver of the requirements:

"The Regional Administrator may waive the requirement in paragraph 4.5(a) for monitoring near Pb [lead] sources if the state or, where appropriate, local agency can demonstrate the Pb source will not contribute to a maximum Pb concentration in ambient air in excess of 50% of the NAAQS (based on modeling or other means). The waiver must be renewed once every 5 years as part of the network assessment required under 58.10(d)."

#### b. Lead: Emissions Inventory

Per EPA's Air Emissions Reporting Requirements (AERR), facilities emitting 0.5 tpy or more (actual emissions) of lead in a reporting year are required to report emissions to DEQ in an emissions inventory (EI) report as a Type B facility. Type B facilities are required to report triennially starting in 2002 (if a facility emitted 0.5 tpy or more of lead in 2002, 2005, 2008, 2011, 2014, 2017, 2020, 2023, 2026, etc., then that facility must submit an EI report for the specific reporting year).

If a facility has an active air permit in a triennial year that has a lead emission limit of 0.5 tpy or greater, DEQ will request lead emission calculations from that facility in order to determine if the facility had actual lead emissions of 0.5 tpy or more in the specified reporting year. If it is determined that the facility has actual lead emissions of 0.5 tpy or more for the specified reporting year, the facility will be required to submit an EI report to DEQ for that reporting year.

#### II. Arkansas-Administered Programs

#### A. What type of air pollution is regulated?

DEQ has the authority to regulate a broad range of compounds although the specific compounds that are regulated differ based on the specific rules that apply to a given source or facility.

For example, <u>Rule 18</u> relies on the definition of "air contaminant," which "means any solid, liquid, gas, or vapor or any combination thereof. The following shall not be considered air contaminants: water vapor, oxygen, carbon dioxide, nitrogen, hydrogen, and inert gases." However, <u>Rule 19</u> relies on the definition of "federally regulated air pollutant," which includes "any pollutant for which a NAAQS has been promulgated." In contrast to <u>Rule 18</u>, <u>Rule 19</u>



would allow the regulation of carbon dioxide (CO2) because CO2 and other greenhouse gases (GHG) are regulated under PSD and NSPS programs.

Generally, DEQ regulates the following compounds:

- 187 hazardous air pollutants (HAP) as defined by EPA as of December 19, 2005;
- The six criteria pollutants, as required by the CAA: particulate matter, carbon monoxide (CO), sulfur dioxide (SO2), nitrogen dioxide (NO2), ozone and lead;
- Volatile organic compounds (VOC);
- GHGs for sources that are major for other pollutants under the Prevention of Significant Deterioration (PSD) program;
- Hydrogen sulfide; and
- Other contaminants that can cause air pollution including:
  - Acetone
  - o Ammonia

Hydrogen sulfide has an ambient air quality standard set by statute. Ark. Code Ann. 88-3-103 prohibits emissions from any facility with predicted ambient concentrations beyond the fenceline of greater than 80 parts per billion (ppb) for any 8-hour averaging period for residential areas and of greater than 100 ppb for any 8-hour averaging period for nonresidential areas. In addition, the statute prohibits emissions from a facility that would result in actual ambient hydrogen sulfide concentrations at any place beyond the facility's perimeter property boundary greater than 20 ppm for any 5-minute averaging period.

## B. What is a Volatile Organic Compound (VOC), and is there a list of VOC?

A VOC is a compound that contains carbon and participates in atmospheric photochemical reactions. If the compound contains carbon and is emitted into the air, it is by default considered a VOC unless it is on the exception list found in the definition in **Rule 19**. A VOC can be almost any solvent, such as gasoline, paint thinners, non-water based coatings, cleaners, etc. There isn't a comprehensive list of VOC.

The following are tips for determining whether a compound is a VOC:

- It is inaccurate to use vapor pressure alone as a means to determine if a compound is a VOC.
- It is safest to assume all compounds with carbon are VOC, unless included in the
  exceptions list. There are EPA-approved test methods that can be done on compounds to
  determine VOC content.

<sup>&</sup>lt;sup>20</sup> Ark. Code Ann. § 8-3-101 – 103.



- Some Safety Data Sheets (SDS) will list "volatiles" but be aware that these may include
  water or omit some compounds. Also, SDS provide only ranges of content. Technical
  bulletins with detailed VOC content are sometimes available from the supplier or
  manufacturer of the compound.
- If it contains carbon and you are in doubt, ask the product distributor or DEQ.

# EPA defines a VOC in 40 CFR § 51.100(s) as follows:

Volatile organic compounds (VOC) means any compound of carbon, excluding CO, CO2, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions.

This includes any such organic compound other than the following, which have been determined to have negligible photochemical reactivity: Methane; ethane; methylene chloride (dichloromethane); 1,1,1–trichloroethane (methyl chloroform); 1,1,2-trichloro-1,2,2trifluoroethane (CFC-113); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro 1fluoroethane (HCFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 2-chloro-1,1,1,2tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134);1,1,1–trifluoroethane (HFC-143a); 1,1—difluoroethane (HFC-152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated siloxanes; acetone; perchloroethylene (tetrachloroethylene); 3,3-dichloro-1,1,1,2,2pentafluoropropane (HCFC-225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb); 1,1,1,2,3,4,4,5,5,5–decafluoropentane (HFC 43–10mee); difluoromethane (HFC–32); 1,1,1,3,3,3—hexafluoropropane ethylfluoride (HFC-161);(HFC-236fa); 1,1,2,2,3pentafluoropropane (HFC-245ca); 1,1,2,3,3-pentafluoropropane (HFC-245ea); 1,1,1,2,3pentafluoropropane (HFC-245eb); 1,1,1,3,3-pentafluoropropane (HFC-245fa); 1,1,1,2,3,3hexafluoropropane (HFC-236ea); 1,1,1,3,3—pentafluorobutane (HFC-365mfc); chlorofluoromethane (HCFC-31); 1 chloro-1-fluoroethane (HCFC-151a); 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C<sub>4</sub> F<sub>9</sub> OCH<sub>3</sub> or HFE–7100); 2–(difluoromethoxymethyl)–1,1,1,2,3,3,3–heptafluoropropane ((CF<sub>3</sub>)<sub>2</sub> CFCF<sub>2</sub> OCH<sub>3</sub>); 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C<sub>4</sub> F<sub>9</sub> OC<sub>2</sub> H<sub>5</sub> or HFE-7200); 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF<sub>3</sub>)<sub>2</sub> CFCF<sub>2</sub> OC<sub>2</sub> H<sub>5</sub>); methyl acetate; 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-C3F7OCH3, HFE-7000); 3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE-7500); 1,1,1,2,3,3,3heptafluoropropane (HFC 227ea); methyl formate (HCOOCH3); 1,1,1,2,2,3,4,5,5,5decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300); propylene dimethyl carbonate; trans–1,3,3,3–tetrafluoropropene; HCF<sub>2</sub> OCF<sub>2</sub> H (HFE–134); HCF<sub>2</sub> OCF<sub>2</sub> OCF<sub>2</sub> H (HFE–236cal2); HCF<sub>2</sub> OCF<sub>2</sub> CF<sub>2</sub> OCF<sub>2</sub> H (HFE–338pcc13); HCF<sub>2</sub> OCF<sub>2</sub> OCF<sub>2</sub> CF<sub>2</sub>



OCF<sub>2</sub> H (H–Galden 1040x or H–Galden ZT 130 (or 150 or 180)); trans 1–chloro–3,3,3–trifluoroprop–1–ene; 2,3,3,3–tetrafluoropropene; 2–amino–2–methyl–1–propanol; t-butyl acetate; 1,1,2,2- Tetrafluoro -1–(2,2,2–trifluoroethoxy) ethane; cis–1,1,1,4,4,4–hexafluorobut–2–ene (HFO–1336mzz–Z); and perfluorocarbon compounds which fall into these classes:

- (i) Cyclic, branched, or linear, completely fluorinated alkanes;
- (ii) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
- (iii) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
- (iv) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

#### C. What is a Hazardous Air Pollutant (HAP)?

HAP are pollutants known to cause cancer and other serious health impacts. These HAP are also called toxic air pollutants or air toxics. A HAP is a hazardous air pollutant as identified under § 112 of the CAA, as amended, 42 U.S.C. §§ 7401 et seq. 40 CFR 61.01 provides a list of HAP. Sources that emit 10 tpy or greater of a HAP or 25 tpy or greater of a mixture of HAP are considered major sources. A single HAP may be an aggregated group of multiple similar compounds. Sources that emit less than those thresholds are considered an area source. These two types of sources of HAP may be subject to different NESHAP requirements.

The following are tips for identifying HAP:

1. How do I determine if a compound is categorized as a HAP?

For specific compounds, you may find it helpful to identify whether a compound is a HAP using the Chemical Abstracts Service (CAS) Registry number. Chemicals can have several different names even though they are the same. A link to an explanation of the CAS Registry can be found here: <a href="https://www.cas.org/support/documentation/chemical-substances">https://www.cas.org/support/documentation/chemical-substances</a>

2. How does the 10 tpy threshold apply to an aggregate group of HAP?

EPA has issued guidance that may be helpful in determining how to apply the 10 tpy threshold to an aggregate group of HAP here: <a href="https://www.epa.gov/sites/production/files/2015-08/documents/agghaps.pdf">https://www.epa.gov/sites/production/files/2015-08/documents/agghaps.pdf</a>

3. How does the 10 tpy threshold apply to Polycyclic Organic Matter (POM)?

Polycyclic organic matter (POM) is a broad class of compounds that is formed primarily from combustion, and is present in the air in particulate form. The major source threshold for the aggregate groups of HAP is 10 tpy of any combination of the HAP included in the



listing, considered in aggregate. One common issue is how to correctly aggregate POM and accurately compare to the major source thresholds. The following example is a hypothetical taken from the related EPA guidance document.<sup>21</sup>

#### Facility A

- Benzo(a)pyrene emissions 6 tpy
- Chrysene emissions 3 tpy
- Fluoranthene emissions four 4 tpy

Total: 13 tpy of POM emissions

Facility A measured their HAP using a volatile organic sampling train. While none of the individual HAP compounds exceed 10 tpy, the aggregate POM emission rate is 13 tpy. Facility A would be considered a major source of HAP because it emits or has the potential to emit more than 10 tpy of HAP within a single aggregate group of HAP.

There have been issues regarding the determination of major source status for sources that emit POM and which separately listed HAP are considered POM.

EPA published guidance, entitled "<u>Locating and Estimating Air Emissions From Sources of Polycyclic Organic Matter</u>" in September 1999, that discusses what kinds of POM can be measured and are likely to be emitted. The following compounds are the POM listed in the guidance:

Naphthalene; Acenaphthene; Acenaphthylene; Fluorene; Phenanthrene; Anthracene; Fluoranthene; Pyrene Benzo(ghi)perylene; Benzo(a)anthracene; Chrysene; Benzo(b)fluoranthene; Benzo(k)fluoranthene; Benzo(a)pyrene; Dibenzo(a,h)anthracene; Indeno(1,2,3-cd)pyrene

However, there are other compounds, besides those listed above, in the § 112(b) HAP list that are also considered POM. These other POM (including those listed directly below) meet the criteria listed in CAA § 112(b), which includes "organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100E C."<sup>22</sup> Further, many of the additional POM listed below can be measured using Method 8270C:

2-Acetylaminofluorene; Carbaryl; Dibenzofuran; 3,3'-Dimethylbenzidine; 3,3-Dimethoxybenzidine; 4-Aminobiphenyl; Benzidine; Biphenyl; Dibenzofurans; Chlorobenzilate; DDE; 3,3-Dichlorobenzidine Quinoline; 4,4-Methylene bis(2)

https://www.epa.gov/haps/initial-list-hazardous-air-pollutants-modifications, Footnote 4



<sup>&</sup>lt;sup>21</sup> Guidance on the Major Source Determination for Certain Hazardous Air Pollutants (August 14, 2000); <a href="https://www.epa.gov/sites/production/files/2015-08/documents/agghaps.pdf">https://www.epa.gov/sites/production/files/2015-08/documents/agghaps.pdf</a>

Chloroaniline); Methylene Diphenyl Diisocyanate; 4-Nitrobiphenyl; 2,3,7,8-Tetrachlorodibenzo-p-dioxin

Both of the groups listed above are POM and all compounds meeting the definition are to be considered in aggregate when determining major source applicability.<sup>23</sup>

# 4. What about glycol ethers?

Glycol ethers is a category of HAP that consists of multiple individual compounds listed in CAA 112(b) as modified under 40 CFR 63 Subpart C.<sup>24</sup>

The North Carolina Department of Environmental Quality maintains a searchable Glycol Ethers Database: <a href="https://deq.nc.gov/about/divisions/air-quality/air-quality-data/glycol-ethers">https://deq.nc.gov/about/divisions/air-quality/air-quality-data/glycol-ethers</a>

While this database is not comprehensive, it may be helpful to determine whether a compound is included in the glycol ethers category.

#### D. What standards may DEQ use to evaluate HAP?

Consistent with the Non-Criteria Pollutant Control Strategy, DEQ may evaluate HAP against standards including American Conference of Governmental Industrial Hygienists (ACGIH) threshold limit values (TLV) and/or Biological Exposure Indices (BEI). The ACGIH is a voluntary body of independent experts. The TLV and BEI represent the opinion of the scientific community that has reviewed the relevant data concerning health risk of exposure to certain chemical substances. The TLV of a chemical substance represents a level of exposure to which evidence suggests a worker can be exposed day after day for a working lifetime without adverse effects. Evidence reviewed by the ACGIH suggests that exposure to a chemical substance at or below the BEI does not create an unreasonable risk of disease of injury.

DEQ may use relative toxicity in certain specific cases such as when addressing permits that retain specific limits based on a Relative Toxicity screening performed under a previous

On November 29, 2004, EPA amended "the list of HAP contained in § 112(b)(1) of the CAA by removing the compound ethylene glycol monobutyl ether (EGBE) (2-Butoxyethanol) (CAS No. 111-76-2) from the group of glycol ethers" as described in the Federal Register ( $\underline{FRL-7841-8}$ )



<sup>&</sup>lt;sup>23</sup> Guidance on the Major Source Determination for Certain Hazardous Air Pollutants (August 14, 2000); https://www.epa.gov/sites/production/files/2015-08/documents/agghaps.pdf

https://www.epa.gov/haps/initial-list-hazardous-air-pollutants-modifications, Footnote 4

On August 2, 2000, EPA redefined the glycol ethers category of HAP. As described in the Federal Register notice, "this action deletes each individual compound in a group called the surfactant alcohol ethoxylates and their derivatives (SAED) from the glycol ethers category in the list of HAP."

version of the non-criteria pollutant control strategy. See page 9 of the DEQ **Non-Criteria Pollutant Control Strategy** for more details.

# E. How are Greenhouse Gases (GHG) regulated?

GHG are regulated under Section 111 of the CAA, under state PSD programs, and through federal motor vehicle emissions standards. GHG may be regulated, either individually or in combination, as the aggregate of the following six well-mixed gases: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6).

#### 1. Clean Air Act (CAA) § 111

Section 111 of the CAA authorizes EPA to develop technology-based standards that apply to specific categories of stationary sources. EPA regulates new sources of GHGs under § 111(b) and establishes emission guidelines (EG) for state regulation of existing sources under § 111(d) of the CAA. NSPS and EG are codified in 40 CFR Part 60.

2. State and federal plans pursuant to Emissions Guidelines for Existing Sources under § 111(d) of the CAA

In 2016, EPA issued guidelines for reducing emissions of methane-rich landfill gas from new, modified and reconstructed municipal solid waste landfills (MSWs) and for existing MSW landfills. <sup>25</sup> In 2017, EPA announced that the agency was reconsidering certain aspects of the emission guidelines. In August 2019, EPA issued revisions to the emission guidelines to align state plan timing with requirements under the updated CAA § 111(d) implementing regulations finalized on July 8, 2019. <sup>26</sup>

## 3. GHG under the PSD Program

Currently, sources in Arkansas may be subject to PSD requirements for GHG such as Best Available Control Technology (BACT) requirements, but only if one of the following conditions are met:

- 1) The stationary source is a new major stationary source for a regulated new source review pollutant that is not a GHG and also will emit or will have the potential to emit GHG at 75,000 tpy CO2e; or
- 2) The stationary source is an existing stationary source that makes a change that:
  - (a) Would trigger PSD new source review requirements for a regulated new source review pollutant that is not a GHG; and

<sup>26</sup> https://www.govinfo.gov/content/pkg/FR-2019-08-26/pdf/2019-18233.pdf



<sup>&</sup>lt;sup>25</sup> https://www.govinfo.gov/content/pkg/FR-2016-08-29/pdf/2016-17700.pdf

(b) Will result in an emission increase of GHGs of 75,000 tpy CO2e or more.

These sources are sometimes called "anyway sources," because they would be subject to PSD review regardless of their GHG emissions.

A facility may elect to comply with a plantwide applicability limit (PAL) instead of emission unit-specific GHG emission limits.

# F. How is Particulate Matter Regulated?

#### 1. PM2.5 and PM10 NAAQS

Particulate matter (PM) is a generic term for a broad class of chemically and physically diverse substances that exist as discrete particles (liquid droplets or solids). PM may be emitted from a variety of sources or formed in the atmosphere through chemical reactions. Those formed in the atmosphere are sometime called "secondary particulates."

In establishing the PM NAAQS, EPA specifies the size of the PM, the averaging times and forms of the standards, and the numerical level of the standards.

			Averaging		Regulatory
Pollutant	Type	Standard	Time	Form	Citation
Coarse	Primary and	150	24-hour	Not to be exceeded	40 CFR
<b>particulate</b>	Secondary	$\mu g/m^3$		more than once per	<u>50.6a</u>
matter (PM <sub>10</sub> )				year on average over	
				3 years	
<b>Fine</b>	Primary	$12 \mu g/m^3$	annual	Annual mean,	40 CFR
<b>particulate</b>				averaged over 3	<u>50.18a</u>
$\underline{\mathbf{matter}}$ (PM <sub>2.5</sub> )				years	
	Secondary	$15 \mu g/m^3$	annual	Annual mean,	40 CFR
				averaged over 3	<u>50.7a</u>
				years	
	Primary and	$35  \mu g/m^3$	24-hour	98th percentile,	40 CFR
	Secondary			averaged over 3	50.18a
				years	

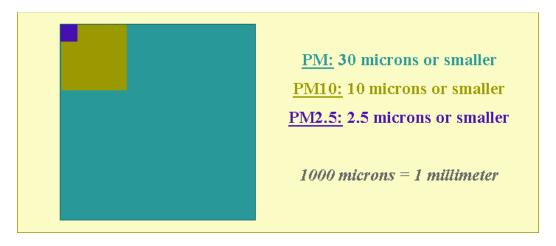
#### 2. Types of Particulate Matter

For emission inventory purposes:

- Filterable (FIL): filterable particles include any particulate matter that may be physically captured on a filter during sampling.
- Condensable (CON): The matter in the gas phase, which condenses to sub-micron particles after cooling. All condensable PM (PM-CON) is smaller than 2.5 microns in diameter.
- Primary (PRI): Primary particles emitted into the air from a source. This includes FIL and CON components.



Below is an illustration of the size relationship between the different types of PM:



3. What types of PM should be reported to the Emissions Inventory?

Generally, the Arkansas Emissions Inventory requires reporting at a minimum of the following types of PM:

- **PM-PRI** (if there is a permit limit listed for PM for a particular process)
- **PM10-PRI** (if there is a permit limit listed for PM for a particular process)
- **PM25-PRI** (if there is a permit limit listed for PM for a particular process)

In addition, DEQ will also ask for condensable PM or various sizes of filterable components if there are specific permit limits for a particular process.

4. What types of PM are referenced for permitting purposes?

The following types of PM may be permitted: PM, PM10, and PM2.5.<sup>27</sup> For permitting purposes in Arkansas, PM2.5 is the same as PM10 unless otherwise stated in the permit. Condensable matter is included in total PM10 and PM2.5 for permitting purposes.

# G. What if I have a question about OAQ's application of a particular regulatory requirement?

Please contact OAQ Permits Branch for information on requesting an interpretation of a specific regulatory requirement affecting permitting.

<sup>&</sup>lt;sup>27</sup> PM regulated as itself and not a smaller subdivision does not include condensables and is not a Title V pollutant for determination of a major source.



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# H. Dispersion Modeling

1. Statutory framework for dispersion modeling

Ark. Code Ann. § 8-4-318 delineates when dispersion modeling may be performed by DEQ. DEQ may not perform dispersion modeling for any NAAQS pollutant unless it is:

- Required by Part C of Title I of the CAA for the permitting of major source construction (PSD permitting);
- Pertaining to the permitting of a temporary source under 42 USC § 7661c(e);
- Pollutant-specific or facility-specific air dispersion modeling explicitly required by an applicable NAAQS SIP submitted to the EPA;
- Otherwise voluntarily proposed and agreed to by the owner or operator of a stationary sources;
- Necessary for the development of a SIP; or
- Necessary for the development of a general permit.

# 2. PSD Permit Modeling

PSD permits will be modeled in accordance with 40 CFR Appendix W to Part 51, the Guideline on Air Quality Models, for all applicable pollutants and NAAQS.

- EPA Guidance regarding Appendix W to 40 CFR Part 51: https://www3.epa.gov/ttn/scram/guidance/guide/appw\_17.pdf
- EPA Preferred/Recommended Models listed in Appendix W: <a href="https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models">https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models</a>
- EPA Screening Procedures for estimating the Air Quality Impacts of Stationary Sources:
  - https://www3.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019\_OCR.pdf

#### 3. Minor NSR Modeling for Criteria Pollutants

DEQ will review each application for new and modified sources that are not subject to PSD to ensure that the stationary source will be constructed or modified to operate without interfering with attainment or maintenance of a NAAQS. This review for construction and modification activities that do not trigger PSD requirements is referred to as Minor NSR.

As part of a **2017 SIP revision**, DEQ submitted with the SIP a modeling analysis demonstrating that emission increases less than 100 tpy of PM10, SO2, or NOx would not interfere with attainment and maintenance of the NAAQS anywhere in the state. The 2017 SIP also included a demonstration that, based on historic modeling for permitting actions in Arkansas, emission increases of CO below major NSR levels would not interfere with



attainment or maintenance of the NAAQS. Based on these analyses, DEQ does not require a NAAQS evaluation for most minor NSR permitting actions.

DEQ does require NAAQS evaluations for relatively large (100 tpy or greater) net emission increases <sup>28</sup> of PM10, SO2, and NOx. These evaluations are typically performed using dispersion modeling. However, DEQ may approve an alternative NAAQS evaluation method proposed by the applicant.

The DEQ <u>Air Permit Screening Modeling Instructions</u> provide instructions for dispersion model screening for minor NSR actions that require a source-specific NAAQS evaluation. If a NAAQS evaluation is required and no analysis is provided with an air permit application, DEQ staff will conduct the screening analysis.

#### 4. Non-criteria pollutant modeling

For non-criteria pollutant modeling, refer to the non-criteria pollutant control strategy guidance document:

https://www.DEQ.state.ar.us/air/permits/pdfs/non\_criteria\_strategy.pdf

# 5. Modeling under the CAA: Arkansas's NAAQS SIP (2017)

The 2017 SIP revision may be helpful for understanding the context of the statutes affecting DEQ's modeling authority:

http://www.adeq.state.ar.us/air/planning/sip/pdfs/20170324-final-sip-signed.pdf

# I. What is the non-criteria pollutant control strategy?

DEQ <u>non-criteria pollutant control strategy</u> ("the Strategy") is a tool used by DEQ for the evaluation of HAP and non-criteria pollutant emissions. It is important to note that the Strategy is not a rule, but rather a screening methodology used by DEQ to determine if the emission of air contaminants from the facility may occur in quantities sufficient to constitute air pollution as defined by <u>Rule 18</u>. In practice, the Strategy will begin a process to determine whether additional information concerning proposed non-criteria air emissions from a facility is necessary.

The first two steps of the Strategy are known as the presumptively acceptable emission rate (PAER) and the presumptively acceptable impact level (PAIL). The initial screening of non-criteria emissions is performed by calculating the PAER for each pollutant. If the emissions fail to pass the PAER, then an emissions model is developed using the newest version of the **AERMOD air quality model** approved by EPA. If this modeling indicates potential off-site

<sup>&</sup>lt;sup>28</sup> A net emissions increase is based on the differences between the sum of the proposed permitted rates for all emissions units and the sum of previously permitted emission rates for all units.



impacts at levels greater than the PAIL for one or more non-criteria pollutants, then the facility may take any combination of the following measures:

- Use refined modeling to predict lower concentrations.
- Revise emission rate estimates.
- Use alternative risk assessments to develop site specific presumptively acceptable impact levels.
- Propose additional control of emissions of the contaminants of concern.
- Propose alternative operating scenarios that result in lower modeled concentrations.
- Install ambient air monitors at appropriate locations.
- Accept emission limitations in a permit that result in lower modeled concentrations.
- Consideration of (unfenced) property lines and areas where there will be no impact on human health can be considered. Generally, all facility property can be excluded from the model if there is no general access by the public. Other impacted areas, such as roads, rivers and other uninhabited property can be excluded as on a case-by-case basis.

The full text of the Strategy, including a more detailed description of the determination of PAER and PAIL, can be found by viewing the **Non-Criteria Pollutant Control Strategy**.

#### III. **Permitting**

## A. Do I need a permit for open burning?

Generally, only vegetative waste generated on-site may be burned. APC&EC Rule 18.602 states that no person shall cause or permit the open burning of refuse, garbage, trade waste, other waste materials, or shall conduct a salvage operation by opening burning.<sup>29</sup> Exemptions to the general prohibition on open burning include the following:

- Fires used for the non-commercial cooking of food or for ceremonial or recreational purposes, including barbecues and outdoor fireplaces used in connection with any residence;
- Open burning related to agricultural activities including clearing previously uncultivated lands and burning of stubble and other debris on previously harvested fields;<sup>30</sup>
- Controlled fires used for purposes of forest and wildlife management;<sup>31</sup>
- Controlled fires used only for purposes of on-site land clearing operations;
- Smokeless flares or safety flares from the combustion of waste gases, provided that you comply with all other applicable provisions of Rule 18;



<sup>&</sup>lt;sup>29</sup> Provisions regulating open burning in Arkansas can be found in Chapter 6 of Rule 18.

<sup>&</sup>lt;sup>30</sup> This exemption does not include the disposal by open burning of waste products generated by cotton gins, or similar equipment used in a manufacturing process or to the disposal by open burning of fowls or animals;

31 Such fires must be used and burned when winds are blowing away from populated areas which might be affected.

- Open burning of the site or origin of waste hydrocarbon products from oil exploration, development, or production, or from natural gas processing plants, or from materials spilled or lost from pipeline breaks, where, because of the isolated location, such waste products cannot be reclaimed, recovered, or disposed of lawfully in any other manner;
- Fires set or authorized by any public officer, board, council, or commission when the fire is set or permission to burn is given in the performance of the duty of the officer for the purpose of weed abatement, or the prevention or elimination of a fire hazard; or fires set for the purposes of the instruction in methods of firefighting or for civil defense instructions;
- Open burning incident to on-site clean-up operations resulting from transportation accidents where, because of the isolated location, the material to be burned cannot be reclaimed or recovered, or where there is no other practical, safe, or lawful method of disposal; <sup>32</sup> and
- Open burning of any material not elsewhere specifically prohibited or exempted and for which there is no practical, safe, or lawful means of disposal. <sup>33</sup>

Open burning is also subject to guidelines and periodic bans put in place by localities. Contact DEQ OAQ Compliance Branch for specific questions about open burning.

### B. Does my facility need a Rule 18.315 registration?

Generally, a registration is required if a facility's total actual emissions fall within the one of the following ranges:

- 40 tpy or more but less than 75 tpy of CO
- 25 tpy or more but less than 40 tpy of NOx
- 25 tpy or more but less than 40 tpy of SO2
- 25 tpy or more but less than 40 tpy of VOC
- 15 tpy or more but less than 25 tpy of particulate matter
- 10 tpy or more but less than 15 tpy of PM10
- 1 tpy or more but less than 2 tpy of any single HAP
- 3 tpy or more but less than 5 tpy of a combination of HAP

#### > NOTE:

- This determination is based on actual emissions, and this requirement is expressly set forth in Rule 18.315.
- The thresholds are based on facility-wide emissions.

<sup>&</sup>lt;sup>33</sup> In the case of such fires, you must first obtain a letter of authorization for open burning from the Director in accordance with the provisions in Rule 18.605.



<sup>&</sup>lt;sup>32</sup> In the case of such fires, you must notify the Director of DEQ of the exact location, and the nature and quantities of materials to be burned prior to ignition, and such burning shall be conducted in accordance with the written approval of the Director.

- A registration requirement is applicable to any new or existing facility that exceeds registration thresholds.
- A registration is separate and distinct from a permit. Having a registration does not meet a requirement to have a permit, if required.
- Facilities under Rule 18.301(B)(2)—medical waste incinerators; rendering plants; pathological waste incinerators (including crematories), chemical process plants, hazardous waste treatment storage or disposal facilities, sour gas process plants; lead acid battery recycling facilities, and charcoal plants—must obtain a permit.

## C. Does my facility require a minor source (non-part 70) permit?

➤ **NOTE:** Minor source in this context is a non-part 70 permit. Minor source has various meanings depending on the context.

You need a minor source air permit if your total facility actual emissions are one of the following:

- 75 tpy or more but less than 100 tpy of CO
- 40 tpy or more but less than 100 tpy of NOx
- 40 tpy or more but less than 100 tpy of SO2
- 40 tpy or more but less than 100 tpy of VOC
- 25 tpy or more of particulate matter
- 15 tpy or more but less than 100 tpy of PM10
- 10 tpy or more of direct PM2.5 but less than 100 tpy of direct PM2.5
- 0.5 tpy or more but less than 10 tpy of lead
- 2 tpy or more but less than 10 tpy of any single HAP
- 5 tpy or more but less than 25 tpy of any combination of HAP
- 25 tpy or more of any other air contaminant

You must obtain a minor source air permit, regardless of emission rates, if the facility falls within one of the following categories:

- Medical waste incinerators
- Rendering plants
- Pathological waste incinerators, including crematories
- Chemical process plants based on SIC code major group 28, or equivalent NAICS
- Hazardous waste treatment storage or disposal facilities
- Sour gas process plants
- Lead acid battery recycling facilities
- Charcoal plants



In addition, you must obtain a minor source air permit, regardless of emission rates, if the facility is one for which DEQ's director determines an air permit is required to protect the public health and welfare or to assist in the abatement or control of air pollution.

You must obtain a minor source permit, regardless of emission rates, if your facility is subject to a regulation under 40 CFR Part 60, Part 61, or Part 63 as of June 27, 2008<sup>34</sup>, except for:

- 40 CFR Part 60, Subpart AAA (Wood Stoves)
- 40 CFR Part 60, Subpart JJJ (Petroleum Dry Cleaners)
- 40 CFR Part 63, Subpart M (Perchloroethylene Dry Cleaners)
- 40 CFR Part 63, Subpart Q (Industrial Cooling Towers)
- Sources subject to 40 CFR Part 60, Subpart Dc (Steam Generating Units that burn only gas)
- 40 CFR Part 63, Subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines) for non-Part 70 sources (minor sources)
- 40 CFR Part 63, Subpart WWWWW (Hospital Ethylene Oxide Sterilizers)
- 40 CFR Part 63, Subpart CCCCCC (Gasoline Dispensing Facilities)
- 40 CFR Part 60, Subpart IIII (Stationary Compression Ignition Internal Combustion Engines) for engines with a displacement of less than 30 liters per cylinder
- 40 CFR Part 60, Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines)
- 40 CFR Part 63, Subpart HHHHHHH (Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources)
- ➤ **NOTE:** This does not mean that the requirements of such rules will not be included in a permit if otherwise required by DEQ. Also, rules promulgated after the June 27, 2008 date are not considered when determining if a permit is needed. Such rules will be evaluated by DEQ in later regulation revisions to possibly include or exempt from the list.

#### D. Does my facility require a Title V Permit?

You must obtain a Title V permit if the total actual facility emissions exceed one of the following thresholds:

- 100 tpy or more of CO
- 100 tpy or more of NOx
- 100 tpy or more of SO2
- 100 tpy or more of VOC
- 100 tpy or more of PM10

<sup>&</sup>lt;sup>34</sup> This means that any standard after June 27, 2008, is not an automatic inclusion for a permit (it has not been evaluated for inclusion by DEQ, and would require revision of the Rules.



- 100 tpy or more of PM2.5
- 10 tpy or more of lead
- 10 tpy or more of any single HAP
- 25 tpy or more of any combination of HAP

In addition, you must obtain a Title V permit if the facility is subject to any federal regulation that specifically requires you to obtain a Title V permit.

#### E. General Permits

1. What is a general permit?

A general permit is a permit issued to cover numerous similar sources under a common set of permit conditions. If DEQ has developed a general permit for your type of source, you may apply for coverage under the terms of the general permit. The application form is called a Notice of Intent (NOI). However, you may instead choose to obtain an individual permit for a source that could be covered under a general permit.

All new applications for coverage require a public notice. For new facilities for initial coverage, once a NOI has been deemed complete and determined to qualify for the general permit, DEQ will publish a notice in the statewide newspaper. New facilities will not be issued a confirmation and tracking number until the 10-business day notice period has expired and any comments received have been addressed. Modified facilities submitting revisions to an NOI or renewals will not be subject to the notice requirements

2. What types of facilities have general permits?

As of the time of writing, DEQ has the following types of general permits available:

- General Air Permit for Air Curtain Incinerators
- General Air Permit for Animal/Human Remains Incinerator Facilities
- General Air Permit for Cotton Gins
- General Air Permit for Gasoline Bulk Plants
- General Air Permit for Hot Mix Asphalt Facilities
- General Air Permit for Natural Gas Compression Stations
- General Air Permit for Rock Crushing Facilities
- 3. What can I do to convert a minor source permit to a general permit?

You would submit a NOI, which is available on the DEQ website. You then need to void the existing minor source permit by sending a letter to that effect to OAQ Permits Branch.



# F. Do I need to submit an application to make a like-for-like replacement of equipment that is already in my permit?

How to permit a like-for-like replacement of equipment is considered on a case-by-case basis. There is no general exemption for replacement of equipment.

If you are considering a potential like-for-like replacement, send OAQ Permits Branch a letter or email with your AFIN and permit number, describing what you plan to install, what it is replacing, and where to find the existing equipment in your current permit. Like-for-like replacement is not easily defined, so it is difficult to make general statements about exactly what would qualify. Also, some state or federal regulations may be triggered by the date of construction, reconstruction, manufacture, or modification of a piece of equipment, even if a facility is replacing a piece of equipment with one of the same type as what was previously installed at a given facility. Because of this, it is not possible for DEQ to give a general authorization for this kind of activity without reviewing it case-by-case.

#### IV. Prevention of Significant Deterioration (PSD) Issues

#### A. Federal Class I areas

Federal Class I areas are scenic areas of special importance as designated by Congress. All facilities undergoing PSD review in Arkansas must consider their potential impacts on visibility at Class I areas. The appropriate Federal Land Manager (FLM) for that Class I area is notified by DEQ during PSD review to evaluate the need for a Class I areas NAAQS and Air Quality Related Value (AQRV) air quality analysis. The applicant's responsibility to conduct a Class I analysis is based on the results of the Class I area emission levels and distances or a Significant Impact Level (SIL) analysis, and, where appropriate, the Class I PSD increment analysis.

The United States contains 154 Class I areas. Arkansas has two Class I areas in-state: Caney Creek and Upper Buffalo Wilderness Areas. Two Class I areas in Missouri are within 100 kilometers of Arkansas: Hercules-Glades and Mingo Wilderness Areas. Additional control strategy requirements for these Class I areas are included in the Arkansas SIP.

Map of Arkansas and Southern Missouri Class I Areas: Class I Map

#### **B.** Baseline dates

A PSD increment is the amount of pollution an area is allowed to increase. PSD increments prevent the air quality in clean areas from deteriorating to the level set by the NAAQS. The NAAQS is a maximum allowable concentration. A PSD increment, on the other hand, is the maximum allowable increase in concentration that is allowed to occur above a baseline concentration for a pollutant.



The baseline concentration is defined for each pollutant and, in general, is the ambient concentration existing at the time that the first complete PSD permit application affecting the area is submitted. A link a table of the minor source baseline dates for Arkansas can be found here:

https://www.adeq.state.ar.us/air/permits/pdfs/minor\_source\_baseline\_dates.pdf

### C. Class I area designations in the Code of Federal Regulations (CFR)

Class I Area designations for Arkansas are specific in 40 CFR § 81.404.

Area name	Acreage	Public Law	Federal Land
		establishing	Manager
Caney Creek	14,344	93-622	USDA – Forest
Wilderness Area		93-022	Service
Upper Buffalo	9,912	93-622	USDA – Forest
Wilderness Area	9,912	93-022	Service

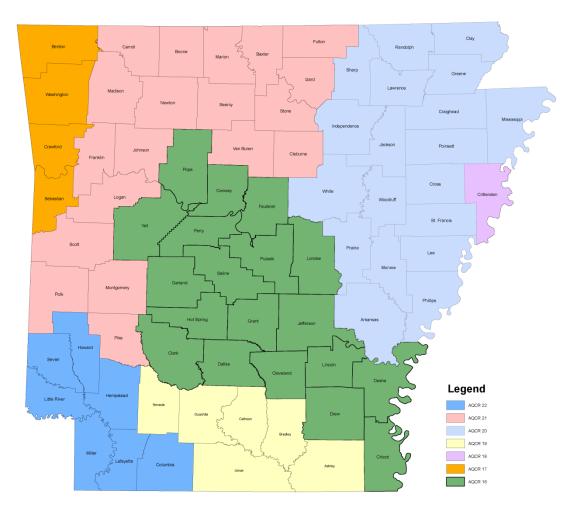
Note that this does not include the Class I areas within 100 km of Arkansas, Hercules-Glades and Mingo Wilderness Areas.

Map of Arkansas and Southern Missouri Class I Areas: Class I Map

## **D.** Air Quality Control Region (AQCR)

The CAA defines an AQCR as a contiguous area where air quality, and thus air pollution, is relatively uniform. AQCR often encompass two or more states, cities, or counties, or cross over other political boundaries. Each AQCR must adopt consistent pollution control measures across the jurisdictions within the region. When an AQCR crosses state lines, neighboring states must cooperate to develop pollution control strategies. Each AQCR is treated as a unit for the purposes of pollution reduction and achieving the NAAQS.





There are 7 AQCRs that include parts of Arkansas, delineated as shown in the following map.

A link to the map of AQCR in Arkansas can be found here: <a href="https://www.adeq.state.ar.us/air/permits/pdfs/aqcr.pdf">https://www.adeq.state.ar.us/air/permits/pdfs/aqcr.pdf</a>

## E. Background Values for Criteria Pollutants

You may find the background values for criteria pollutants here: <a href="https://www.adeq.state.ar.us/air/permits/pdfs/background\_values.pdf">https://www.adeq.state.ar.us/air/permits/pdfs/background\_values.pdf</a>

## V. Interim Authority and Variances

# Can I operate without a permit or establish a temporary alternative limit?

Generally, a facility that emits above the permit thresholds is required to have a permit and may be subject to legal action if it constructs or operates a stationary source of air emissions without a required permit. If your facility is operating without a permit, you should contact DEQ OAQ Compliance Branch, and you must submit an application and all information required for permit evaluation.



Under limited circumstances, a facility may be able to obtain interim authority to construct or operate prior to the effective date of a permit or permit modification. In addition, a facility may be able to obtain a variance from a permit condition as under limited circumstances. The facility must show good cause to allow such a variance based on certain factors set forth in Ark. Code Ann. § 8-4-230.

#### > NOTE:

- The decision whether or not to grant a request for a Temporary Variance or Interim Authority is at the discretion of the Director.
- DEQ must act on an Interim Authority or Variance request within 10 days of receipt of the request.
- The statute explicitly prohibits granting interim authority or temporary variance if there is an express requirement for that permit condition under federal law.
- A **temporary variance** is used when there is an existing limit or permit condition that an applicant requests be altered. An **interim authority request** is used when the facility has submitted a permit application but does not have existing authority to construct or operate a source.
- Address all applicable factors in Ark. Code Ann. § 8-4-230 in a request.
- Do not forget to include the \$200 fee for a request for temporary variance or interim authority.
- A temporary variance or a granting of interim authority may not exceed a period of 90 days, unless a longer period is justified by circumstances beyond the applicant's control. Extensions are considered on a case-by-case basis.
- Approvals may be conditional or unconditional.

#### **VI. The Permit/Registration Process**

#### A. Timeframe for Permitting/Registration Actions

OAQ's goal is to issue all permits within 180 days.

1. Minor Modification Approval Letters

The letter stating the application qualifies as a minor modification is given within 15 days receipt of application.

#### 2. *De Minimis* Approval Letters

The letter stating the application qualifies as a *De Minimis* modification is given within 30 days of receipt of application.

3. Registrations



Under Rule 18.315 *Registration*, "a facility may construct, operate, or modify a source subject to registration under this section [Rule 18.315] immediately upon submittal of the registration." You may choose to await the DEQ concurrence letter, which is usually issued within 30 days, in case any issue should arise over the facility's eligibility.

#### 4. General Permits

Unless a 10-day public notice is required, general permit authorizations are generally issued within 2 weeks of receipt of a NOI.

#### **B.** Public Notices/Draft Permits

#### 1. Act 163 Public Notice

An Act 163 Public Notice concerns notification to the public that a facility has submitted an air permit application to modify its permit. This notice is sent to the facility, with instructions on publication and payment. The notice is printed for one day, and the public is afforded the opportunity to submit comments on the submittal.

#### 2. Draft Permit Public Notice

This notice informs the public that a draft permit has been prepared for the facility and is available for public review and comment. A copy of this notice is mailed to the facility and is sent directly to the state and local newspapers with a request to publish and instructions on payment. DEQ sends a copy of this notice to the facility; DEQ also sends copies of the notice to state and local newspapers with instructions for publication and sends a copy of this communication to the facility. The 30-day comment period begins on date of publication of the later of either the state newspaper publication date or the local newspaper publication.

#### 3. How can the public participate in this process?

Local newspapers publish public notices of proposed permitting actions. The public will have at least 30 days to review the permit and make written comments about the draft permit decision. The public can review current applications and permits at DEQ headquarters in North Little Rock and the public library nearest the facility.

#### C. Public Hearing and Comment Process

#### 1. What is a public hearing?

Under Rule 8.103(FF), a "public hearing" is a formal meeting that is conducted according to the laws or rules administered by the APC&EC or DEQ for the purpose of receiving onthe-record oral or written comments from the public regarding a permitting decision or a rulemaking proceeding. A public hearing is not an adjudicatory hearing or a public meeting.



## 2. What is the difference between a public hearing and a public meeting?

Under Rule 8.103 (GG), a "Public Meeting" is an informal meeting held by the APC&EC or DEQ for the purpose of exchanging information with the public on a permitting decision, on a rulemaking, or on any issue of public interest. A public meeting is not an adjudicatory hearing or a public hearing. Any comment made at a public meeting is not made on-the-record and is therefore not received as a "public comment."

#### 3. How do I submit a comment?

Each permit action, rule revision, or SIP revision that is subject to public notice and comment will have a scheduled public comment period. The timeframe varies according to the action. The comment period begins on the date that the public notice is published in the newspaper and is released through DEQ's Office of Communications. During the public comment period, you may make a comment on-the-record by mailing or emailing feedback, and in most cases, you may attend and make comment at the public hearing for the action.

To submit written comments on a(n):

- APC&EC rulemaking: reg-comment@adeq.state.ar.us
- State Implementation Plan (SIP) revision: <u>airplancomments@adeq.state.ar.us</u>
- Permitting action: <u>airpermits@adeq.state.ar.us</u>

# D. Will a facility have a chance to comment on a permit before the permit becomes final?

All modifications, Title V renewals, and initial permits have a public comment period of at least thirty days. The permittee and the public have a chance to comment on the conditions contained in the permit. OAQ will respond to any comments made about the permit when OAQ issues the permit. All commenters and the permittee have 30 days after the final issuance of the permit to appeal the permit to the APC&EC. <u>Rule 8</u> contains the procedures for public notice and appeal of permits.

#### E. Where do I mail the application?

DEQ encourages electronic submission of permit applications through ePortal: <a href="https://eportal.adeq.state.ar.us/Home/e8f74e04-6779-45e1-99af-b8b3338f851c">https://eportal.adeq.state.ar.us/Home/e8f74e04-6779-45e1-99af-b8b3338f851c</a>

Alternatively, you may submit a physical copy of your permit application to:

Division of Environmental Quality

Attention: Office of Air Quality: Permits Branch

5301 Northshore Drive

North Little Rock, AR 72118-5317



#### F. What happens when an air permit application is submitted?

The air permit application goes through two processes of review: administrative review and technical review.

#### 1. Administrative review

The administrative review determines that the permit application contains all required attachments and signatures. An applicant will be notified of what information is necessary for submission before a final decision can be reached on the application. If the information missing is minor, such as a plot plan that is too small, then a request is made by telephone to submit a clearer document, and then the application is determined complete. However, if the application contains only a minimal amount of information, then a letter is mailed to the applicant describing the deficiencies.

When a new application, a renewal, or a major modification has been determined to be complete, a public notice, with instructions for publication, is mailed to the applicant. This notice informs the public that the facility has submitted a permit application.

#### 2. Technical review

The technical review begins when an engineer is assigned to perform a detailed technical review of the permit application. If the application is lacking additional information needed to further review the application, then the engineer will mail a letter to the applicant describing the deficiencies. When all information has been received and the engineer is satisfied, a draft permit decision is prepared.

Some draft permits require a public notice and comment period. After the comment period, if required, DEQ will address any issues and make a final permit decision.

#### G. What can I do to expedite the permit application review process?

There are no regulatory provisions in Arkansas that provide an option to pay an additional fee for expedited processing of a permit application. But, there are several things you can do to help accelerate the process.

A common cause for delay in the permit application review process is incomplete or missing forms and additional information (not requested in the application forms) necessary for permit evaluation. The following list identifies some of the things you can do to expedite the permit application review process:

- Use ePortal to help ensure administrative completeness and to check status of the review.
   Submitting through ePortal offers additional guidance in preparing your application and provides you with greater tracking ability as your application is processed.
- Be clear with your requested change(s).



- Be sure that you provide all requested and submit all of the required application pages.
- Be sure to sign and date the signature pages of the application and submit the originals.
- Include any relevant information such as emission calculations, Safety Data Sheets (SDS), modeling reports, stack test data, etc.
- Give prompt feedback if your assigned engineer requests additional information.
- Include a suggested draft permit with proposed conditions.
- Periodically call your assigned engineer and inquire about the status of your application.

#### > NOTE:

- The clock keeps running for administratively incomplete applications, so a timely response to DEQ with necessary documentation is crucial.
- Do not leave something in the application blank or omit documentation because you don't know whether or not it pertains to your application. Contact OAQ Permits Branch with questions: <a href="mailto:Help-Air-Permits@adeq.state.ar.us">Help-Air-Permits@adeq.state.ar.us</a>
- If your calculations require something that is not publicly available, DEQ still needs to be able to review it somehow. Contact OAQ Permits Branch with questions: <a href="mailto:Help-Air-Permits@adeq.state.ar.us">Help-Air-Permits@adeq.state.ar.us</a>

#### H. Are any fees required for obtaining a permit?

Yes, the permitted emission rate determines the fee. The fee calculation is the tpy emission rate times a ton per year fee factor. Chapter 5 of **Rule 9** contains the fee schedule. The applicant must pay all fees before DEQ will issue a permit.

- **NOTE:** The following are general tips regarding air permitting fees:
  - General permits and registrations are a fixed fee of \$200.
  - The annual fee is the same as the initial permit fee.
  - The fee is due at time of application.
  - Annual invoicing is based on the first permit from DEQ (any media—water, land/solid waste, or air), that is, the first time the facility was entered into the invoicing system. All subsequent annual invoices use the same date.
  - Reference DEQ's <u>fee factor memo for the current factors used in air permit fee</u> calculations.
  - Fees are based on permitted emissions, not actual emissions.
  - Do not over-permit, as this increases the fee.
  - Pay online using the invoice number: https://www.ark.org/adeq\_invoice/app/login.html.



### VII. Permit Questions

# A. Can I operate a temporary source, conduct testing, or do other things not listed in my permit?

Permit conditions and rules allow for some temporary emissions, testing, or alternative monitoring if a request is submitted and approved in advance. A request must contain the information listed in the general conditions of the permit and/or in the Rule 18.314, Rule 19.416, and Rule 26.1013 (sections on permit flexibility).

## B. What is included in an air permit?

Air permits contain requirements for all stationary sources at the facility that emit air pollutants.

Air quality permits are legally binding documents that include enforceable conditions with which the source owner/operator must comply. Some permit conditions are general to all types of emissions units, and some permit conditions are specific to the source. Overall, the permit conditions establish limits on the types and amounts of air pollution allowed, operating requirements for pollution control devices or pollution prevention activities, and monitoring and recordkeeping requirements.

### C. When do I need to apply for an air permit?

You need to apply for an air permit before you begin construction of the facility that requires a permit or for any addition or modification at an existing facility that involves air pollutants.

#### D. What documents do I submit to begin the process?

The documents required for new permits, renewal permits, and permit modifications are listed in the checklist provided in the application forms and instructions, available on the **Permit Applications Forms & Instructions** page of DEQ's website. All permit changes require application forms.

## E. Can I submit confidential information in the permit?

Applicants can submit confidential information. The presumption is that all material submitted to OAQ is available for public review unless specific procedures are followed to claim confidentiality. The requirements for confidential information are found in **Rule 19**, Section 19.413 *Confidentiality*, and in Ark. Code Ann. § 8-4-308, **Rule 18**, Chapter 14: *Public Information and Confidentiality*. Applications and other material claiming confidentiality will be returned to the applicant unprocessed if these requirements are not met.

DEQ Office of Law and Policy Legal Services Branch reviews every claim of confidentiality. DEQ must evaluate the submitted information against the following factors:



- The extent to which the information is known outside the business,
- The extent to which the information is known by employees and others involved in the business,
- The extent of measures taken by a business to guard the secrecy of the information,
- The value of the information to the business and its competitors,
- The amount of effort or money expended by the business in developing the information, and
- The ease or difficulty with which the information could be properly acquired or duplicated by others.

The application must be submitted using two variant copies: one copy with the complete application with confidential information, and one copy of the application with *only* the information asserted to be a trade secret redacted. The redacted copy should be identical in all other ways. In addition, the two copies of the application must include an affidavit with the following language:

"The applicant agrees to act as an indispensable party and to exercise extraordinary diligence in any legal action arising from DEQ's denial of public access to the documents or information claimed herein to be a trade secret."

Tips for submitting confidential business information:

- Review Rule 19.413.
- Do not email confidential information.
- Make sure to include the required language in the Affidavit.
- Mark the cover page of the confidential copy of the application as "Confidential."
- **NOTE:** Incorrectly submitted applications may not be held confidential.

#### F. Are there instructions to assist in completing an air permit application?

Instructions are located with the air application forms, which are available on the **Permit Applications Forms & Instructions page** of DEQ's website.

#### G. How are fees calculated?

Fees are calculated in accordance with Chapter 5 of **Rule 9**.

## H. How does a facility transfer a permit?

Under Rule 19.407, permits issued under <u>Rule 19</u> are freely transferable if the applicant notifies the Director of DEQ at least 30 days in advance of the proposed transfer date on DEQ-required forms, and the applicant submits a disclosure statement in accordance with Rule 8: *Administrative Procedures* or other documents required by DEQ.



The Director may deny the transfer of any permit if it is found that:

- The applicant has a history of non-compliance with environmental laws or rules of the state or another jurisdiction;
- An applicant that owns or operates other facilities in the state is not in substantial compliance with, or on a legally enforceable schedule that will result in compliance with, the environmental laws or rules of this state; or
- A person with a history of non-compliance with environmental laws or rules of this state or
  any other jurisdiction is affiliated with the applicant to the extent of being capable of
  significantly influencing the practices or operations of the applicant which could have an
  impact upon the environment.

Under <u>Rule 19</u>, public notice requirements do not apply to changes in ownership or changes in name.

### I. What is a Responsible Official (RO)?

A Responsible Official (RO) is a person of authority at the facility who certifies permit applications and other documents. Not everyone qualifies as an RO; an RO is defined in the rules and on application forms.

#### 1. Who can be an RO?

It depends on the type of legal entity that is submitting the form. For sources subject to **Rule 19**, the definition of "Responsible Official" is in **Rule 19**: Chapter 2, which contains the definitions chapter. For sources subject to **Rule 26**, the definition is in Chapter 2 of Rule 26. However, it is similar to the definition in **Rule 19** Chapter 2.

- **For a corporation:** a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative or such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
  - The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 United States dollars);
  - The delegation of authority to such representative is approved in advance by DEQ;
- For partnership or sole proprietorship: a general partner or the proprietor, respectively
- For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this rule, a principal executive officer of a federal agency includes the chief executive officer having



responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA).

### 2. Is a plant manager automatically an RO?

No, the plant manager is not necessarily an RO. It depends on the type of company or partnership and the plant manager's role in that organization. In most cases, a plant manager is the lowest hierarchical position at a permitted source that may be delegated as an RO.

## 3. What documents must an RO sign?

Most reports and any permit application forms must be submitted or certified by an RO. If you supplement an application that is already in progress with new or revised forms, you need an RO signature. By regulation, an RO needs to certify any application form, report, or compliance certification (see Rule 26.410, *Certification by responsible official*).

4. Would an RO signature for another DEQ Office (i.e., water or land/solid waste) work for an air application?

No. It doesn't work as a "blanket signature." NPDES (water) and air permits are not processed by the same staff or in the same manner. The RO will need to sign documents for each DEQ Office that is processing permitting actions for the facility.

### J. Is there one name change/ownership change form for DEQ?

There is not one common name change or ownership change form for all of DEQ due to differing requirements in different media Offices (water, land/solid waste, or air).

#### K. How long will my permit last? Do I need to renew my permit?

#### 1. Minor Sources

Air permits for minor sources do not expire. Generally, the permit will remain valid if the equipment and operations do not change and the facility is current on all fees. Facilities should regularly evaluate the need for a permit update or modification.

#### 2. Title V

Title V permits are active for a term of 5 years. The permittee should submit a complete renewal application at least six months before the Title V permit expiration date.

#### 3. General Permits

General air permits are active for a term of 5 years. A facility must apply for a renewed permit before the old permit expires. Notices are sent to facilities when renewal is



necessary. DEQ may choose to renew the permit or not. If the permit is not renewed, the facility will need to obtain a standard minor or Title V permit to continue operations.

### L. How do I get air emission data (for modeling or other purposes)?

OAQ collects emissions and stack parameter data from certain permitted stationary sources in the state in the form of an emission inventory report. Specific facility inventory data can be requested by contacting the SLEIS contacts listed on the **OAQ Policy & Planning Branch webpage**.

The actual permits for facilities, available online, have permitted emissions data but lack any stack information.

OAQ does not maintain an inventory of increment-consuming sources.

For emission/stack information beyond these two sources, you will need to consult the actual permit application files. Contact the **Records Management Section** of DEQ.

#### M. Where can I find emission factors?

Emission factors may be found from a number of sources. The US Environmental Protection Agency maintains an extensive emission factor database, known as <u>AP-42 emission factors</u>.

Other potential sources of emission factors are data from previous stack emission tests performed for a particular source, or information provided by an equipment manufacturer. Most emissions control device vendors have access to emission factors for the products that they sell.

#### N. Can I change a permit after the permit is effective?

You can request changes to the permit through a permit modification. The type of permit modification depends on the type of changes and the amount of increase of the emissions of the pollutants. See <u>Rule 18</u>, <u>Rule 19</u>, or <u>Rule 26</u> for additional information about modifications.

#### O. What happens if a source violates its permit?

A source that violates one or more enforceable permit condition(s) is subject to an enforcement action including, but not limited to, penalties and corrective action. DEQ or, in some cases, EPA may initiate an enforcement action. Citizens may also sue for violations of permit conditions derived from SIP requirements pursuant to CAA 113.



# P. For what types of changes should I notify DEQ, other than the installation or modification of equipment that emits air pollutants?

#### 1. Relocation of emissions units?

You should notify DEQ if an emissions unit is relocated on-site when that relocation could have impacted the results of modeling performed during the permitting or permit modification process.

### 2. Changes in stack parameters?

You should notify DEQ of a change in stack parameters when that change could have impacted the results of modeling performed during the permitting or permit modification process.

### 3. Equipment shutdown/removal from service?

Generally, you do not have to notify DEQ of equipment removal from service. However, a reduction in sources could reduce permitting fees. You may want to notify DEQ for that reason.

### 4. Emissions test for engineering purposes?

You must notify DEQ of an emissions test that is required by a permit. You do not have to notify DEQ of an emissions test solely for engineering purposes.

## 5. Addition of a Group B, Insignificant Activity?

You do not have to notify DEQ of a group B insignificant activity in and of itself, but the addition may have permitting implications.

# 6. Does adding an insignificant activity ever require a preconstruction permit or other authorization?

No. Per Rule 19.408(A) and Rule 26.304, insignificant activities are exempt from permitting requirements. For Rule 19 sources, insignificant activities are not required to be listed in a source's air permit. For Rule 26 sources, 26.402(A) requires that each air permit application include a list of insignificant activities which are exempted from permitting requirements because of their size or production rate. This would include insignificant sources in categories A-1, A-2, A-3, A-6, A-7, A-8, A-9, A-10, A-11, and A-13, as listed in Appendix A to Rule 19. If a Rule 26 source adds an insignificant activity in one of these categories, then the addition of this insignificant activity should be included in the next renewal or significant modification application submitted for that source.

Changes to a facility's insignificant activities list may be considered an Administrative Amendment.



#### Q. How should I request an alternative stack testing or monitoring method?

You should request an alternative stack testing or monitoring method on a test protocol form available on the <u>DEQ OAQ Compliance Branch</u> web page.

# R. For a change at a source that will result in decreased emissions, is any permit needed?

For a change at a <u>Rule 19</u> source or a change involving only existing emissions units at a <u>Rule 26</u> source, no permit is needed to accommodate a decrease in emissions. If the change involves a new emissions unit(s) at a <u>Rule 26</u> source, then a permit is necessary, even if emissions are decreasing. See Rule 26.301(C) of <u>Rule 26</u>, which requires a modified Part 70 permit be obtained prior to construction of a new emissions unit.

# S. When is a permit required to be reopened for a new applicable requirement for a Title V source?

Rule 26.1011 governs when a Title V operating permit must be reopened by DEQ for cause. The circumstances in which a permit will be reopened will also be included in any Title V permit.

DEQ must reopen a permit to incorporate a new applicable requirement under the following circumstances:

- Additional applicable requirements become applicable to a source with a remaining permit term of three or more years.
- Additional requirements become applicable to an acid rain source under the acid rain program.
- DEQ or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing permit limitations or conditions.
- DEQ or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Under Rule 26.1011(A)(1), no permit is required to be reopened until the source is provided with notice of intent to re-open the permit at least 30 days in advance of the date that the permit is to be re-opened, except in emergency situations.

## T. Is any permit required for a change in stack parameters? If so, why?

A permit may be required for change in stack parameters when a facility is nearing modeling an exceedance. A facility should submit a miscellaneous request through ePortal to determine whether a permit is required for a change in stack parameters.



## U. What qualifies as a De Minimis Change?

Under Rule 19.407(C)(1), a proposed change to a facility will be considered *De Minimis* if "(a) minimal judgement is required to establish the permit requirements for the change and (b) the change will result in a trivial environmental impact."

Under Rule 19.407(C)(2), "the environmental impact of a proposed change generally will be considered trivial if the emission increase, based on the differences between the sum of the proposed permitted rates for all emissions units and the sum of previously permitted emission rates for all units will either:

- (a) Be less than the following amounts:
  - i. 75 tpy of CO;
  - ii. 40 tpy of NO2, SO2, or VOC;
  - iii. 25 tpy of particulate matter emissions;
  - iv. 10 tpy of direct PM2.5;
  - v. 15 tpy of PM10 emissions; and
  - vi. 0.5 a ton per year of lead; or
- (b) Result in an air quality impact less than:

Pollutant	De Minimis Concentration	Averaging Time
СО	$500 \mu\mathrm{g/m}^3$	8-hour
NO2	$10 \mu\mathrm{g/m}^3$	Annual
PM10	$8 \mu g/m^3$	24-hour
SO2	$18 \mu\mathrm{g/m}^3$	24-hour
lead	$0.1 \ \mu \text{g/m}^3$	3-month

## V. What qualifies as a Minor Modification?

For a source with a Title V operating permit under Rule 26.1002, minor permit modifications are used for those permit modifications that:

- (A) Involve an emission increase of less than:
  - 75 tpy of CO;
  - 40 tpy of NOx;
  - 40 tpy of SO2;
  - 25 tpy of PM;



- 10 tpy of direct PM2.5;
- 15 tpy of PM10;
- 40 tpy of VOC; or
- 0.6 tpy of lead.
- (B) Involve the installation or modification of emissions units that do not require a Title I emissions netting procedure to determine eligibility;
- (C) Do not violate any applicable requirement;
- (D) Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- (E) Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
- (F) Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - (1) A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I; and
  - (2) An alternative emissions limit approved pursuant to regulations promulgated under § 112(i)(5) of the CAA; and
- (G) Are not modifications under any provision of Title I of the CAA.

#### W. What qualifies as an Administrative Amendment?

The following are the most common situations that qualify as an administrative amendment:

- The correction of typographical errors
- The identification of a change in the name, address, or phone number of any person identified in the permit, or a similar minor administrative change
- Requiring more frequent monitoring or reporting
- Allowing for a change in ownership or operational control of a source
- Incorporating a change to the permit solely involving the retirement of equipment or an emissions unit
- Incorporating a change to the insignificant activities list

See Rule 19.407(A) and Rule 26.901.



## X. What type(s) of activities can I conduct prior to permit issuance?

Under Rule 26.301, no new Part 70 (Title V) source may begin construction prior to obtaining a Part 70 permit. DEQ adheres to EPA's general guidance that activities such as planning, ordering equipment and material, site-clearing, grading, and on-site storage of equipment and materials are acceptable. All on-site activities of a permanent nature aimed at completing a PSD source (including, but not limited to, installation of building supports and foundations, paving, laying of underground pipe work, construction of permanent storage structures, and activities of a similar nature) are prohibited until the permit is obtained.

In the past, certain facilities have requested written clarification regarding what work may be performed prior to the permit becoming effective. Please direct specific questions to OAQ Permits Branch.

#### VIII. Compliance

#### A. Operating under a permit: Types of permit conditions

1. Plantwide Conditions: Title V Source Permits Only

Plantwide conditions only exist in Title V Operating Permits. Plantwide conditions include operating parameters and recordkeeping requirements not found in specific conditions including the following:

- Stack test reporting
- Other opacity
- Additional throughput and usage requirements
- Any applicable federal regulations
- Federal subpart requirements

#### 2. General Conditions or General Provisions

General Provisions (Title V operating permit term) or General Conditions (minor source term) consist of requirements including:

- Upset condition reporting guidelines
- Submission of monitoring reports
- Notification requirements
- Testing requirements
- Exemption from limits requests
- General Provisions: Title V Operating Permits Only



### B. What to expect in an inspection

- 1. Plants process inspection
  - a. Key areas of interest during a facility tour include the following:
  - Control equipment
  - All listed sources
  - Fugitive emissions
  - Un-permitted sources
  - Potential violations of other media (water, land/solid waste, etc.)
  - b. Common types of equipment and key questions regarding that equipment:
  - Cyclones
    - What is the physical condition of the cyclone(s) and duct work?
    - Are fugitive emissions occurring from improperly maintained duct work?
    - Are any required maintenance records being kept?
    - o Is the opacity within permit limits?
  - Baghouses
    - What is the physical condition of baghouse and ductwork?
    - Are required maintenance records being kept? (e.g., bag replacement)
    - o Does the baghouse have a functional pressure gauge?
    - o Are the required pressure drop records (or VE reading records) being maintained?
  - Scrubbers
    - What is the physical condition of the scrubber?
    - Are required maintenance and/or monitoring records being kept?
    - o Is the opacity within permit limits?
  - Continuous Emissions Monitoring Systems (CEMS)
    - o Is the CEMS shelter adequate?
    - o Are temperatures being controlled?
    - Have daily calibrations been conducted as required?
    - Are cylinder gas audits and relative accuracy test audits being conducted as required?
  - c. Other potential areas of interest during inspections
  - Fugitive emissions
    - Are fugitive emissions being generated? If so, are visible emissions crossing the property boundary?
    - When containers are not in use, are they closed or sealed to prevent emissions?
  - Unpermitted Sources



• Are there any processes or equipment that have been added that are not included in the permit?

### 2. Conclusion of inspection

This part of the inspection will include a discussion of any compliance issues found, including those noted in recordkeeping practices, or any potential issues involving permit conditions effecting equipment. Examples of recordkeeping issues that might be discussed include whether the records were organized in the required format and whether the throughputs are near the permit limits. Examples of discussions that may occur involving equipment include opacity approaching the permit limits or warnings signs such as pressure drops.

### 3. After the conclusion of an inspection

If there are issues identified in an inspection, then the facility will receive what is called a "30-day letter," which instructs the facility to submit any other information that it wishes DEQ to consider and a corrective action plan, if necessary.

#### > NOTE:

- A response is due 30 days from the date on the letter and not 30 days from receipt of the letter.
- The response to a 30-day letter will be reviewed by the inspector, who will make a recommendation to DEQ OAQ Enforcement Branch as to how to proceed.
- The inspector does not determine whether or not an issue noted during an inspection is a violation. There is a separate DEQ OAQ Enforcement Branch that makes that determination.
- If a violation is found, it may be determined to be "informal" if it is sufficiently minor to be resolved with further action by enforcement. "Informal" enforcement actions do not have a civil penalty attached. Alternatively, it may be determined to "formal" in which case DEQ OAQ Enforcement Branch may offer to settle the violations in a Consent Administrative Order (CAO). In the event violations are not settled through the CAO, a Notice of Violation (NOV) may be issued. Information about informal and formal administrative enforcement actions is detailed in <a href="Section IX.">Section IX.</a> of this guidance document.

#### C. General Conditions

As indicated by name, general conditions are conditions that are standardized and not specific to a particular facility. Examples include:

- Upset condition reporting guidelines
- Submission of monitoring reports
- Notification requirements



- Testing requirements
- Exemption from limits requests

#### D. 12-month rolling total

A "12-month rolling total" means any 12-month total that is continuous and consecutive. Records must contain the monthly total and the 12-month rolling total for each individual month's data.

#### E. Recordkeeping

Recordkeeping requirements are found in the specific conditions, plantwide conditions, general provisions (conditions), and certain federal regulations.

The following are some common recordkeeping problems to avoid:

- Tailor records to permit requirements. Keep records simple and concise.
- Records should pertain only to the requirements contained in the permit. Avoid including unrelated information.
- Remember that all collected records are subject to public viewing through a Freedom of Information Act request if one is submitted.

One example of a recordkeeping requirement is general condition five (GC-5): The permittee must keep records for 5 years to enable DEQ to determine compliance with the terms of this permit. Tips for complying with GC-5 include the following:

- You do not have to keep these records on-site unless specifically required to do so.
- If you can access the information electronically, then that counts as "on-site."

#### F. Upset Condition Reporting

All upset conditions, resulting in violation of an applicable permit or rule, must be reported to DEQ. Upset Condition reporting requirements are contained in Rule 19.601. An "upset condition" is defined as an exceedance of applicable emission limitations lasting 30 or more minutes, in the aggregate, during a 24-hour period, unless otherwise specified in an applicable permit or regulation (NSPS regulations). DEQ may forego enforcement action for an exceedance if owner or operator demonstrates that:

- Equipment malfunction or upset and are not the result of negligence or improper maintenance; or
- Physical constraints on the ability of a source to comply with the emission standard, limitation or rate during startup or shutdown; and
- That all reasonable measures have been taken to immediately minimize or eliminate the excess emissions.



The facility must report the upset or breakdown of equipment to DEQ by the end of the next business day after the discovery of the occurrence.

The facility must also submit to DEQ, at its request, a full report of such occurrence, including the identification of and location of the process and control equipment involved in the upset and including a statement of all known causes and the scheduling and nature of the actions to be taken to eliminate future occurrences or to minimize the amount by which said limits are exceeded and to reduce the length of time for which said limits are exceeded.

### IX. Enforcement

#### A. What is an informal enforcement action?

An informal enforcement action is reviewed by Enforcement and is provided as a letter detailing violations found of a referenced air permit and/or applicable rules that at the time do not warrant a formal enforcement action.

You will not be required to do anything other than to correct the violation. In these instances, once you have solved the problem, you are not required to do anything further because you have come back into compliance with state rules and federal air regulations. The informal enforcement action letter simply becomes part of your compliance record. However, DEQ reserves the right to address any violations addressed in an informal enforcement action in the future if it is discovered at a later date that the facility is out of compliance for similar violations.

#### B. What is a formal administrative enforcement action?

A formal administrative enforcement action, depending upon the circumstances, is provided either as a CAO or as a NOV. This type of action incorporates an assessment of a civil penalty, corrective actions for violations, and other terms of the agreement into a legally binding document. Typically, a CAO is the primary response issued in the formal enforcement process for possible violations. When possible violations of state rules or federal regulations are discovered, a CAO is issued.

A NOV may be issued when violations are not settled through a CAO. A NOV initiates an administrative enforcement action before the APC&EC as set forth in APC&EC Rule 8.

# C. How should a response be provided to a formal administrative enforcement action?

First, a review of the circumstances surrounding the formal enforcement action and corrective actions/measures needed to return to an "in compliance" status should be determined. This information should be submitted in writing to DEQ OAQ Enforcement Branch. Then the corrective actions/measures should be implemented.



If corrective actions/measures require additional time to implement, please communicate a timeline to DEQ OAQ Enforcement Branch for the implementation of these actions/measures. In addition, there is some assistance through DEQ OAQ Compliance Monitoring Branch, OAQ Permits Branch, and DEQ OAQ Enforcement Branch in understanding the rules and regulations and what needs to be done to demonstrate compliance. If you have specific questions or technical assistance needs, please contact DEQ Enterprise Services or OAQ.

Provide all pertinent information that will help make an appropriate final decision about the violations noted in the formal administrative enforcement action. DEQ OAQ Enforcement Branch strives to ensure that all enforcement actions are resolved in a manner that is fair, consistent, and reasonable. Cooperation in addressing the violations and in communicating throughout the formal administrative enforcement action process is key to any resolution.

## D. What do I do if I receive a proposed Consent Administrative Order (CAO)?

When you receive a proposed CAO, please review the Findings of Fact and Order and Agreement sections for accuracy. If you agree with the proposed CAO, within 30 days sign and return the original embossed CAO to DEQ OAQ Enforcement Branch for processing. If you disagree with the proposed CAO, contact the enforcement analyst provided on the proposed CAO cover letter within 30 days. Be prepared to provide a response that contains mitigating information and/or documentation that has not already been considered.

# E. What happens when settlement negotiations are completed after the CAO has been initially proposed?

When a settlement agreement is reached after the proposed CAO has been received, any necessary and appropriate changes will be made, and the CAO will be re-proposed. Within 15 days, the original embossed CAO should be signed and returned to DEQ OAQ Enforcement Branch for processing.

## F. What happens if a settlement cannot be reached?

If a settlement cannot be reached through a CAO, either a NOV will be drafted and issued, or a complaint may be filed in Circuit Court. Upon issuance of a NOV, the respondent may appeal by filing a Request for Hearing with the Secretary of the APC&EC, in writing, within 30 days. Providing a written request within the 30-day timeframe, will entitle the respondent to an adjudicatory hearing pertaining to the allegations and matters provided in the NOV. See APC&EC Rule 8 for more information.

#### G. Does the Office of Air Quality (OAQ) have a penalty policy?

OAQ does have a penalty policy. The Uniform Penalty Policy can be accessed online at <a href="https://www.adeq.state.ar.us/uniform\_penalty\_policy.pdf">https://www.adeq.state.ar.us/uniform\_penalty\_policy.pdf</a>. Please contact DEQ OAQ Enforcement Branch for more information.



### H. Can I voluntarily disclose potential violations?

Yes. Information about how to disclose potential violations is in DEQ's <u>Environmental Self-Disclosure Incentive Policy</u>. Submittals for consideration under the Self-Disclosure Incentive Policy should be emailed to selfdisclosurepolicy@adeq.state.ar.us or mailed to:

Arkansas Department of Energy & Environment Division of Environmental Quality Office of Compliance 5301 Northshore Drive, North Little Rock, AR 72118-5317

The Self-Disclosure Incentive Policy has eight conditions that are evaluated based on the self-disclosure submittal that aid in penalty mitigation consideration during the enforcement process. (See the Self-Disclosure Incentive Policy for specific conditions.) In addition, self-disclosed issues are considered during the enforcement process by working to get a facility back into compliance as soon as possible.

There are two methods for reporting violations: self-disclosures and self-reporting. Penalty mitigation may be considered if violations are self-disclosed or self-reported. Self-disclosures stem from environmental audits or environmental management systems. They follow a specific submittal process, are evaluated against the eight Self-Disclosure Incentive Policy conditions, and allow for more penalty mitigation consideration than just the evaluation of factors in the <u>Uniform Penalty Policy</u>. Self-reporting generally occurs through a required report such as a Semi-Annual Monitoring Report or Annual Compliance Certification Report or an informal email/letter to the Compliance Branch. Typically, the penalty mitigation considered for self-reported violations is through the evaluation of factors in the Uniform Penalty Policy.

#### X. Resources

# A. Where can I access information concerning air permit applications and/or permits?

Access to a <u>list of air permit applications</u>, <u>permitted facilities</u>, and some permits may be obtained by following the links on our website under the Databases section for <u>Air Permit Applications Processing Data and DEQ Facility and Permit Summary (PDS).</u>

## B. Where can I obtain a copy of OAQ's permits?

Electronic copies of most of OAQ's permits may be downloaded from the DEQ website. All the permit files are in Adobe Acrobat format and can be accessed on the <u>DEQ Facility and Permit Summary (PDS)</u> search page. Use the search criteria and select the entry for the "Active" air permit to obtain the current permit for the facility.



# C. Is there a list of draft air permits?

Yes. A list of draft air permits is updated daily and can be found on the DEQ website on the <u>Draft Air Permits Listing</u> page.

# D. Where can I obtain a copy of Arkansas's air rules?

Electronic copies of all APC&EC air rules (Rules 18, 19, 21, 26, 31, and 33) are available in PDF format on the DEQ website: <a href="http://www.adeq.state.ar.us/regs/">http://www.adeq.state.ar.us/regs/</a>



# XI. Appendices

Appendix A: Useful Links for Air Permitting

Appendix B: Incorporation by Reference in Arkansas Air Rules

Appendix C: Historical Regulation of Greenhouse Gases (GHG)

### **Appendix A: Useful Links for Air Permitting**

#### DEQ OAQ Permits Branch

OAQ Permits Branch Homepage:

http://www.adeq.state.ar.us/air/permits/

Air Permits Forms and Instructions:

http://www.adeq.state.ar.us/air/permits/instructions.aspx

DEQ Non-Criteria Pollutant Control Strategy:

The DEQ non-criteria pollutant strategy is a tool used by the Department for the evaluation of Hazardous Air Pollutant (HAP) and non-criteria pollutant emissions. It is important to note that the Strategy is not a regulation, but rather a screening methodology used by the Division to determine if the emission of air contaminants from the facility may occur in quantities sufficient to constitute air pollution as defined by the Arkansas Air Pollution Control Code (Rule 18).

https://www.adeq.state.ar.us/air/permits/pdfs/non\_criteria\_strategy.pdf

Modeling Instructions for Air Permitting:

For minor (non PSD) permit modifications, ambient air evaluations are required by the State Implementation Plan and as summarized in the DEQ Air Permit Screening Modeling Instructions. If required and no analysis is provided with an air permit application, DEQ staff will conduct the screening analysis.

http://www.adeq.state.ar.us/air/permits/pdfs/modeling-instruction.pdf

Air Permit Fee Factor Memo:

http://www.adeq.state.ar.us/air/permits/pdfs/fee\_factor.pdf

Air Permit Applications Processing and Miscellaneous Requests Tracking Databases: http://www.adeq.state.ar.us/air/permits/applications.aspx

#### **DEQ ePortal Permitting System**

ePortal Homepage:

https://eportal.adeq.state.ar.us/

ePortal User Guide:

https://eportal.adeq.state.ar.us/webfiles/ADEQ/ADEQ\_ePortal\_Guide.pdf

ePortal Quick-Start Guide:

https://eportal.adeq.state.ar.us/webfiles/ADEQ/Quick\_Start.pdf

ePortal Air Permits Branch Homepage:

https://eportal.adeq.state.ar.us/Home/e8f74e04-6779-45e1-99af-b8b3338f851c

ePortal Air Permit Application Instructions:

https://eportal.adeq.state.ar.us/webfiles/Air/Instructions/Air Permit Application Forms Instructions.pdf

ePortal Air On-Track Assistance Meeting Program:

Shortly after the draft or final issuance of an initial permit, significant modification, or a renewal, you may request an On-Track Assistance meeting with OAQ. During an On-Track Assistance meeting you will discuss your permit requirements with both an inspector and a permit engineer to better understand how the Division interprets key provisions, and what the inspector will look for during an inspection. The On-Track Assistance meeting ensures that the facility, OAQ Permits Branch, and DEQ OAQ Compliance Monitoring Branch have a common understanding of how to interpret permit provisions and prevent potential confusion that could result in unintentional violations.

 $\frac{https://eportal.adeq.state.ar.us/app/?allowAnonymous=true\#/formversion/2360340f-33bc-4678-8b66-117769fd8c5f?FormTag=Air\_OTA$ 

### **Regulatory Information**

North American Product Classification System (NAPCS):

https://www.census.gov/eos/www/napcs/

Part 63 NESHAP Delegated to DEQ:

 $\underline{https://www.epa.gov/ar/national-emission-standards-hazardous-air-pollutants-neshap-part-63-arkansas}$ 

Part 61 NESHAP Delegated to DEQ:

https://www.epa.gov/ar/national-emission-standards-hazardous-air-pollutants-neshap-part-61-arkansas

# Appendix B: Incorporation by Reference in Arkansas Air Rules

The following tables outline federal rules and effective dates as of April 23, 2021 for provisions that are incorporated by reference in Rules 18, 19, and 26.

Rule 18	Reference	Effective Date
18.2	42 U.S.C. 7401, et seq.	Rule 18 effective date
18.2	42 U.S.C. 7401, et seq.; CAA § 112	Rule 18 effective date
18.2	40 CFR Part 50; 78 FR 3086	January 15, 2013
	40 CFR Part 50, App. L; 71 FR 61226	effective date of federal rule published
18.2	and 40 CFR Part 53, App. C	on 10/17/2006
	40 CFR Part 50, App. J: 52 FR 29467	effective date of federal rule published
18.2	and 40 CFR Part 53	on 8/7/1987 (no date for Part 53)
	40 CFR Part 51, Appendix	effective date of federal rule published
18.2	M: 79 FR 18452	on 4/2/2014
10.2	40 CFR Part 51, Appendix	effective date of federal rule published
18.2	M: 79 FR 18452	on 4/2/2014
	Title IV [Acid Deposition Control, Parts 72-78], CAA and any regulations	
	promulgated thereunder	
	PART 72 - PERMITS REGULATION	
	PART 73 - SULFUR DIOXIDE	
	ALLOWANCE SYSTEM	
10.2	PART 74 - SULFUR DIOXIDE OPT-	Il., 1 1007
18.2	INS PART 75 - CONTINUOUS EMISSION	July 1, 1997
	MONITORING  PART 76 ACID RAIN NUTROCEN	
	PART 76 - ACID RAIN NITROGEN	
	OXIDES EMISSION REDUCTION	
	PROGRAM	
	PART 77 - EXCESS EMISSIONS	
	PART 78 - APPEAL PROCEDURES	
18.2	Title I, CAA	July 2, 2008
18.301(B)(3)	40 CFR Parts 60, 61, or 63	June 27, 2008
18.305(A)(2)	§§ 111, 112, and 114 of the CAA	February 15, 1999
	,	July 1, 1997
18.501(B)	Appendix A	0 diy 1, 1997
	40 CFR Part 51 Appendix M: 70 FR	effective date of federal rules
19 1002(E)		
10.1002(Γ)		
	1	
	Appendix A: 57 FK 62002	A: December 29, 1992
18.501(B) 18.1002(F)	40 CFR Part 60, Appendix A  40 CFR Part 51, Appendix M: 79 FR 18452; 40 CFR Part 60, Appendix A: 79 FR 11257; 40 CFR Part 61, Appendix B: 65 FR 621621; 40 CFR Part 63, Appendix A: 57 FR 62002	July 1, 1997  effective date of federal rules published on: App M: April 2, 2014; Part 60, App A: February 27, 2014; App B: October 17, 2000; Part 63, App A: December 29, 1992

		A man De affactives data of the fordered
	40 CFR Part 60, Appendix Bquality assurance procedures in 40 CFR Part 60, Appendix F	App B: effective date of the federal
		final rule published by EPA in the
		Federal Register on February 27, 2014
18.1003(A)		(79 FR 11271) <u>App F:</u> effective date
		of the federal final rule published by
		EPA in the Federal Register on
		February 27, 2014 (79 FR 11274)
	40 CFR Part 51, Appendix P: 51 FR 40675	as of the effective date of the federal
		final rule published by EPA in the
		Federal Register on November 7, 1986
18.1003(B)	40 CFR Part 51, Appendix P, Section 4.0	November 7, 1986
	Min Data Reqs: 51 FR 40675	November 7, 1980

Rule 19	Reference	Effective Date
19.1	42 U.S.C. § 7401 et seq.	July 1, 1997
19.103	NAAQs (40 CFR Part 50), subparts of NSPS (40 CFR Part 60), PSD (40 CFR § 52.21), Minor NSR (Ch. 4)(40 CFR Part 51), subparts of the NESHAPS (40 CFR Parts 61 and 63)	July 1, 1997
19.2	40 CFR Part 98: 78 FR 71948	November 29, 2013
19.2	42 U.S.C. 7401, et seq. and its implementing regulations	Rule 19 effective date
19.2	42 U.S.C. § 7401 et seq.	Rule 19 effective date
19.2	42 U.S.C. § 7401 et seq.	July 1, 1997
19.2	42 U.S.C. 7401, et seq.	Rule 19 effective date
19.2	40 CFR Part 50; 78 FR 3086	January 15, 2013
19.2	40 CFR Part 60 Appendix A; 79 FR 11257	February 27, 2014
19.2	40 CFR Part 50	October 17, 2006
19.2	40 CFR Part 50, App. J: 52 FR 29467 and 40 CFR Part 53	Part 50 as of effective date of federal rule published on 8/7/1987; Part 53 as of December 8, 1984
19.2	40 CFR Part 51, Appendix M: 79 FR 18452	effective date of federal rule published on April 2, 2014
19.2	40 CFR Part 51, Appendix M: 79 FR 18452	effective date of federal rule published on April 2, 2014
19.2	42 U.S.C. § 7401 et seq.	July 1, 1997
19.2	40 CFR Part 60 Appendix A	July 1, 1997

19.304	certain delegated subparts of the NSPS (40 CFR Part 60), provisions designed for PSD (40 CFR § 52.21), and certain delegated subparts of the NESHAPS (40 CFR Parts 61 and 63), promulgated as of January 27, 2006.	January 27, 2006
19.407(C)(4)(c)	Clean Air Act	February 15, 1999
19.412	Appendix W of 40 CFR Part 51	November 9, 2005; 70 FR 68228
19.504	40 CFR §§ 51.100 (ff) - (kk)	September 12, 1986
19.702(F)	40 CFR Part 51, Appendix M: 79 FR 18452; 40 CFR Part 60, Appendix A: 79 FR 11257; 40 CFR Part 61, Appendix B: 65 FR 621621; 40 CFR Part 63, Appendix A: 57 FR 62002	effective date of federal rules published on: App M: April 2, 2014; Part 60, App A: February 27, 2014; App B: October 17, 2000; Part 63, App A: December 29, 1992
19.703(A)	40 CFR Part 60, Appendix B quality assurance procedures in 40 CFR Part 60, Appendix F	App B: effective date of the federal final rule published by EPA in the Federal Register on February 27, 2014 (79 FR 11271). App F: effective date of the federal final rule published by EPA in the Federal Register on February 27, 2014 (79 FR 11274)
19.703(B)	40 CFR Part 51, Appendix P or in 40 CFR Part 60 40 CFR Part 51, Appendix P, Section 4.0	App P: November 7, 1986 (51 FR 40675); 40 CFR Part 60: August 30, 1992 November 7, 1986; 51 FR 40675
19.803	40 CFR Part 60 Appendix A	May 25, 1979
19.804(B)	40 CFR 60.8	February 27, 2014
19.903(B)(2) and (5)	standards promulgated under CAA 111; no pollutants listed in CAA 112, or added to 112(b)(2), UNLESS the pollutant is also regulated under CAA 108	July 27, 2012
19.903(B)(6)	77 FR 65107, Oct 25, 2012	October 25, 2012
19.903(D)	definitions in 40 CFR 52.21(b) and 40 CFR 51.301	October 20, 2010
19.904(A)	40 CFR § 52.21 (a)(2) - (bb)	November 29, 2005
19.904(A)(1)	40 CFR § 52.21 (aa)	August 13, 2012
19.904(A)(2)	40 CFR § 52.21(r)(6): 72 FR 72607	December 21, 2007
19.904(A)(3)	40 CFR §§ 52.21(b)(23), 52.21(i)(5)(ii) - (iii)	May 16, 2008
19.904(A)(4)	40 CFR §§ 52.21(b)(14)(i) - (iii), 52.21(b)(15), 52.21(c), 52.21(k)(1), and 52.21(p)	October 20, 2010
19.904(B)	40 CFR § 51.166(f)(1)(iii)	November 29, 2005
19.904(C)	40 CFR § 52.21(o)	November 29, 2005
19.904(C)(2)	40 CFR § 52.21(q)	November 29, 2005
19.904(D)	40 CFR § 52.21(p)(1)	October 20, 2010

19.904(G)	40 CFR § 52.21	June 3, 2010
19.904(G)(2)(i)	40 CFR Part 98: 78 FR 71948	November 29, 2005
19.904(G)(3)	40 CFR § 52.21(a)(2)(iv), 40 CFR § 52.21(b)(3), 40 CFR § 52.21(b)(23) and 40 CFR § 52.21(b)(23)(ii)	November 29, 2005
19.1004(E)(2)(a)(ii)	Clean Air Act	Rule 19 effective date
19.1401	40 CFR Part 96, Subparts AAAA-HHHH	CAIR NOx Ozone Season Trading Program, as finalized by the EPA on May 12, 2005, and further revised by EPA on April 28, 2006, with correcting amendments on December 13, 2006, and on October 19, 2007
19.1502	40 CFR § 51.301	June 22, 2007
19, A-1, Group B	Section 112(r)	July 1, 1997
	Federal Register Notice	Effective Date
	76 FR 54294	August 31, 2011
	73 FR 66964	November 12, 2008
	75 FR 6474	February 9, 2010
	61 FR 52852	October 8, 1996
NAAQS Table	73 FR 16436	March 27, 2008
	78 FR 3085	January 15, 2013
	71 FR 61144	October 17, 2006
	71 FR 61144	October 17, 2006
	75 FR 35520	June 22, 2010
	38 FR 25678	September 14, 1973

Rule 26	Reference	<b>Effective Date</b>
26.102	40 CFR Part 70	November 27, 2001
26.2	42 U.S.C. 7401, et seq.	July 23, 1993
26.2	40 CFR Part 98: 78 FR 71948	effective date of federal rule published on 11/29/2013
26.2	40 CFR Part 70	November 27, 2001
26.303(B)	40 CFR Part 60, Subpart AAA	July 23, 1993
26.303(C)	40 CFR Part 61, Subpart M, Section 61.145	July 23, 1993
26.401	40 CFR Part 70; 75 FR 31607	June 3, 2010
26.603(B)	40 CFR Part 70; 75 FR 31607	June 3, 2010
26.604(B)	40 CFR Part 70; 75 FR 31607	June 3, 2010
26.803	40 CFR 70.6(a) and (c); 75 FR 31607	June 3, 2010
26.1101	40 CFR 70.9; 75 FR 31607	June 3, 2010
26.1202	40 CFR Part 72 and 76, and parts of 73-75, 77, 78 where referenced therein); 64 FR 55838	October 15, 1999

### **Appendix C: Historical Regulation of Greenhouse Gases (GHG)**

A. Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule

On April 2, 2007, in *Massachusetts v. EPA*, 549 U.S. 497 (2007), the Supreme Court found that GHG are air pollutants covered by the CAA. On December 7, 2009, EPA issued an endangerment finding regarding greenhouse gases under section 202(a) of the CAA. Specifically, the Administrator of EPA found that the current and projected concentrations of the six key well-mixed GHG—carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6)—in the atmosphere "threaten the public health and welfare of current and future generations."

On June 3, 2010, EPA promulgated the "Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule" ("Tailoring Rule"). The Tailoring Rule phased in the GHG PSD and Title V permitting requirements and set GHG emissions thresholds that define when permits under these permitting programs are required based on the level of GHG emissions from a new or modified source.

- Step 1 (January 2, 2011 to June 30, 2011) only applied to sources that were already required to obtain a PSD or Title V permit (i.e., "anyway sources").
- Step 2 (on or after July 1, 2011) extended the PSD and Title V requirements to sources that only emitted GHG if those emissions exceeded certain levels. (Step 2 was invalidated by <u>Utility Air Regulatory Group v. EPA</u>, June 23, 2014.)
- Step 3 (issued on June 29, 2012) retained the permitting thresholds that were established in Steps 1 and 2 and improved the usefulness of plantwide applicability limitations (PAL) by, among other things, allowing GHG PAL to be established on a carbon dioxide equivalent (CO2e) basis. In general, a PAL is a facility-wide permit limit or cap for a regulated NSR pollutant.
- Step 4 would have required EPA to study and consider further phasing-in the GHG permitting requirements at lower GHG emission thresholds.

The D.C. Circuit Court ordered that the regulations under review be vacated to the extent they require a stationary source to obtain a PSD or Title V permit solely because the source emits or has the potential to emit GHG above the applicable thresholds, and that the EPA consider whether any further revisions to its regulations are appropriate and, if so, that it undertake to make such revisions.

On October 3, 2016, EPA proposed a rule to remove or revise certain regulatory provisions from the PSD and Title V regulations to conform those regulations to the D.C. Circuit Court's decision and to establish a 75,000 tpy CO2e Significant Emission Rate for GHG. As of the last revision date of this guidance document, the proposed rule has not yet been finalized.

B. New Source Performance Standards for Greenhouse Gases Emissions from Electric Generating Units

Effective October 23, 2015, EPA promulgated a NSPS for EGUs that covers the emissions of GHG from new, modified, or reconstructed sources of greenhouse gas emissions. 40 CFR § 60.5509 contains more information on facilities subject to that standard.

On December 6, 2018, EPA proposed to revise the NSPS for GHG emissions from new, modified, and reconstructed fossil fuel-fired power plants. After further analysis and review, EPA proposes to determine that the best system of emission reduction (BSER) for newly constructed coal-fired units, is the most efficient demonstrated steam cycle in combination with the best operating practices. This proposed BSER would replace the determination from the 2015 rule, which identified the BSER as partial carbon capture and storage. The federal register notice for that proposal can be found here:

https://www.federalregister.gov/documents/2018/12/20/2018-27052/review-of-standards-of-performance-for-greenhouse-gas-emissions-from-new-modified-and-reconstructed