

NOTICE OF PROPOSED RULEMAKING
TITLE 18. ENVIRONMENTAL QUALITY
CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL

PREAMBLE

1. Permission to proceed with this proposed rulemaking was granted under A.R.S. § 41-1039(B) by the governor on:

August 20, 2024

2. Articles, Parts, or Sections Affected (as applicable) Rulemaking Action

R18-2-101	Amend
R18-2-201	Amend
R18-2-301	Amend
R18-2-306	Amend
R18-2-310.01	Amend
R18-2-311	Amend
R18-2-312	Amend
R18-2-334	Amend
R18-2-405	Amend
R18-2-503	Amend

3. Citations to the agency’s statutory rulemaking authority to include the authorizing statute (general) and the implementing statute (specific):

Authorizing statutes: A.R.S. §§ 49-404, 49-406, and 49-425

Implementing statutes: A.R.S. §§ 49-426

4. Citations to all related notices published in the Register as specified in R1-1-409(A) that pertain to the record of the proposed rule:

Notice of Rulemaking Docket Opening: 30 A.A.R. 2876, Issue Date: September 20, 2024, Issue Number: 38, File Number: R24-176

5. The agency’s contact person who can answer questions about the rulemaking:

Name: Steve Burr

Title: Principal Environmental Specialist

Division: Air Quality Division

Address: Arizona Department of Environmental Quality
1110 W. Washington Ave.
Phoenix, AZ 85007

Telephone: (602) 771-4251 (This number may be reached in-state by dialing 1-800-234-5677 and entering the seven digit number.)

E-mail: airplanning@azdeq.gov

Web site: <https://www.azdeq.gov/rulemaking-new-source-review-pm25-national-ambient-air-quality-standards>

6. An agency's justification and reason why a rule should be made, amended, repealed, or renumbered, to include an explanation about the rulemaking:

Summary.

ADEQ proposes to amend its air quality rules (1) to adopt Clean Air Act (CAA) New Source Review (NSR) requirements for serious ozone nonattainment areas, (2) to improve the clarity of the minor NSR rules, (3) to cure deficiencies identified by EPA in its March 18, 2015 proposed limited approval/disapproval of a revision to the SIP designed to update Arizona's federally approved NSR program, (4) to update its rule establishing the annual ambient air quality standard for PM_{2.5} to reflect recent changes by EPA, and (5) to fix typos and incorrect cross-references that the Department has identified in various rules.

Background.

Serious Ozone Area Nonattainment New Source Review

The Phoenix-Mesa nonattainment area (NAA) for the 2015 ozone National Ambient Air Quality Standards (NAAQS) is currently classified as moderate, but will be reclassified as serious within the next year, because it has failed to attain the NAAQS by the August 3, 2024 deadline. A revised SIP satisfying all requirements for a serious ozone nonattainment area will be due by the end of 2025.

ADEQ's NNSR program applies in the portions of Pinal and Gila Counties included in the Phoenix-Mesa NAA. (The portion of the NAA in Maricopa County is subject to that county's NNSR program.) The state's NNSR program therefore must satisfy the serious NAA NNSR requirements in CAA § 182(c) in order for EPA to approve the Phoenix-Mesa serious area SIP.

ADEQ's rules currently satisfy all but one of the CAA §182(c) requirements for serious area NNSR. The state's rules do not implement the requirements in CAA 182(c)(6) for calculating whether emissions increases constitute a major modification to a major source.

In areas other than serious and above ozone nonattainment areas (i.e. marginal and moderate ozone nonattainment areas, NAAs for other pollutants, and attainment areas) the following calculation method is employed to determine whether a major modification will occur: The permit applicant calculates the emissions increase projected to occur as a result of a particular project. If that increase is below the relevant significant level (40 tons per year in a moderate NAA), the project is *not* subject to NNSR. If the increase from the particular project is above significant, the applicant must total all emissions increases and decreases that occurred over the previous five years. If that "net emissions increase" is also greater than significant, NNSR applies to the project. Otherwise, NNSR does not apply. In other words, a project must result in *both* a significant one-time increase and a significant net increase over five years in order for NNSR to apply.

In a serious ozone NAA, CAA § 182(c)(6) requires that NNSR applicability be determined solely on the basis of the net emissions increase. If the sum of decreases and increases over a five-year period exceeds the significant level (25 tons per year in a serious NAA), NNSR applies, regardless of whether the increase from any particular project during that five years is greater than significant.

For example, suppose an existing major source engages in the following projects:

Project	Resulting Increase/Decrease of VOC Emissions
2024 Expansion	+ 20 TPY
2026 Pollution Control Installation	- 10 TPY
2028 Expansion	+ 20 TPY
Net Impact	+ 30 TPY

Under the usual calculation methodology, neither of the expansion projects would be subject to NNSR, because individually they are both less than significant (25 TPY). Under CAA § 182(c)(6), NNSR would apply to the 2028 project, because a greater than significant net increase occurs over a five-year period.

In order to secure approval of the Phoenix-Mesa serious ozone NAA SIP, ADEQ's rules must be amended to incorporate the § 182(c)(6) approach to determining NNSR applicability. If Arizona fails to submit a SIP satisfying § 182(c) or EPA disapproves the SIP, and the failure or disapproval is not cured within the time periods specified in the CAA, the Phoenix-Mesa area will be subject to 2-for-1 offset sanctions and the loss of most federal funding for transportation projects in the Phoenix-Mesa 2015 ozone NAA.

Minor NSR

In addition to requiring specific major NSR programs for nonattainment (NNSR) and attainment (Prevention of Significant Deterioration) areas, CAA § 110(a)(2)(C) requires SIPs to "include a program to provide for the ... regulation of the modification and construction of any stationary source within the

areas covered by the plan as necessary to assure that national ambient air quality standards are achieved." Programs satisfying this requirement are known as "minor NSR."

ADEQ adopted a minor NSR program (R18-2-334) in 2012. Generally, the program requires certain new sources and modifications to demonstrate through modeling that emissions from the source or modification will not interfere with attainment of the NAAQS. These rules have been fully approved by EPA.

As certain stakeholders have noted, the minor NSR program does not clearly establish under what circumstances air pollution controls and limitations may be considered when demonstrating non-interference with the NAAQS. ADEQ's position is that under current rules, the inclusion of limits designed to protect the NAAQS is implicitly authorized by the minor NSR rule itself in R18-2-334(C)(2). ADEQ recognizes, however, that it would be preferable to make the authority to include such limits explicit.

In another rulemaking addressing the subject of voluntary permit conditions generally, ADEQ is proposing to add a new section R18-2-306.03 to authorize the inclusion of voluntary limits designed to assure compliance with the NAAQS, as well as other air quality requirements. On adoption, this rule will establish explicit authority to include limits assuring that a source's emissions will comply with minor NSR. In this rulemaking, ADEQ is proposing to amend R18-2-334 to make its language consistent with the proposed new rule.

2012 NSR SIP Deficiencies

On October 29, 2012, ADEQ submitted a SIP revision containing rule revisions designed to bring the state's NSR SIP into full compliance with the CAA. On December 2, 2015, EPA published a Notice of Final Rulemaking granting limited approval/limited disapproval ("LA/LD") of ADEQ's submittal. EPA proposed this action "because, although we find that the new and amended rules meet most of the applicable requirements for such permit programs and that the SIP revisions improve the existing SIP, we have found certain deficiencies that prevent full approval."

ADEQ corrected nearly all of the deficiencies identified in EPA's LA/LD and obtained final approval of its major and minor NSR programs in 2018 and 2021, respectively. However, three rules, R18-2-310.01, R18-2-311, and R18-2-312, still need to be amended to address deficiencies identified by EPA.

Section R18-2-310.01 requires prompt reporting of emissions in excess of an emissions limit. EPA did not act on R18-2-310.01 in 2015 because it included a cross-reference to R18-2-310, which provides an affirmative defense to the imposition of monetary penalties for excess emissions caused by malfunctions. In 2015 EPA interpreted the Clean Air Act as prohibiting such affirmative defenses in SIPs, and that

interpretation has since been upheld by the federal court of appeals for the D.C. Circuit. Section R18-2-310.01 therefore needs to be amended to remove the cross-reference.

Sections R18-2-311 and R18-2-312 establish emission testing requirements for state emission limits. In 2015, EPA promulgated limited disapproval of these sections, because they allow the use of equivalent and alternative test methods without EPA approval in conflict with CAA sections 110(a)(2)(A) and 110(i). To resolve this objection, ADEQ is proposing to add a requirement for EPA approval of equivalent and alternative methods to each rule.

New PM_{2.5} National Ambient Air Quality Standards

On February 7, 2024, EPA published a final rule to amend the NAAQS for fine particulate pollution, also known as fine particulate matter (PM_{2.5}). EPA revised the level of primary, or health-based, annual PM_{2.5} NAAQS from 12.0 micrograms per cubic meter (µg/m³) to 9.0 µg/m³. EPA retained the primary and secondary (welfare-based) 24-hour PM_{2.5} standards, the secondary annual PM_{2.5} standard, and the primary and secondary PM₁₀ standards.

ADEQ is proposing to amend R18-2-201(B)(1)(a) to reflect this change.

Technical Amendments

ADEQ is also taking the opportunity to correct typos and incorrect cross-references in a number of other rules.

7. A reference to any study relevant to the rule that the agency reviewed and proposes either to rely on or not to rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

Not applicable.

8. A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rulemaking will diminish a previous grant of authority of a political subdivision of this state:

Not applicable.

9. The preliminary summary of the economic, small business, and consumer impact:

The following discussion addresses each of the elements required for an economic, small business and consumer impact statement (ESBCIS) under A.R.S. § 41-1055.

An identification of the rule making.

The rulemaking addressed by this ESBCIS is the adoption of amendments to (1) ensure ADEQ's nonattainment new source review (NNSR) rules fully comply with the requirements for a serious ozone nonattainment area (NAA), (2) clarify when voluntarily assumed controls are considered in determining ambient impacts under the minor NSR rules, (3) require EPA approval of alternative or equivalent test methods before they are authorized by ADEQ under R18-2-311 or R18-2-312, (4) update ADEQ's ambient standards for PM_{2.5} to conform to recent amendments by EPA, (5) eliminate an unnecessary cross-reference to R18-2-310 in R18-2-310.01, and (5) correct errors in certain rules.

Items (2), (4), (5), and (6) are very unlikely to result in any economic, small business, or consumer impact and are therefore not addressed in this ESBCIS. EPA's amendments to the PM_{2.5} NAAQS will apply in Arizona regardless of whether they are reflected in R18-2-201, and the clarifications and corrections proposed will have no substantive impact on the regulated community or the public.

This ESBCIS will therefore focus on items 1 (NNSR) and 3 (alternative test methods).

An identification of the persons who will be directly affected by, bear the costs of or directly benefit from the rule making.

NNSR Amendment

NNSR is a pre-construction permit program designed to assure that major industrial developments in areas that fail to attain the NAAQS do not cause further deterioration of air quality. Facilities subject to the program are required to offset any emissions increases with decreases from other facilities and to install control technology meeting the very stringent lowest achievable emission rate (LAER) standard.

Businesses that will potentially be subject to the NNSR amendment are those that seek to modify a major source of volatile organic compounds (VOC) or nitrogen oxides (NO_x) in the areas of Pinal and Gila Counties included in the Phoenix-Mesa ozone NAA. Major sources of VOC are generally large industrial facilities that burn fossil fuels, such as power plants, or that use extensive amounts of solvents in their operations, such as semiconductor and wood furniture manufacturers. A modification is a physical or operational change that will result in an increase in air pollutant emissions. There are currently no major sources of VOC or NO_x in the relevant area, but if a major source were built in the area and later sought to construct modifications, those modifications could potentially be subject to NNSR as a result of the amendment.

As explained in sections (a) and (c) below, it is unlikely that any business requiring a permit from ADEQ will be affected by the NNSR amendments included in this rulemaking. If a business is required to obtain an NNSR permit as a result of this rulemaking, however, the costs of compliance are likely to be high. These costs are unavoidable, because NNSR is a federally required program and will be implemented by

EPA if it is not by the state. Moreover, any costs imposed would be at least partially offset by the benefits of preventing additional degradation of air quality in the Phoenix-Mesa ozone nonattainment area.

Amendments to R18-2-311 and R18-2-312

Any business that requires an air quality permit from ADEQ could potentially be subject to the amendments to R18-2-311 and R18-2-312. Typical businesses subject to ADEQ's permit program include copper mines and smelters, rock quarrying and crushing operations, concrete batch plants, asphalt plants, and landfills.

A cost benefit analysis of the following:

(a) The probable costs and benefits to the implementing agency and other agencies directly affected by the implementation and enforcement of the rule making.

NNSR Amendment

ADEQ's cost of implementing the amendment to the NNSR applicability rules for modifications described in section 5 above will likely be low.

The change in the methodology for calculating whether a modification is subject to NNSR described in section 5 will make it somewhat more likely that a given modification will require an NNSR permit. Processing an NNSR permit would be a resource intensive and therefore costly undertaking for the Department.

As noted above, however there are currently no major sources that could potentially be subject to the NNSR amendment in the portion of the Phoenix-Mesa ozone NAA subject to ADEQ's permitting jurisdiction. A new major source of VOC or NO_x would have to be constructed in the area (which would require an NNSR permit under existing rules) and then later seek approval of two or more modifications for the NNSR amendment to be potentially applicable. (At least two modifications would be required for the NNSR amendment to have effect, because there would be no previous emissions increases to consider in the calculation of the net emissions increase for the first modification). ADEQ believes that this is an unlikely scenario, given the characteristics of the relevant area.

Even if this scenario were to occur, it is unlikely that the amended NNSR applicability rules would result in the imposition of NNSR requirements. A series of emissions increases and decreases similar to those described in the example in section 5 above would have to occur, and even in that case, the source could still avoid NNSR applicability by voluntarily reducing emissions in operations unaffected by the modifications.

Thus, ADEQ is unlikely to incur the costs of processing any NNSR permits as a result of the proposed amendment. In addition, any costs incurred would be recouped through permit fees.

Amendments to R18-2-311 and R18-2-312

The amendments to R18-2-311 and R18-2-312 requiring ADEQ to obtain EPA approval of equivalent and alternative test methods could result in an increase in the processing time for some permits. Based on past permitting experience, ADEQ believes that relatively few permit applications will be affected and that the increased costs per application will be low.

(b) The probable costs and benefits to a political subdivision of this state directly affected by the implementation and enforcement of the rule making.

ADEQ has delegated authority to administer its NNSR program to the Pinal County Air Quality Control District (PCAQCD). The discussion above regarding the costs of the proposed rule amendments for ADEQ would therefore apply to PCAQCD as well. Again, these costs are likely to be low.

ADEQ has not identified any other potential impacts to political subdivisions.

(c) The probable costs and benefits to businesses directly affected by the rule making, including any anticipated effect on the revenues or payroll expenditures of employers who are subject to the rule making.

NNSR Amendment

As discussed in section (a) of this cost-benefit analysis, although the NNSR amendment makes it slightly more likely that NNSR will apply to a given modification to a major source of VOC or NO_x in the Pinal and Gila County portions of the Phoenix-Mesa ozone NAA, it is unlikely that the circumstances necessary for the amendment to have this impact will occur in that area. Thus, the overall costs of the NNSR amendment are expected to be low.

In the unlikely event that a modification became subject to NNSR as a result of the proposed amendment, the cost to that specific facility would likely be high. A modification subject to NNSR must obtain emission reductions from other sources in the nonattainment area to offset the emission increase resulting from the modification. VOC and NO_x offsets in the Phoenix-Mesa ozone nonattainment area are scarce and therefore expensive. In addition, the modification would have to comply with the "lowest achievable emission rate" standard. This standard requires compliance with the strictest standard applicable to the same type of source anywhere in the United States, regardless of cost.

As discussed above, the NNSR amendment is necessary to comply with federal requirements for the program. If ADEQ failed to adopt this amendment, the same regulation would ultimately apply to sources in Arizona through the adoption of a federal implementation plan (FIP) or the application of 40 CFR Part 51, Appendix S. In addition, Title I, Part D of the CAA imposes a limited time for ADEQ to adopt the NSR amendment. Failure to meet the statutory timeframe would result in sanctions by the federal

government, including the loss of federal highway funding. Thus, failure to adopt the amendment would not in the long run result in the avoidance of any costs of compliance, but would result in a substantial negative impact on the state's economy. In addition, any costs imposed through application of NNSR to a facility subject to ADEQ's permit program would be at least partially offset by the benefits of preventing additional degradation of air quality in the Phoenix-Mesa ozone nonattainment area.

Amendments to R18-2-311 and R18-2-312

As discussed in section (a) of the cost-benefit analysis, amendments to R18-2-311 and R18-2-312 could result in a slight increase in the processing time for some permits. ADEQ believes that relatively few permit applications will be affected and that the increased costs for the permit applicant will be low.

A general description of the probable impact on private and public employment in businesses, agencies and political subdivisions of this state directly affected by the rule making.

For the reasons expressed in the cost-benefit analysis, ADEQ believes the overall costs of the proposed amendments will be low and are therefore unlikely to impact public or private employment.

As discussed, in the unlikely event that a modification became subject to NNSR as a result of the proposed amendment, the cost to that specific facility would likely be high. It might even be impossible for the facility to construct a modification as a result the unavailability of emission offsets. Thus, it is possible that the NNSR amendment could lead to the loss of employment associated with a planned modification. For the reasons given above, however: this impact is unlikely to occur; the regulatory change establishing this potential impact is unavoidable in the long run; and the imposition of sanctions as a result of a failure to adopt the amendment would probably have employment impacts far in excess of the impact from the change.

A statement of the probable impact of the rule making on small businesses.

(a) An identification of the small businesses subject to the rule making.

Under A.R.S. § 41-1001(21):

“Small business” means a concern, including its affiliates, which is [1] independently owned and operated, which is [2] not dominant in its field and which [3] employs fewer than one hundred full-time employees or which had gross annual receipts of less than four million dollars in its last fiscal year.

Because NNSR applies to very large industrial facilities, it is highly unlikely that the amendment to the NNSR rules would affect a small business.

Some operations subject to ADEQ's permitting program, such as concrete batch plants and asphalt plants, may qualify as small businesses. These businesses could be subject the amendments to R18-2-311 and

R18-2-312. For the reasons discussed above, the impact of these amendments on regulated businesses is expected to be low.

(b) The administrative and other costs required for compliance with the rule making.

See sections (a) and (c) of the cost-benefit analysis.

(c) A description of the methods that the agency may use to reduce the impact on small businesses.

(i) Establishing less costly compliance requirements in the rule making for small businesses.

States are required to comply fully with the federal Clean Air Act. Thus, there is no less costly alternative to the proposed amendments.

(ii) Establishing less costly schedules or less stringent deadlines for compliance in the rule making.

These amendments do not establish or change a schedule or deadline for compliance.

(iii) Exempting small businesses from any or all requirements of the rule making.

To the extent a small business is subject to the state air quality permit program, it is not possible to exempt it from the proposed amendments.

(d) The probable cost and benefit to private persons and consumers who are directly affected by the rule making.

The proposed amendments are not expected to directly affect consumers or private persons, other than the owners and operators of sources requiring a state air quality permit. The impacts of the amendments on the latter are discussed above.

A statement of the probable effect on state revenues.

Since any costs associated with the rulemaking will be recoverable through air quality permit fees, there will be no net effect on state revenues.

A description of any less intrusive or less costly alternative methods of achieving the purpose of the rule making.

ADEQ was not able to identify any less intrusive or costly alternative methods for achieving the purpose of the rulemaking.

10. The agency's contact person who can answer questions about the economic, small business, and consumer impact statement:

Name: Steve Burr

Title: Principal Environmental Specialist

Division: Air Quality Division

Address: ADEQ, Air Quality Improvement Planning Section
1110 West Washington
Phoenix, AZ 85007

Telephone: (602) 771-4251 (Any extension may be reached in-state by dialing 1-800-234-5677, and entering the seven-digit number.)

E-mail: airplanning@azdeq.gov

Web site: <https://www.azdeq.gov/rulemaking-new-source-review-pm25-national-ambient-air-quality-standards>

11. The time, place, and nature of the proceedings to make, amend, repeal, or renumber the rule, or if no proceeding is scheduled, where, when, and how persons may request an oral proceeding on the proposed rule:

A formal public comment period will take place from the publication of this rule in the Arizona Administrative Register until 5:00 p.m., May 6, 2025.

Please email or submit written comments related to this rulemaking at any time during the public comment period to the contact in item 5 of the Preamble of this Notice.

An oral proceeding is scheduled on this proposed rulemaking.

Date: May 6, 2025

Time: 1:00 PM

Location: ONLINE – GoToWebinar hosted by ADEQ at
<https://attendee.gotowebinar.com/register/3044694378284826203>.

After you register, you will receive a confirmation email with information on how to join the oral proceeding at the scheduled time. You can also dial in using your phone. Dialing in using your phone will NOT provide the opportunity for making public comments.

United States: (562) 247-8422

Access Code: 460-626-961

ADEQ will take reasonable measures to provide access to department services to individuals with limited ability to speak, write or understand English and/or to those with disabilities. Requests for language translation, ASL interpretation, CART captioning services or disability accommodations must be made at least 48 hours in advance by contacting the Title VI Nondiscrimination Coordinator, Joaquin Marruffo Ruiz, at 520-628-6744 or Marruffo.Joaquin@azdeq.gov. For a TTY or other device, Telecommunications Relay Services are available by calling 711.

ADEQ tomará las medidas razonables para proveer acceso a los servicios del departamento a personas con capacidad limitada para hablar, escribir o entender inglés y/o para personas con discapacidades. Las solicitudes de servicios de traducción de idiomas, interpretación ASL (lengua de signos americano), subtítulo de CART, o adaptaciones por discapacidad deben realizarse con al menos 48 horas de anticipación comunicándose con el Coordinador de Anti-Discriminación del Título VI, Joaquin Marruffo Ruiz, al 520-628-6744 o Marruffo.Joaquin@azdeq.gov. Para un TTY u otro dispositivo, los servicios de retransmisión de telecomunicaciones están disponible llamando al 711.

Nature: Public Hearing on the proposed rule

Public comment period ends: May 6, 2025, 5:00 p.m.

Close of record: May 6, 2025, 5:00 p.m.

12. All agencies shall list other matters prescribed by statute applicable to the specific agency or to any specific rule or class of rules. Additionally, an agency subject to Council review under A.R.S. §§ 41-1052 and 41-1055 shall respond to the following questions:

There are no other matters prescribed by statutes applicable specifically to ADEQ or this specific rulemaking.

a. Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:

The rule amends ADEQ's air quality permitting rules, which already include a general permit program. ADEQ has previously amended the general permit rules to allow sources to comply with minor NSR requirements by obtaining an authorization to operate under a general permit. It would not be possible to implement the NNSR requirements addressed in this rulemaking through a general permit. The Clean Air Act and EPA regulations require state NNSR programs to impose requirements developed through a rigorous case-by-case analysis in a source-specific permit on stationary sources subject to the program.

b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than federal law and if so, citation to the statutory authority to exceed the requirements of federal law:

Clean Air Act requirements for state implementation plans, NNSR, and minor NSR apply to the subject of this proposed rulemaking. The rule is no more stringent than necessary to comply with those requirements.

c. Whether a person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states:

Not applicable.

13. A list of any incorporated by reference material as specified in A.R.S. § 41-1028 and its location in the rules:

Not applicable.

14. The full text of the rules follows:

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY - AIR POLLUTION CONTROL

ARTICLE 1. GENERAL

Section

R18-2-101. Definitions

ARTICLE 2. AMBIENT AIR QUALITY STANDARDS; AREA DESIGNATIONS; CLASSIFICATIONS

Section

R18-2-201. Particulate Matter: PM₁₀ and PM_{2.5}

ARTICLE 3. PERMITS AND PERMIT REVISIONS

Section

R18-2-301. Definitions

R18-2-306. Permit Contents

R18-2-310.01. Reporting Requirements

R18-2-311. Test Methods and Procedures

R18-2-312. Performance Tests

R18-2-334. Minor New Source Review

ARTICLE 4. PERMIT REQUIREMENTS FOR NEW MAJOR SOURCES AND MAJOR MODIFICATIONS TO EXISTING MAJOR SOURCES

Section

R18-2-405. Special Rule for Major Sources of VOC or Nitrogen Oxides in Ozone Nonattainment Areas Classified as Serious or Severe

ARTICLE 5. GENERAL PERMITS

Section

R18-2-503. Application for Coverage under General Permit

ARTICLE 1. GENERAL

R18-2-101. Definitions

The following definitions apply to this Chapter. Where the same term is defined in this Section and in the definitions Section for an Article of this Chapter, the Article-specific definition shall apply.

1. “Act” means the Clean Air Act of 1963 (P.L. 88-206; 42 U.S.C. 7401 through 7671q) as amended through December 31, 2011 (and no future editions).
2. “Actual emissions” means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in subsections (2)(a) through (e), except that this definition shall not apply for calculating whether a significant emissions increase as defined in R18-2-401 has occurred, or for establishing a plantwide applicability limitation as defined in R18-2-401. Instead, the definitions of projected actual emissions and baseline actual emissions in R18-2-401 shall apply for those purposes.
 - a. In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period that precedes the particular date and that is representative of normal source operation. The Director may allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit’s actual operating hours, production rates, and types of materials processed, stored or combusted during the selected time period.
 - b. The Director may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
 - c. For any emissions unit that is or will be located at a source with a Class I permit and has not begun normal operations on the particular date, actual emissions shall equal the unit’s potential to emit on that date.

- d. For any emissions unit that is or will be located at a source with a Class II permit and has not begun normal operations on the particular date, actual emissions shall be based on applicable control equipment requirements and projected conditions of operation.
 - e. This definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL. Instead, the definitions of projected actual emissions and baseline actual emissions in R18-2-401 shall apply for those purposes.
3. “Administrator” means the Administrator of the United States Environmental Protection Agency.
 4. “Affected facility” means, with reference to a stationary source, any apparatus to which a standard is applicable.
 5. “Affected source” means a source that includes one or more units which are subject to emission reduction requirements or limitations under Title IV of the Act.
 6. “Affected state” means any state whose air quality may be affected by a source applying for a permit, permit revision, or permit renewal and that is contiguous to Arizona or that is within 50 miles of the permitted source.
 7. “Afterburner” means an incinerator installed in the secondary combustion chamber or stack for the purpose of incinerating smoke, fumes, gases, unburned carbon, and other combustible material not consumed during primary combustion.
 8. “Air contaminants” means smoke, vapors, charred paper, dust, soot, grime, carbon, fumes, gases, sulfuric acid mist aerosols, aerosol droplets, odors, particulate matter, wind-borne matter, radioactive materials, or noxious chemicals, or any other material in the outdoor atmosphere.
 9. “Air curtain destructor” means an incineration device designed and used to secure, by means of a fan-generated air curtain, controlled combustion of only wood waste and slash materials in an earthen trench or refractory-lined pit or bin.
 10. *“Air pollution” means the presence in the outdoor atmosphere of one or more air contaminants or combinations thereof in sufficient quantities, which either alone or in connection with other*

substances by reason of their concentration and duration are or tend to be injurious to human, plant or animal life, or cause damage to property, or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the director.
A.R.S. § 49-421(2).

11. “Air pollution control equipment” means equipment used to eliminate, reduce or control the emission of air pollutants into the ambient air.
12. “Air quality control region” (AQCR) means an area so designated by the Administrator pursuant to Section 107 of the Act and includes the following regions in Arizona:
 - a. Maricopa Intrastate Air Quality Control Region which is comprised of the County of Maricopa.
 - b. Pima Intrastate Air Quality Control Region which is comprised of the County of Pima.
 - c. Northern Arizona Intrastate Air Quality Control Region which encompasses the counties of Apache, Coconino, Navajo, and Yavapai.
 - d. Mohave-Yuma Intrastate Air Quality Control Region which encompasses the counties of La Paz, Mohave, and Yuma.
 - e. Central Arizona Intrastate Air Quality Control Region which encompasses the counties of Gila and Pinal.
 - f. Southeast Arizona Intrastate Air Quality Control Region which encompasses the counties of Cochise, Graham, Greenlee, and Santa Cruz.
13. “Allowable emissions” means the emission rate of a stationary source calculated using both the maximum rated capacity of the source, unless the source is subject to federally enforceable limits which restrict the operating rate or hours of operation, and the most stringent of the following:
 - a. The applicable standards as set forth in 40 CFR 60, 61 and 63;

- b. The applicable emissions limitations approved into the state implementation plan, including those with a future compliance date; or,
 - c. The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.
14. “Ambient air” means that portion of the atmosphere, external to buildings, to which the general public has access.
15. “Applicable implementation plan” means those provisions of the state implementation plan approved by the Administrator or a federal implementation plan promulgated for Arizona or any portion of Arizona in accordance with Title I of the Act.
16. “Applicable requirement” means any of the following:
- a. Any federal applicable requirement.
 - b. Any other requirement established pursuant to this Chapter or A.R.S. Title 49, Chapter 3.
17. “Arizona Testing Manual” means sections 1 and 7 of the Arizona Testing Manual for Air Pollutant Emissions amended as of March 1992 (and no future editions).
18. “ASTM” means the American Society for Testing and Materials.
19. “Attainment area” means any area that has been identified in regulations promulgated by the Administrator as being in compliance with national ambient air quality standards.
20. *“Begin actual construction” means, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. With respect to a change in method of operation this term refers to those onsite activities, other than preparatory activities, which mark the initiation of the change.*
- a. For purposes of title I, parts C and D and section 112 of the clean air act, and for purposes of applicants that require permits containing limits designed to avoid the application of title I, parts C and D and section 112 of the clean air act, these activities include installation of building supports and foundations, laying of underground pipework, and construction of

permanent storage structures but do not include any of the following, subject to subsection (20)(c):

- i. Clearing and grading, including demolition and removal of existing structures and equipment, stripping and stockpiling of topsoil.
 - ii. Installation of access roads, driveways and parking lots.
 - iii. Installation of ancillary structures, including fences, office buildings and temporary storage structures, that are not a necessary component of an emissions unit or associated air pollution control equipment for which the permit is required.
 - iv. Ordering and onsite storage of materials and equipment.
- b. For purposes other than those identified in subsection (20)(a), these activities do not include any of the following, subject to subsection (20)(c):
- i. Clearing and grading, including demolition and removal of existing structures and equipment, stripping and stockpiling of topsoil and earthwork cut and fill for foundations.
 - ii. Installation of access roads, parking lots, driveways and storage areas.
 - iii. Installation of ancillary structures, including fences, warehouses, storerooms and office buildings, provided none of these structures impacts the design of any emissions unit or associated air pollution control equipment.
 - iv. Ordering and onsite storage of materials and equipment.
 - v. Installation of underground pipework, including water, sewer, electric and telecommunications utilities.
 - vi. Installation of building and equipment supports, including concrete forms, footers, pilings, foundations, pads and platforms, provided none of these supports impacts the design of any emissions unit or associated air pollution control equipment.
- c. An applicant's performance of any activities that are excluded from the definition of "begin actual construction" under subsection (20)(a) or (b) shall be at the applicant's risk and shall

not reduce the applicant's obligations under this Chapter. The director shall evaluate an application for a permit or permit revision and make a decision on the same basis as if the activities allowed under subsection (20)(a) or (b) had not occurred. A.R.S. § 49-401.01(7).

21. "Best available control technology" (BACT) means an emission limitation, including a visible emissions standard, based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major source or major modification, taking into account energy, environmental, and economic impact and other costs, determined by the Director in accordance with R18-2-406(A)(4) to be achievable for such source or modification.
22. "Btu" means British thermal unit, which is the quantity of heat required to raise the temperature of one pound of water 1°F.
23. "Categorical sources" means the following classes of sources:
 - a. Coal cleaning plants with thermal dryers;
 - b. Kraft pulp mills;
 - c. Portland cement plants;
 - d. Primary zinc smelters;
 - e. Iron and steel mills;
 - f. Primary aluminum ore reduction plants;
 - g. Primary copper smelters;
 - h. Municipal incinerators capable of charging more than 50 tons of refuse per day;
 - i. Hydrofluoric, sulfuric, or nitric acid plants;
 - j. Petroleum refineries;
 - k. Lime plants;
 - l. Phosphate rock processing plants;
 - m. Coke oven batteries;
 - n. Sulfur recovery plants;

- o. Carbon black plants using the furnace process;
 - p. Primary lead smelters;
 - q. Fuel conversion plants;
 - r. Sintering plants;
 - s. Secondary metal production plants;
 - t. Chemical process plants, which shall not include ethanol production facilities that produce ethanol by natural fermentation included in North American Industry Classification System codes 325193 or 312140;
 - u. Fossil-fuel boilers, combinations thereof, totaling more than 250 million Btus per hour heat input;
 - v. Petroleum storage and transfer units with a total storage capacity more than 300,000 barrels;
 - w. Taconite ore processing plants;
 - x. Glass fiber processing plants;
 - y. Charcoal production plants;
 - z. Fossil-fuel-fired steam electric plants and combined cycle gas turbines of more than 250 million Btus per hour heat input.
24. "Categorically exempt activities" means any of the following:
- a. Any combination of diesel-, natural gas- or gasoline-fired engines with cumulative power equal to or less than 145 horsepower.
 - b. Natural gas-fired engines with cumulative power equal to or less than 155 horsepower.
 - c. Gasoline-fired engines with cumulative power equal to or less than 200 horsepower.
 - d. Any of the following emergency or stand-by engines used for less than 500 hours in each calendar year, provided the permittee keeps records documenting the hours of operation of the engines:

- i. Any combination of diesel-, natural gas- or gasoline-fired emergency engines with cumulative power equal to or less than 2,500 horsepower.
 - ii. Natural gas-fired emergency engines with cumulative power equal to or less than 2,700 horsepower.
 - iii. Gasoline-fired emergency engines with cumulative power equal to or less than 3,700 horsepower.
 - e. Any combination of boilers with a cumulative maximum design heat input capacity of less than 10 million Btu/hr.
25. “CFR” means the Code of Federal Regulations, amended as of July 1, 2011, (and no future editions), with standard references in this Chapter by Title and Part, so that “40 CFR 51” means Title 40 of the Code of Federal Regulations, Part 51.
26. “Charge” means the addition of metal bearing materials, scrap, or fluxes to a furnace, converter or refining vessel.
27. “Clean coal technology” means any technology, including technologies applied at the precombustion, combustion, or post-combustion stage, at a new or existing facility that will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam, that was not in widespread use as of November 15, 1990.
28. “Clean coal technology demonstration project” means a project using funds appropriated under the heading “Department of Energy - Clean Coal Technology,” up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology or similar projects funded through appropriations for the Environmental Protection Agency. The federal contribution for a qualifying project shall be at least 20% of the total cost of the demonstration project.
29. “Coal” means all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D-388-91, (Classification of Coals by Rank).

30. “Combustion” means the burning of matter.
31. “Commence” means, as applied to construction of a source, or a major modification as defined in Article 4 of this Chapter, that the owner or operator has all necessary preconstruction approvals or permits and either has:
 - a. Begun, or caused to begin, a continuous program of actual onsite construction of the source, to be completed within a reasonable time; or
 - b. Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.
32. “Construction” means any physical change or change in the method of operation, including fabrication, erection, installation, demolition, or modification of an emissions unit, which would result in a change in emissions.
33. “Continuous monitoring system” means a CEMS, CERMS, or CPMS.
34. “Continuous emissions monitoring system” or “CEMS” means the total equipment, required under the emission monitoring provisions in this Chapter, used to sample, condition (if applicable), analyze, and provide, on a continuous basis, a permanent record of emissions.
35. “Continuous emissions rate monitoring system” or “CERMS” means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).
36. “Continuous parameter monitoring system” or “CPMS” means the total equipment, required under the emission monitoring provisions in this Chapter, to monitor process or control device operational parameters (for example, control device secondary voltages and electric currents) or other information (for example, gas flow rate, O₂ or CO₂ concentrations) and to provide, on a continuous basis, a permanent record of monitored values.

37. "Controlled atmosphere incinerator" means one or more refractory-lined chambers in which complete combustion is promoted by recirculation of gases by mechanical means.
38. "Conventional air pollutant" means any pollutant for which the Administrator has promulgated a primary or secondary national ambient air quality standard. A.R.S. § 49-401.01(12).
39. "Department" means the Department of Environmental Quality. A.R.S. § 49-101(2)
40. "Director" means the director of environmental quality who is also the director of the department. A.R.S. § 49-101(3).
41. "Discharge" means the release or escape of an effluent from a source into the atmosphere.
42. "Dust" means finely divided solid particulate matter occurring naturally or created by mechanical processing, handling or storage of materials in the solid state.
43. "Dust suppressant" means a chemical compound or mixture of chemical compounds added with or without water to a dust source for purposes of preventing air entrainment.
44. "Effluent" means any air contaminant which is emitted and subsequently escapes into the atmosphere.
45. "Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.
46. "Emission" means an air contaminant or gas stream, or the act of discharging an air contaminant or a gas stream, visible or invisible.
47. "Emission standard" or "emission limitation" means a requirement established by the state, a local government, or the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements which limit the

level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction.

48. “Emissions unit” means any part of a stationary source which emits or would have the potential to emit any regulated air pollutant and includes an electric steam generating unit.
49. “Equivalent method” means any method of sampling and analyzing for an air pollutant which has been demonstrated under R18-2-311(D) to have a consistent and quantitatively known relationship to the reference method, under specified conditions.
50. “Excess emissions” means emissions of an air pollutant in excess of an emission standard as measured by the compliance test method applicable to such emission standard.
51. “Federal applicable requirement” means any of the following (including requirements that have been promulgated or approved by EPA through rulemaking at the time of issuance but have future effective compliance dates):
 - a. Any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under Title I of the Act that implements the relevant requirements of the Act, including any revisions to that plan promulgated in 40 CFR 52.
 - b. Any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under Title I, including parts C or D, of the Act.
 - c. Any standard or other requirement under section 111 of the Act, including 111(d).
 - d. Any standard or other requirement under section 112 of the Act, including any requirement concerning accident prevention under section 112(r)(7) of the Act.
 - e. Any standard or other requirement of the acid rain program under Title IV of the Act or the regulations promulgated thereunder and incorporated pursuant to R18-2-333.
 - f. Any requirements established pursuant to section 504(b) or section 114(a)(3) of the Act.

- g. Any standard or other requirement governing solid waste incineration, under section 129 of the Act.
 - h. Any standard or other requirement for consumer and commercial products, under section 183(e) of the Act.
 - i. Any standard or other requirement for tank vessels under section 183(f) of the Act.
 - j. Any standard or other requirement of the program to control air pollution from outer continental shelf sources, under section 328 of the Act.
 - k. Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the Act, unless the Administrator has determined that such requirements need not be contained in a Title V permit.
 - l. Any national ambient air quality standard or maximum increase allowed under R18-2-218 or visibility requirement under Part C of Title I of the Act, but only as it would apply to temporary sources permitted pursuant to section 504(e) of the Act.
52. "Federal Land Manager" means, with respect to any lands in the United States, the secretary of the department with authority over such lands.
53. "Federally enforceable" means all limitations and conditions which are enforceable by the Administrator under the Act, including all of the following:
- a. The requirements of the new source performance standards and national emission standards for hazardous air pollutants.
 - b. The requirements of such other state or county rules or regulations approved by the Administrator, including the requirements of state and county operating and new source review permit and registration programs that have been approved by the Administrator. Notwithstanding this subsection, the condition of any permit or registration designated as being enforceable only by the state is not federally enforceable.
 - c. The requirements of any applicable implementation plan.

- d. Emissions limitations, controls, and other requirements, and any associated monitoring, recordkeeping, and reporting requirements that are included in a permit pursuant to R18-2-306.01 or R18-2-306.02.
- 54. “Federally listed hazardous air pollutant” means a pollutant listed pursuant to R18-2-1701(9).
- 55. “Final permit” means the version of a permit issued by the Department after completion of all review required by this Chapter.
- 56. “Fixed capital cost” means the capital needed to provide all the depreciable components.
- 57. “Fuel” means any material which is burned for the purpose of producing energy.
- 58. “Fuel burning equipment” means any machine, equipment, incinerator, device or other Article, except stationary rotating machinery, in which combustion takes place.
- 59. “Fugitive emissions” means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- 60. “Fume” means solid particulate matter resulting from the condensation and subsequent solidification of vapors of melted solid materials.
- 61. “Fume incinerator” means a device similar to an afterburner installed for the purpose of incinerating fumes, gases and other finely divided combustible particulate matter not previously burned.
- 62. “Good engineering practice (GEP) stack height” means a stack height meeting the requirements described in R18-2-332.
- 63. “Hazardous air pollutant” means any federally listed hazardous air pollutant.
- 64. “Heat input” means the quantity of heat in terms of Btus generated by fuels fed into the fuel burning equipment under conditions of complete combustion.
- 65. “Incinerator” means any equipment, machine, device, contrivance or other Article, and all appurtenances thereof, used for the combustion of refuse, salvage materials or any other combustible material except fossil fuels, for the purpose of reducing the volume of material.

66. “Indian governing body” means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.
67. “Indian reservation” means any federally recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.
68. “Insignificant activity” means any of the following activities:
- a. Liquid Storage and Piping
 - i. Petroleum product storage tanks containing the following substances, provided the applicant lists and identifies the contents of each tank with a volume of 350 gallons or more and provides threshold values for throughput or capacity or both for each such tank: diesel fuels and fuel oil in storage tanks with capacity of 40,000 gallons or less, lubricating oil, transformer oil, and used oil.
 - ii. Gasoline storage tanks with capacity of 10,000 gallons or less.
 - iii. Storage and piping of natural gas, butane, propane, or liquified petroleum gas, provided the applicant lists and identifies the contents of each stationary storage vessel with a volume of 350 gallons or more and provides threshold values for throughput or capacity or both for each such vessel.
 - iv. Piping of fuel oils, used oil and transformer oil, provided the applicant includes a system description.
 - v. Storage and handling of drums or other transportable containers where the containers are sealed during storage, and covered during loading and unloading, including containers of waste and used oil regulated under the federal Resource Conservation and Recovery Act, 42 U.S.C. 6901-6992(k). Permit applicants must provide a description of material in the containers and the approximate amount stored.

- vi. Storage tanks of any size containing exclusively soaps, detergents, waxes, greases, aqueous salt solutions, aqueous solutions of acids that are not regulated air pollutants, or aqueous caustic solutions, provided the permit applicant specifies the contents of each storage tank with a volume of 350 gallons or more.
- vii. Electrical transformer oil pumping, cleaning, filtering, drying and the re-installation of oil back into transformers.
- b. Internal combustion engine-driven compressors, internal combustion engine-driven electrical generator sets, and internal combustion engine-driven water pumps used for less than 500 hours per calendar year for emergency replacement or standby service, provided the permittee keeps records documenting the hours of operation of this equipment.
- c. Low Emitting Processes
 - i. Batch mixers with rated capacity of 5 cubic feet or less.
 - ii. Wet sand and gravel production facilities that obtain material from subterranean and subaqueous beds, whose production rate is 200 tons/hour or less, and whose permanent in-plant roads are paved and cleaned to control dust. This does not include activities in emissions units which are used to crush or grind any non-metallic minerals.
 - iii. Powder coating operations.
 - iv. Equipment using water, water and soap or detergent, or a suspension of abrasives in water for purposes of cleaning or finishing.
 - v. Blast-cleaning equipment using a suspension of abrasive in water and any exhaust system or collector serving them exclusively.
 - vi. Plastic pipe welding.
- d. Site Maintenance

- i. Housekeeping activities and associated products used for cleaning purposes, including collecting spilled and accumulated materials at the source, including operation of fixed vacuum cleaning systems specifically for such purposes.
 - ii. Sanding of streets and roads to abate traffic hazards caused by ice and snow.
 - iii. Street and parking lot striping.
 - iv. Architectural painting and associated surface preparation for maintenance purposes at industrial or commercial facilities.
- e. Sampling and Testing
 - i. Noncommercial (in-house) experimental, analytical laboratory equipment which is bench scale in nature, including quality control/quality assurance laboratories supporting a stationary source and research and development laboratories.
 - ii. Individual sampling points, analyzers, and process instrumentation, whose operation may result in emissions but that are not regulated as emission units.
- f. Ancillary Non-Industrial Activities
 - i. General office activities, such as paper shredding, copying, photographic activities, and blueprinting, but not to include incineration.
 - ii. Use of consumer products, including hazardous substances as that term is defined in the Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) where the product is used at a source in the same manner as normal consumer use.
 - iii. Activities directly used in the diagnosis and treatment of disease, injury or other medical condition.
- g. Miscellaneous Activities
 - i. Installation and operation of potable, process and waste water observation wells, including drilling, pumping, filtering apparatus.
 - ii. Transformer vents.

69. “Kraft pulp mill” means any stationary source which produces pulp from wood by cooking or digesting wood chips in a water solution of sodium hydroxide and sodium sulfide at high temperature and pressure. Regeneration of the cooking chemicals through a recovery process is also considered part of the kraft pulp mill.
70. “Lead” means elemental lead or alloys in which the predominant component is lead.
71. “Lime hydrator” means a unit used to produce hydrated lime product.
72. “Lime plant” includes any plant which produces a lime product from limestone by calcination. Hydration of the lime product is also considered to be part of the source.
73. “Lime product” means any product produced by the calcination of limestone.
74. “Major modification” is defined as follows:
- a. A major modification is any physical change in or change in the method of operation of a major source that would result in both a significant emissions increase of any regulated NSR pollutant and a significant net emissions increase of that pollutant from the stationary source.
 - b. Any emissions increase or net emissions increase that is significant for nitrogen oxides or volatile organic compounds is significant for ozone.
 - c. For the purposes of this definition, none of the following is a physical change or change in the method of operation:
 - i. Routine maintenance, repair, and replacement;
 - ii. Use of an alternative fuel or raw material by reason of an order under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, 15 U.S.C. 792, or by reason of a natural gas curtailment plan under the Federal Power Act, 16 U.S.C. 792 - 825r;
 - iii. Use of an alternative fuel by reason of an order or rule under section 125 of the Act;
 - iv. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

- v. For purposes of determining the applicability of R18-2-403 through R18-2-405 or R18-2-411, any of the following:
 - (1) Use of an alternative fuel or raw material by a stationary source that the source was capable of accommodating before December 21, 1976, unless the change would be prohibited under any federally enforceable permit condition established after December 12, 1976 under 40 CFR 52.21 or under Articles 3 or 4 of this Chapter; or
 - (2) Use of an alternative fuel or raw material by a stationary source that the source is approved to use under any permit issued under R18-2-403;
 - (3) An increase in the hours of operation or in the production rate, unless the change would be prohibited under any federally enforceable permit condition established after December 21, 1976, under 40 CFR 52.21, or under Articles 3 or 4 of this Chapter.
- vi. For purposes of determining the applicability of R18-2-406 through R18-2-408 or R18-2-410, any of the following:
 - (1) Use of an alternative fuel or raw material by a stationary source that the source was capable of accommodating before January 6, 1975, unless the change would be prohibited under any federally enforceable permit condition established after January 6, 1975 under 40 CFR 52.21 or under Articles 3 or 4 of this Chapter;
 - (2) Use of an alternative fuel or raw material by a stationary source that the source is approved to use under any permit issued under 40 CFR 52.21, or under R18-2-406; or
 - (3) An increase in the hours of operation or in the production rate, unless the change would be prohibited under any federally enforceable permit condition established after January 6, 1975, under 40 CFR 52.21, or under Articles 3 or 4 of this Chapter.
- vii. Any change in ownership at a stationary source;

- viii. [Reserved.]
 - ix. The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, if the project complies with:
 - (1) The SIP, and
 - (2) Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated;
 - x. For electric utility steam generating units located in attainment and unclassifiable areas only, the installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, if the project does not result in an increase in the potential to emit any regulated pollutant emitted by the unit. This exemption applies on a pollutant-by-pollutant basis; and
 - xi. For electric utility steam generating units located in attainment and unclassifiable areas only, the reactivation of a very clean coal-fired electric utility steam generating unit.
 - d. This definition shall not apply with respect to a particular regulated NSR pollutant when the major source is complying with the requirements of R18-2-412 for a PAL for that regulated NSR pollutant. Instead, the definition of PAL major modification in R18-2-401(20) shall apply.
75. "Major source" means:
- a. A major source as defined in R18-2-401.
 - b. A major source under section 112 of the Act:
 - i. For pollutants other than radionuclides, any stationary source that emits or has the potential to emit, in the aggregate, including fugitive emission 10 tons per year (tpy) or more of any hazardous air pollutant which has been listed pursuant to section 112(b) of the Act, 25 tpy or more of any combination of such hazardous air pollutants, or such lesser quantity as described in Article 11 of this Chapter. Notwithstanding the preceding

sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or

- ii. For radionuclides, “major source” shall have the meaning specified by the Administrator by rule.
 - c. A major stationary source, as defined in section 302 of the Act, that directly emits or has the potential to emit, 100 tpy or more of any air pollutant including any major source of fugitive emissions of any such pollutant. The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of section 302(j) of the Act, unless the source belongs to a section 302(j) category.
76. “Malfunction” means any sudden and unavoidable failure of air pollution control equipment, process equipment or a process to operate in a normal and usual manner, but does not include failures that are caused by poor maintenance, careless operation or any other upset condition or equipment breakdown which could have been prevented by the exercise of reasonable care.
77. “Minor source” means a source of air pollution which is not a major source for the purposes of Article 4 of this Chapter and over which the Director, acting pursuant to A.R.S. § 49-402(B), has asserted jurisdiction.
78. “Minor source baseline area” means the air quality control region in which the source is located.
79. *“Mobile source” means any combustion engine, device, machine or equipment that operates during transport and that emits or generates air contaminants whether in motion or at rest.*
A.R.S. § 49-401.01(23).
80. *“Modification” or “modify” means a physical change in or change in the method of operation of a source that increases the emissions of any regulated air pollutant emitted by such source by*

more than any relevant de minimis amount or that results in the emission of any regulated air pollutant not previously emitted by more than such de minimis amount. An increase in emissions at a minor source shall be determined by comparing the source's potential to emit before and after the modification. The following exemptions apply:

- a. A physical or operational change does not include routine maintenance, repair or replacement.
- b. An increase in the hours of operation or if the production rate is not considered an operational change unless such increase is prohibited under any permit condition that is legally and practically enforceable by the department.
- c. *A change in ownership at a source is not considered a modification. A.R.S. § 49-401.01(24).*

81. "Monitoring device" means the total equipment, required under the applicable provisions of this Chapter, used to measure and record, if applicable, process parameters.
82. "Motor vehicle" means any self-propelled vehicle designed for transporting persons or property on public highways.
83. "Multiple chamber incinerator" means three or more refractory-lined combustion chambers in series, physically separated by refractory walls and interconnected by gas passage ports or ducts.
84. "Natural conditions" includes naturally occurring phenomena that reduce visibility as measured in terms of light extinction, visual range, contrast, or coloration.
85. "*National ambient air quality standard*" means the ambient air pollutant concentration limits established by the Administrator pursuant to section 109 of the Act. A.R.S. § 49-401.01(25).
86. "National emission standards for hazardous air pollutants" or "NESHAP" means standards adopted by the Administrator under section 112 of the Act.
87. "Necessary preconstruction approvals or permits" means those permits or approvals required under the Act and those air quality control laws and rules which are part of the SIP.
88. "Net emissions increase" means:

- a. The amount by which the sum of subsections (88)(a)(i) and (ii) exceeds zero:
 - i. The increase in emissions of a regulated NSR pollutant from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to R18-2-402(D); and
 - ii. Any other increases and decreases in actual emissions of the regulated NSR pollutant at the source that are contemporaneous with the particular change and are otherwise creditable.
 - iii. For purposes of calculating increases and decreases in actual emissions under subsection (88)(a)(ii), baseline actual emissions shall be determined as provided in the definition of baseline actual emissions in R18-2-401(2), except that R18-2-401(2)(a)(iii) and (b)(iv) shall not apply.
- b. An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:
 - i. The date five years before a complete application for a permit or permit revision authorizing the particular change is submitted or actual construction of the particular change begins, whichever occurs earlier, and
 - ii. The date that the increase from the particular change occurs.
- c. For purposes of determining the applicability of R18-2-403 through R18-2-405 or R18-2-411, an increase or decrease in actual emissions is creditable only if the Director has not relied on it in issuing a permit or permit revision under R18-2-403, which permit is in effect when the increase in actual emissions from the particular change occurs. For purposes of determining the applicability of R18-2-406 through R18-2-408 or R18-2-410, an increase or decrease in actual emissions is creditable only if the Director has not relied on it in issuing a permit under R18-2-406, which permit is in effect when the increase in actual emissions from the particular change occurs.

- d. An increase or decrease in actual emissions of sulfur dioxide, nitrogen oxides, PM₁₀, or PM_{2.5} which occurs before the applicable minor source baseline date, as defined in R18-2-218, is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.
- e. An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
- f. A decrease in actual emissions is creditable only to the extent that it satisfies all of the following conditions:
 - i. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions.
 - ii. It is enforceable as a practical matter at and after the time that actual construction on the particular change begins.
 - iii. It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
 - iv. The emissions unit was actually operated and emitted the specific pollutant.
 - v. For purposes of determining the applicability of R18-2-403 through R18-2-405 or R18-2-411, the Director has not relied on it in issuing any permit, permit revision, or registration under Article 4, R18-2-302.01, (or) R18-2-334, and the state has not relied on it in demonstrating attainment or reasonable further progress.
- g. An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit, as defined in R18-2-401(24), that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.
- h. Subsection (2)(a) shall not apply for determining creditable increases and decreases.

89. "New source" means any stationary source of air pollution which is subject to a new source performance standard.
90. "New source performance standards" or "NSPS" means standards adopted by the Administrator under section 111(b) of the Act.
91. "Nitric acid plant" means any facility producing nitric acid 30% to 70% in strength by either the pressure or atmospheric pressure process.
92. "Nitrogen oxides" means all oxides of nitrogen except nitrous oxide, as measured by test methods set forth in the Appendices to 40 CFR 60.
93. "Nonattainment area" means an area so designated by the Administrator acting pursuant to section 107 of the Act as exceeding national primary or secondary ambient air standards for a particular pollutant or pollutants.
94. "Nonpoint source" means a source of air contaminants which lacks an identifiable plume or emission point.
95. "Opacity" means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.
96. "Operation" means any physical or chemical action resulting in the change in location, form, physical properties, or chemical character of a material.
97. "Owner or operator" means any person who owns, leases, operates, controls, or supervises an affected facility or a stationary source.
98. "Particulate matter" means any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers.
99. "Particulate matter emissions" means all finely divided solid or liquid materials other than uncombined water, emitted to the ambient air as measured by applicable test methods and procedures described in R18-2-311.

100. “Permitting authority” means the department or a county department, agency or air pollution control district that is charged with enforcing a permit program adopted pursuant to A.R.S. § 49-480(A). A.R.S. § 49-401.01(28).

101. “Permitting exemption thresholds” for a regulated minor NSR pollutant means the following:

Regulated Air Pollutant	Emission Rate in tons per year (TPY)
PM _{2.5} (primary emissions only; levels for precursors are set below)	5
PM ₁₀	7.5
SO ₂	20
NO _x	20
VOC	20
CO	50
Pb	0.3

102. “Person” means any public or private corporation, company, partnership, firm, association or society of persons, the federal government and any of its departments or agencies, the state and any of its agencies, departments or political subdivisions, as well as a natural person.

103. “Planning agency” means an organization designated by the governor pursuant to 42 U.S.C. 7504. A.R.S. § 49-401.01(29).

104. “PM_{2.5}” means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by a reference method based on 40 CFR 50 Appendix L, or by an equivalent method designated according to 40 CFR 53.

105. “PM₁₀” means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method contained within 40 CFR 50 Appendix J or by an equivalent method designated in accordance with 40 CFR 53.
106. “PM₁₀ emissions” means finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by applicable test methods and procedures described in R18-2-311.
107. “Plume” means visible effluent.
108. “Pollutant” means an air contaminant the emission or ambient concentration of which is regulated pursuant to this Chapter.
109. “Portable source” means any stationary source that is capable of being operated at more than one location.
110. “Potential to emit” or “potential emission rate” means the maximum capacity of a stationary source to emit a pollutant, excluding secondary emissions, under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is legally and practically enforceable by the Department or a county under A.R.S. Title 49, Chapter 3; any rule, ordinance, order or permit adopted or issued under A.R.S. Title 49, Chapter 3 or the state implementation plan.
111. “Predictive Emissions Monitoring System” or “PEMS” means the total equipment, required under the emission monitoring provisions in this Chapter, to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and calculate and record the mass emissions rate (for example, lb/hr) on a continuous basis.

112. “Primary ambient air quality standards” means the ambient air quality standards which define levels of air quality necessary, with an adequate margin of safety, to protect the public health, as specified in Article 2 of this Chapter.
113. “Process” means one or more operations, including equipment and technology, used in the production of goods or services or the control of by-products or waste.
114. “Project” means a physical change in, or change in the method of operation of, an existing major source.
115. “Proposed final permit” means the version of a Class I permit or Class I permit revision that the Department proposes to issue and forwards to the Administrator for review in compliance with R18-2-307(A). A proposed final permit constitutes a final and enforceable authorization to begin actual construction of, but not to operate, a new Class I source or a modification to a Class I source.
116. “Proposed permit” means the version of a permit for which the Director offers public participation under R18-2-330 or affected state review under R18-2-307(D).
117. “Reactivation of a very clean coal-fired electric utility steam generating unit” means any physical change or change in the method of operation associated with commencing commercial operations by a coal-fired utility unit after a period of discontinued operation if the unit:
- a. Has not been in operation for the two-year period before enactment of the Clean Air Act Amendments of 1990, and the emissions from the unit continue to be carried in the Director’s emissions inventory at the time of enactment;
 - b. Was equipped before shutdown with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85% and a removal efficiency for particulates of no less than 98%;
 - c. Is equipped with low-NO_x burners before commencement of operations following reactivation; and

- d. Is otherwise in compliance with the Act.
118. “Reasonable further progress” means the schedule of emission reductions defined within a nonattainment area plan as being necessary to come into compliance with a national ambient air quality standard by the primary standard attainment date.
119. “Reasonably available control technology” (RACT) means devices, systems, process modifications, work practices or other apparatus or techniques that are determined by the Director to be reasonably available taking into account:
- a. The necessity of imposing the controls in order to attain and maintain a national ambient air quality standard;
 - b. The social, environmental, energy and economic impact of the controls;
 - c. Control technology in use by similar sources; and
 - d. The capital and operating costs and technical feasibility of the controls.
120. “Reclaiming machinery” means any machine, equipment device or other Article used for picking up stored granular material and either depositing this material on a conveyor or reintroducing this material into the process.
121. “Reference method” means the methods of sampling and analyzing for an air pollutant as described in the Arizona Testing Manual; 40 CFR 50, Appendices A through K; 40 CFR 51, Appendix M; 40 CFR 52, Appendices D and E; 40 CFR 60, Appendices A through F; and 40 CFR 61, Appendices B and C, as incorporated by reference in 18 A.A.C. 2, Appendix 2.
122. “Regulated air pollutant” means any of the following:
- a. Any conventional air pollutant.
 - b. Nitrogen oxides and volatile organic compounds.
 - c. Any pollutant that is subject to a new source performance standard.

- d. Any pollutant that is subject to a national emission standard for hazardous air pollutants or other requirements established under section 112 of the Act, including sections 112(g), (j), and (r), including the following:
 - i. Any pollutant subject to requirements under section 112(j) of the act. If the administrator fails to promulgate a standard by the date established pursuant to section 112(e) of the act, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established pursuant to section 112(e) of the Act; and
 - ii. Any pollutant for which the requirements of section 112(g)(2) of the Act have been met, but only with respect to the individual source subject to the section 112(g)(2) requirement.
 - e. Any Class I or II substance subject to a standard promulgated under title VI of the Act.
123. “Regulated minor NSR pollutant” means any pollutant for which a national ambient air quality standard has been promulgated and the following precursors for such pollutants:
- a. VOC and nitrogen oxides as precursors to ozone.
 - b. Nitrogen oxides and sulfur dioxide as precursors to PM_{2.5}.
124. “Regulated NSR pollutant” is defined as follows:
- a. For purposes of determining the applicability of R18-2-403 through R18-2-405 and R18-2-411, regulated NSR pollutant means any pollutant for which a national ambient air quality standard has been promulgated and any pollutant identified under this subsection as a constituent of or precursor to such pollutant, provided that such constituent or precursor pollutant may only be regulated under NSR as part of the regulation of the general pollutant. Precursors for purposes of NSR are the following:
 - i. Volatile organic compounds and nitrogen oxides are precursors to ozone in all areas.
 - ii. Sulfur dioxide is a precursor to PM_{2.5} in all areas.

- iii. Nitrogen oxides are precursors to PM_{2.5} in all areas.
 - iv. VOC and ammonia are precursors to PM_{2.5} in PM_{2.5} nonattainment areas.
 - b. For all other purposes, regulated NSR pollutant means the pollutants identified in subsection (a) and the following:
 - i. Any pollutant that is subject to any new source performance standard except greenhouse gases as defined in 40 CFR 86.1818-12(a).
 - ii. Any Class I or II substance subject to a standard promulgated under or established by Title VI of the Act as of July 1, 2011.
 - iii. Any pollutant that is otherwise subject to regulation under the Act, except greenhouse gases as defined in 40 CFR 86.1818-12(a).
 - c. Notwithstanding subsections (124)(a) and (b), the term regulated NSR pollutant shall not include any or all hazardous air pollutants either listed in section 112 of the Act, or added to the list pursuant to section 112(b)(2) of the Act, unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the Act.
 - d. PM_{2.5} emissions and PM₁₀ emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. On and after January 1, 2011, condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for PM_{2.5} and PM₁₀ in permits issued under Article 4.
125. "Repowering" means:
- a. Replacing an existing coal-fired boiler with one of the following clean coal technologies:
 - i. Atmospheric or pressurized fluidized bed combustion;
 - ii. Integrated gasification combined cycle;
 - iii. Magnetohydrodynamics;

- iv. Direct and indirect coal-fired turbines;
 - v. Integrated gasification fuel cells; or
 - vi. As determined by the Administrator, in consultation with the United States Secretary of Energy, a derivative of one or more of the above technologies; and
 - vii. Any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.
- b. Repowering also includes any oil, gas, or oil and gas-fired unit that has been awarded clean coal technology demonstration funding as of January 1, 1991, by the United States Department of Energy.
 - c. The Director shall give expedited consideration to permit applications for any source that satisfies the requirements of this subsection ~~(and)~~ is granted an extension under section 409 of the Act.
126. “Run” means the net period of time during which an emission sample is collected, which may be, unless otherwise specified, either intermittent or continuous within the limits of good engineering practice.
127. “Secondary ambient air quality standards” means the ambient air quality standards which define levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant, as specified in Article 2 of this Chapter.
128. “Secondary emissions” means emissions which are specific, well defined, quantifiable, occur as a result of the construction or operation of a major source or major modification, but do not come from the major source or major modification itself, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not otherwise be constructed or

increase its emissions except as a result of the construction or operation of the major source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

129. “Section 302(j) category” means:

- a. Any of the classes of sources listed in the definition of categorical source in subsection (23);
or
- b. Any category of affected facility which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.

130. “Shutdown” means the cessation of operation of any air pollution control equipment or process equipment for any purpose, except routine phasing out of process equipment.

131. “Significant” means, in reference to a significant emissions increase, a net emissions increase, a stationary source’s potential to emit or a stationary source’s maximum capacity to emit with any elective limits as defined in R18-2-301(43):

- a. A rate of emissions of conventional pollutants that would equal or exceed any of the following:

Pollutant	Emissions Rate
Carbon monoxide	100 tons per year (tpy)
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy
PM ₁₀	15 tpy
	10 tpy of direct PM _{2.5} emissions; 40 tpy of sulfur dioxide emissions; 40 tpy of nitrogen oxide emissions.
PM _{2.5}	40 tpy of VOC or nitrogen oxides
Ozone	oxides
Lead	0.6 tpy

- b. For purposes of determining the applicability of R18-2-302(B)(2) or R18-2-406, in addition to the rates specified in subsection (131)(a), a rate of emissions of non-conventional pollutants that would equal or exceed any of the following:

Pollutant	Emissions Rate
Particulate matter	25 tpy
Fluorides	3 tpy
Sulfuric acid mist	7 tpy
Hydrogen sulfide (H ₂ S)	10 tpy
Total reduced sulfur (including H ₂ S)	10 tpy
Reduced sulfur compounds (including H ₂ S)	10 tpy
Municipal waste combustor organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans)	3.5 x 10 ⁻⁶ tpy
Municipal waste combustor metals (measured as particulate matter)	15 tpy
Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride)	40 tpy
Municipal solid waste landfill emissions (measured as nonmethane organic compounds)	50 tpy
Any regulated NSR pollutant not specifically listed in this subsection (or) subsection (131)(a), except for ammonia.	Any emission rate

- c. In ozone nonattainment areas classified as serious or severe, the emission rate for nitrogen oxides or VOC determined under R18-2-405.

- d. In a carbon monoxide nonattainment area classified as serious, a rate of emissions that would equal or exceed 50 tons per year, if the Administrator has determined that stationary sources contribute significantly to carbon monoxide levels in that area.
 - e. In PM_{2.5} nonattainment areas, an emission rate that would equal or exceed 40 tons per year of VOC as a precursor of PM_{2.5}.
 - f. In PM_{2.5} nonattainment areas, for purposes of determining the applicability of R18-2-403 or R18-2-404, an emission rate that would equal or exceed 40 tons per year of ammonia, as a precursor to PM_{2.5}. This subsection shall take effect on the effective date of the Administrator's action approving it as part of the state implementation plan.
 - g. Notwithstanding the emission rates listed in subsection (131)(a) or (b), for purposes of determining the applicability of R18-2-406, any emissions rate or any net emissions increase associated with a major source or major modification, which would be constructed within 10 kilometers of a Class I area and have an impact on the ambient air quality of such area equal to or greater than 1 µg/m³ (24-hour average).
132. "Significant emissions increase" means, for a regulated NSR pollutant, an increase in emissions that is significant as defined in this Section for that pollutant.
133. "Smoke" means particulate matter resulting from incomplete combustion.
134. "*Source*" means any building, structure, facility or installation that may cause or contribute to air pollution or the use of which may eliminate, reduce or control the emission of air pollution. A.R.S. § 49-401.01(23).
135. "Stack" means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct but not including flares.
136. "Stack in existence" means that the owner or operator had either:
- a. Begun, or caused to begin, a continuous program of physical onsite construction of the stack;

- b. Entered into binding agreements or contractual obligations, which could not be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the stack to be completed in a reasonable time.
137. “Start-up” means the setting into operation of any air pollution control equipment or process equipment for any purpose except routine phasing in of process equipment.
138. “State implementation plan” or “SIP” means the accumulated record of enforceable air pollution control measures, programs and plans adopted by the Director and submitted to and approved by the Administrator pursuant to 42 U.S.C. 7410.
139. “Stationary rotating machinery” means any gas engine, diesel engine, gas turbine, or oil fired turbine operated from a stationary mounting and used for the production of electric power or for the direct drive of other equipment.
140. “Stationary source” means any building, structure, facility or installation which emits or may emit any regulated NSR pollutant, any regulated air pollutant or any pollutant listed under section 112(b) of the act. “Building,” “structure,” “facility,” or “installation” means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person or persons under common control. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same “Major Group” as described in the “Standard Industrial Classification Manual, 1987.”
141. “Subject to regulation” means, for any air pollutant, that the pollutant is subject to either a provision in the Act, or a nationally-applicable regulation codified by the administrator in 40 CFR chapter I, subchapter C, that requires actual control of the quantity of emissions of that pollutant, and that such a control requirement has taken effect and is operative to control, limit or restrict the quantity of emissions of that pollutant released from the regulated activity.

142. “Sulfuric acid plant” means any facility producing sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, or acid sludge, but does not include facilities where conversion to sulfuric acid is utilized as a means of preventing emissions of sulfur dioxide or other sulfur compounds to the atmosphere.
143. “Temporary clean coal technology demonstration project” means a clean coal technology demonstration project operated for five years or less, and that complies with the applicable implementation plan and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after the project is terminated.
144. “Temporary source” means a source which is portable, as defined in A.R.S. § 49-401.01(23) and which is not an affected source.
145. “Total reduced sulfur” (TRS) means the sum of the sulfur compounds, primarily hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide, that are released during kraft pulping and other operations and measured by Method 16 in 40 CFR 60, Appendix A.
146. “Trivial activities” means activities and emissions units, such as the following, that may be omitted from a permit or registration application. Certain of the following listed activities include qualifying statements intended to exclude similar activities:
- a. Low-Emitting Combustion
 - i. Combustion emissions from propulsion of mobile sources;
 - ii. Emergency or backup electrical generators at residential locations;
 - iii. Portable electrical generators that can be moved by hand from one location to another.
“Moved by hand” means capable of being moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device;
 - b. Low- Or Non-Emitting Industrial Activities
 - i. Blacksmith forges;

- ii. Hand-held or manually operated equipment used for buffing, polishing, carving, cutting, drilling, sawing, grinding, turning, routing or machining of ceramic art work, precision parts, leather, metals, plastics, fiberboard, masonry, carbon, glass, or wood;
- iii. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that do not result in emission of HAP metals. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals are insignificant activities based on size or production level thresholds. Brazing, soldering, and welding equipment, and cutting torches directly related to plant maintenance and upkeep and repair or maintenance shop activities that emit HAP metals are treated as trivial and listed separately in this definition;
- iv. Drop hammers or hydraulic presses for forging or metalworking;
- v. Air compressors and pneumatically operated equipment, including hand tools;
- vi. Batteries and battery charging stations, except at battery manufacturing plants;
- vii. Drop hammers or hydraulic presses for forging or metalworking;
- viii. Equipment used exclusively to slaughter animals, not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment;
- ix. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation;
- x. Equipment used for surface coating, painting, dipping, or spraying operations, except those that will emit VOC or HAP;
- xi. CO₂ lasers used only on metals and other materials that do not emit HAP in the process;

- xii. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam;
 - xiii. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants;
 - xiv. Laser trimmers using dust collection to prevent fugitive emissions;
 - xv. Process water filtration systems and demineralizers;
 - xvi. Demineralized water tanks and demineralizer vents;
 - xvii. Oxygen scavenging or de-aeration of water;
 - xviii. Ozone generators;
 - xix. Steam vents and safety relief valves;
 - xx. Steam leaks; and
 - xxi. Steam cleaning operations and steam sterilizers;
 - xxii. Use of vacuum trucks and high pressure washer/cleaning equipment within the stationary source boundaries for cleanup and in-source transfer of liquids and slurried solids to waste water treatment units or conveyances;
 - xxiii. Equipment using water, water and soap or detergent, or a suspension of abrasives in water for purposes of cleaning or finishing.
 - xxiv. Electric motors.
- c. Building and Site Maintenance Activities
- i. Plant and building maintenance and upkeep activities, including grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots, if these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and do

- not otherwise trigger a permit revision. Cleaning and painting activities qualify as trivial activities if they are not subject to VOC or hazardous air pollutant control requirements;
- ii. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating, de-greasing, or solvent metal cleaning activities, and not otherwise triggering a permit revision;
 - iii. Janitorial services and consumer use of janitorial products;
 - iv. Landscaping activities;
 - v. Routine calibration and maintenance of laboratory equipment or other analytical instruments;
 - vi. Sanding of streets and roads to abate traffic hazards caused by ice and snow;
 - vii. Street and parking lot striping;
 - viii. Caulking operations which are not part of a production process.
- d. Incidental, Non-Industrial Activities
- i. Air-conditioning units used for human comfort that do not have applicable requirements under Title VI of the Act;
 - ii. Ventilating units used for human comfort that do not exhaust air pollutants into the ambient air from any manufacturing, industrial or commercial process;
 - iii. Tobacco smoking rooms and areas;
 - iv. Non-commercial food preparation;
 - v. General office activities, such as paper shredding, copying, photographic activities, pencil sharpening and blueprinting, but not including incineration;
 - vi. Laundry activities, except for dry-cleaning and steam boilers;
 - vii. Bathroom and toilet vent emissions;
 - viii. Fugitive emissions related to movement of passenger vehicles, if the emissions are not counted for applicability purposes under subsection (146)(c) of the definition of major

- source in this Section and any required fugitive dust control plan or its equivalent is submitted with the application;
- ix. Use of consumer products, including hazardous substances as that term is defined in the Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) where the product is used at a source in the same manner as normal consumer use;
 - x. Activities directly used in the diagnosis and treatment of disease, injury or other medical condition;
 - xi. Circuit breakers;
 - xii. Adhesive use which is not related to production.
- e. Storage, Piping and Packaging
- i. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP;
 - ii. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, if appropriate lids and covers are used;
 - iii. Chemical storage associated with water and wastewater treatment where the water is treated for consumption and/or use within the permitted facility;
 - iv. Chemical storage associated with water and wastewater treatment where the water is treated for consumption and/or use within the permitted facility;
 - v. Storage cabinets for flammable products;
 - vi. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities;
 - vii. Equipment used to mix and package soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, if appropriate lids and covers are used;
- f. Sampling and Testing

- i. Vents from continuous emissions monitors and other analyzers;
 - ii. Bench-scale laboratory equipment used for physical or chemical analysis, but not laboratory fume hoods or vents;
 - iii. Equipment used for quality control, quality assurance, or inspection purposes, including sampling equipment used to withdraw materials for analysis;
 - iv. Hydraulic and hydrostatic testing equipment;
 - v. Environmental chambers not using HAP gases;
 - vi. Soil gas sampling;
 - vii. Individual sampling points, analyzers, and process instrumentation, whose operation may result in emissions but that are not regulated as emission units;
- g. Safety Activities
- i. Fire suppression systems;
 - ii. Emergency road flares;
- h. Miscellaneous Activities
- i. Shock chambers;
 - ii. Humidity chambers;
 - iii. Solar simulators;
 - iv. Cathodic protection systems;
 - v. High voltage induced corona; and
 - vi. Filter draining.
147. "Unclassified area" means an area which the Administrator, because of a lack of adequate data, is unable to classify as an attainment or nonattainment area for a specific pollutant, and which, for purposes of this Chapter, is treated as an attainment area.
148. "Uncombined water" means condensed water containing analytical trace amounts of other chemical elements or compounds.

149. “Urban or suburban open area” means an unsubdivided tract of land surrounding a substantial urban development of a residential, industrial, or commercial nature and which, though near or within the limits of a city or town, may be uncultivated, used for agriculture, or lie fallow.
150. “Vacant lot” means a subdivided residential or commercial lot which contains no buildings or structures of a temporary or permanent nature.
151. “Vapor” means the gaseous form of a substance normally occurring in a liquid or solid state.
152. “Visibility impairment” means any humanly perceptible change in visibility (light extinction, visual range, contrast, coloration) from that which would have existed under natural conditions.
153. “Visible emissions” means any emissions which are visually detectable without the aid of instruments and which contain particulate matter.
154. “Volatile organic compounds” or “VOC” means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, that participates in atmospheric photochemical reactions. This includes any such organic compound other than the following:
- a. Methane;
 - b. Ethane;
 - c. Methylene chloride (dichloromethane);
 - d. 1,1,1-trichloroethane (methyl chloroform);
 - e. 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);
 - f. Trichlorofluoromethane (CFC-11);
 - g. Dichlorodifluoromethane (CFC-12);
 - h. Chlorodifluoromethane (HCFC-22);

- i. Trifluoromethane (HFC-23);
- j. 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114);
- k. Chloropentafluoroethane (CFC-115);
- l. 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123);
- m. 1,1,1,2-tetrafluoroethane (HFC-134(a));
- n. 1,1-dichloro 1-fluoroethane (HCFC-141(b));
- o. 1-chloro 1,1-difluoroethane (HCFC-142(b));
- p. 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);
- q. Pentafluoroethane (HFC-125);
- r. 1,1,2,2-tetrafluoroethane (HFC-134);
- s. 1,1,1-trifluoroethane (HFC-143(a));
- t. 1,1-difluoroethane (HFC-152(a));
- u. Parachlorobenzotrifluoride (PCBTF);
- v. Cyclic, branched, or linear completely methylated siloxanes;
- w. Acetone;
- x. Perchloroethylene (tetrachloroethylene);
- y. 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225(ca));
- z. 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225(cb));
- aa. 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee);
- bb. Difluoromethane (HFC-32);
- cc. Ethylfluoride (HFC-161);
- dd. 1,1,1,3,3,3-hexafluoropropane (HFC-236(fa));
- ee. 1,1,2,2,3-pentafluoropropane (HFC-245(ca));
- ff. 1,1,2,3,3-pentafluoropropane (HFC-245(ea));
- gg. 1,1,1,2,3-pentafluoropropane (HFC-245(eb));

- hh. 1,1,1,3,3-pentafluoropropane (HFC-245(fa));
- ii. 1,1,1,2,3,3-hexafluoropropane (HFC-236(ea));
- jj. 1,1,1,3,3-pentafluorobutane (HFC-365(mfc));
- kk. Chlorofluoromethane (HCFC-31);
- ll. 1 chloro-1-fluoroethane (HCFC-151(a));
- mm. 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123(a));
- nn. 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C₄F₉OCH₃);
- oo. 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF₃)₂CF₂OCH₃);
- pp. 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C₄F₉OC₂H₅);
- qq. 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF₃)₂CF₂OC₂H₅);
- rr. Methyl acetate; and
- ss. 1,1,1,2,2,3,3-heptafluoro-3-methoxypropane (n-C₃F₇OCH₃, HFE—7000);
- tt. 3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE – 7500);
- uu. 1,1,1,2,3,3,3-hentafluoropropane (HFC 227ea);
- vv. Methyl formate (HCOOCH₃): and
- ww. (1) 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE–7300);
- xx. Propylene carbonate;
- yy. Dimethyl carbonate; and
- zz. Trans -1,3,3,3-tetrafluoropropene;
- aaa.HCF₂OCHF₂H (HFE-134);
- bbb. HCF₂OCHF₂OCHF₂H (HFE-236(cal2));
- ccc.HCF₂OCHF₂CF₂OCHF₂H (HFE-338(pcc13));
- ddd. HCF₂OCHF₂OCHF₂CF₂OCHF₂H (H-Galden 1040x or H-Galden ZT 130 (or 150 or 180));
- eee.Trans 1-chloro-3,3,3- trifluoroprop-1-ene;
- fff. 2,3,3,3-tetrafluoropropene;

- ggg. 2-amino-2-methyl-1-propanol; and
- hhh. Perfluorocarbon compounds that fall into these classes:
 - i. Cyclic, branched, or linear, completely fluorinated alkanes.
 - ii. Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations.
 - iii. Cycle, branched, or linear, completely fluorinated tertiary amines with no unsaturations;
or
 - iv. Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.
 - v. The following compound is VOC for purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling and inventory requirements which apply to VOC and shall be uniquely identified in emission reports, but is not VOC for purposes of VOC emissions limitations or VOC content requirements: t-butyl acetate.
- 155. “Wood waste burner” means an incinerator designed and used exclusively for the burning of wood wastes consisting of wood slabs, scraps, shavings, barks, sawdust or other wood material, including those that generate steam as a by-product.

**ARTICLE 2. AMBIENT AIR QUALITY STANDARDS; AREA DESIGNATIONS;
CLASSIFICATIONS**

R18-2-201. Particulate Matter: PM₁₀ and PM_{2.5}

A. PM₁₀ Standards

1. The level of the primary and secondary ambient air quality standards for PM₁₀ is 150 micrograms per cubic meter of PM₁₀ – 24-hour average concentration.
2. To determine attainment of the primary and secondary standards, a person shall measure PM₁₀ in the ambient air by:

- a. A reference method based on 40 CFR 50, Appendix J, and designated according to 40 CFR 53; or
 - b. An equivalent method designated according to 40 CFR 53.
3. The primary and secondary 24-hour ambient air quality standards for PM_{10} are attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter, determined according to 40 CFR 50, Appendix K, is less than or equal to one.

B. $PM_{2.5}$ Standards

1. The primary ambient air quality standards for $PM_{2.5}$ are:
 - a. ~~12~~ 9.0 micrograms per cubic meter of $PM_{2.5}$ – annual arithmetic mean concentration.
 - b. 35 micrograms per cubic meter of $PM_{2.5}$ – 24-hour average concentration.
2. The secondary ambient air quality standards for $PM_{2.5}$ are:
 - a. 15 micrograms per cubic meter of $PM_{2.5}$ – annual arithmetic mean concentration.
 - b. 35 micrograms per cubic meter of $PM_{2.5}$ – 24-hour average concentration.
3. To determine attainment of the primary and secondary standards, a person shall measure $PM_{2.5}$ in the ambient air by:
 - a. A reference method based on 40 CFR 50, Appendix L, and designated according to 40 CFR 53; or
 - b. An equivalent method designated according to 40 CFR 53.
4. The primary annual ambient air quality standard for $PM_{2.5}$ is met when the annual arithmetic mean concentration, determined according to 40 CFR 50, Appendix N, is less than or equal to ~~12~~ 9.0 micrograms per cubic meter.
5. The secondary annual ambient air quality standard for $PM_{2.5}$ is met when the annual arithmetic mean concentration, determined according to 40 CFR 50, Appendix N, is less than or equal to 15 micrograms per cubic meter.

6. The primary and secondary 24-hour ambient air quality standards for PM_{2.5} are met when the 98th percentile 24-hour concentration, determined according to 40 CFR 50, Appendix N, is less than or equal to 35 micrograms per cubic meter.

ARTICLE 3. PERMITS AND PERMIT REVISIONS

R18-2-301. Definitions

The following definitions apply to this Article:

1. “Alternative method” means any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated to produce results adequate for the Director’s determination of compliance in accordance with R18-2-311(D).
2. “Billable permit action” means the issuance or denial of a new permit, significant permit revision, or minor permit revision, or the renewal of an existing permit.
3. “Capacity factor” means the ratio of the average load on a machine or equipment for the period of time considered to the capacity rating of the machine or equipment.
4. “CEM” means a continuous emission monitoring system as defined in R18-2-101.
5. “Complete” means, in reference to an application for a permit, permit revision or registration, that the application contains all the information necessary for processing the application. Designating an application complete for purposes of a permit, permit revisions or registration processing does not preclude the Director from requesting or accepting any additional information.
6. “Dispersion technique” means any technique which attempts to affect the concentration of a pollutant in the ambient air by any of the following:
 - a. Using that portion of a stack which exceeds good engineering practice stack height;
 - b. Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or

- c. Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack; or other selective handling of exhaust gas streams so as to increase the exhaust gas plume rise. This shall not include any of the following:
 - i. The reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream.
 - ii. The merging of exhaust gas streams under any of the following conditions:
 - (1) The source owner or operator demonstrates that the facility was originally designed and constructed with such merged gas streams;
 - (2) After July 8, 1985, such merging is part of a change in operation at the facility that includes the installation of pollution controls and is accompanied by a net reduction in the allowable emissions of a pollutant, applying only to the emission limitation for that pollutant; or
 - (3) Before July 8, 1985, such merging was part of a change in operation at the facility that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or, in the event that no emission limitation was in existence prior to the merging, an increase in the quantity of pollutants actually emitted prior to the merging, the reviewing agency shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Absent a demonstration by the source owner or operator that merging was not significantly motivated by such intent, the reviewing agency shall deny credit for the effects of such merging in calculating the allowable emissions for the source.
 - iii. Smoke management in agricultural or silvicultural prescribed burning programs.

- iv. Episodic restrictions on residential woodburning and open burning.
 - v. Techniques which increase final exhaust gas plume rise where the resulting allowable emissions of sulfur dioxide from the facility do not exceed 5,000 tons per year.
7. “Emissions allowable under the permit” means a permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or an emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.
 8. “Fossil fuel-fired steam generator” means a furnace or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.
 9. “Fuel oil” means Number 2 through Number 6 fuel oils as specified in ASTM D-396-90a (Specification for Fuel Oils), gas turbine fuel oils Numbers 2-GT through 4-GT as specified in ASTM D-2880-90a (Specification for Gas Turbine Fuel Oils), or diesel fuel oils Numbers 2-D and 4-D as specified in ASTM D-975-90a (Specification for Diesel Fuel Oils).
 10. “Itemized bill” means a breakdown of the permit processing time into the categories of pre-application activities, completeness review, substantive review, and public involvement activities, and within each category, a further breakdown by employee name.
 11. “Major source threshold” means the lowest applicable emissions rate for a pollutant that would cause the source to be a major source at the particular time and location, under the definition of major source in R18-2-101.
 12. “Maximum capacity to emit” means the maximum amount a source is capable of emitting under its physical and operational design without taking any limitations on operations or air pollution controls into account.
 13. “Maximum capacity to emit with any elective limits” means the maximum amount a source is capable of emitting under its physical and operational design taking into account the effect on emissions of any elective limits included in the source’s registration under R18-2-302.01(F).

14. “Minor NSR Modification” means any of the following changes that do not qualify as a major source or major modification:
- a. Any physical change in or change in the method of operation of an emission unit or a stationary source that either:
 - i. Increases the potential to emit of a regulated minor NSR pollutant by an amount greater than or equal to the permitting exemption thresholds, or
 - ii. Results in emissions of a regulated minor NSR pollutant not previously emitted by such emission unit or stationary source in an amount greater than or equal to the permitting exemption thresholds.
 - b. Construction of one or more new emissions units that have the potential to emit regulated minor NSR pollutants at an amount greater than or equal to the permitting exemption threshold.
 - c. A change covered by subsections ~~(1214)~~(a) or (b) constitutes a minor NSR modification regardless of whether there will be a net decrease in total source emissions or a net increase in total source emissions that is less than the permitting exemption threshold as a result of decreases in the potential to emit of other emission units at the same stationary source.
 - d. For the purposes of this subsection ~~(the)~~ following do not constitute a physical change or change in the method of operation:
 - i. A change consisting solely of the construction of, or changes to, a combination of emissions units qualifying as a categorically exempt activity.
 - ii. For a stationary source that is required to obtain a Class II permit under R18-2-302 and that is subject to source-wide emissions caps under R18-2-306.01 or R18-2-306.02, (a) change that will not result in the violation of the existing emissions cap for that regulated minor NSR pollutant.

- iii. Replacement of an emission unit by a unit with a potential to emit regulated minor NSR pollutants that is less than or equal to the potential to emit of the existing unit, provided the replacement does not cause an increase in emissions at other emission units at the stationary source. A unit installed under this provision is subject to any limits applicable to the unit it replaced.
- iv. Routine maintenance, repair, and replacement.
- v. Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, 15 U.S.C. 792, or by reason of a natural gas curtailment plan under the Federal Power Act, 16 U.S.C. 792 to 825r.
- vi. Use of an alternative fuel by reason of an order or rule under Section 125 of the Act.
- vii. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.
- viii. Use of an alternative fuel or raw material by a stationary source that either:
 - (1) The source was capable of accommodating before December 12, 1976, unless the change would be prohibited under any federally enforceable permit condition established after December 12, 1976, under 40 CFR 52.21, or under Articles 3 or 4 of this Chapter; or
 - (2) The source is approved to use under any permit issued under 40 CFR 52.21, or under Articles 3 or 4 of this Chapter.
- ix. An increase in the hours of operation or in the production rate, unless the change would be prohibited under any federally enforceable permit condition established after December 12, 1976, under 40 CFR 52.21, or under Articles 3 or 4 of this Chapter.
- x. Any change in ownership at a stationary source.

- xi. The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, if the project complies with:
 - (1) The SIP, and
 - (2) Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
 - xii. For electric utility steam generating units located in attainment and unclassifiable areas only, the installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, if the project does not result in an increase in the potential to emit any regulated pollutant emitted by the unit. This exemption applies on a pollutant-by-pollutant basis.
 - xiii. For electric utility steam generating units located in attainment and unclassifiable areas only, the reactivation of a very clean coal-fired electric utility steam generating unit.
- e. For purposes of this subsection:
- i. “Potential to emit” means the lower of a source’s or emission unit’s potential to emit or its allowable emissions.
 - ii. In determining potential to emit, the fugitive emissions of a stationary source shall not be considered unless the source belongs to a section 302(j) category.
 - iii. All of the roadways located at a stationary source constitute a single emissions unit.
15. “NAICS” means the five- or six-digit North American Industry Classification System-United States, 1997, number for industries used by the U.S. Department of Commerce.
16. “Permit processing time” means all time spent by Air Quality Division staff or consultants on tasks specifically related to the processing of an application for the issuance or renewal of a particular permit or permit revision, including time spent processing an application that is denied.
17. “Quantifiable” means, with respect to emissions, including the emissions involved in equivalent emission limits and emission trades, capable of being measured or otherwise determined in terms

of quantity and assessed in terms of character. Quantification may be based on emission factors, stack tests, monitored values, operating rates and averaging times, materials used in a process or production, modeling, or other reasonable measurement practices.

18. "Registration" means a registration under R18-2-302.01.
19. "Replicable" means, with respect to methods or procedures, sufficiently unambiguous that the same or equivalent results would be obtained by the application of the method or procedure by different users.
20. "Responsible official" means one of the following:
 - a. 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 of 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:
 - i. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
 - ii. The delegation of authority to such representatives is approved in advance by the permitting authority;
 - b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
 - c. For a municipality, state, federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this Article, 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); or
 - d. For affected sources:

- i. The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the Act or the regulations promulgated thereunder are concerned; and
 - ii. The designated representative for any other purposes under 40 CFR 70.
- 21. “Screening model” means air dispersion modeling performed with screening techniques in accordance with 40 CFR 51, Appendix W as of June 30, 2017 (and no future amendments or additions).
- 22. “Small source” means a source with a potential to emit, without controls, less than the rate defined as permitting exemption thresholds in R18-2-101, but required to obtain a permit solely because it is subject to a standard under 40 CFR 63.
- 23. “Startup” means the setting in operation of a source for any purpose.
- 24. “Synthetic minor” means a source with a permit that contains voluntarily accepted emissions limitations, controls, or other requirements (for example, a cap on production rates or hours of operation, or limits on the type of fuel) under R18-2-306.01 to (reduce) the potential to emit to a level below the major source threshold.

R18-2-306. Permit Contents

- A. Each permit issued by the Director shall include the following elements:
 - 1. The date of issuance and the permit term.
 - 2. Enforceable emission limitations and standards, including operational requirements and limitations that ensure compliance with all applicable requirements at the time of issuance and operational requirements and limitations that have been voluntarily accepted under R18-2-306.01.
 - a. The permit shall specify and reference the origin of and authority for each term or condition and identify any difference in form as compared to the applicable requirement upon which the term or condition is based.

- b. The permit shall state that, if an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.
 - c. Any permit containing an equivalency demonstration for an alternative emission limit submitted under R18-2-304(E) shall contain provisions to ensure that any resulting emissions limit has been demonstrated to be quantifiable, accountable, enforceable, and based on replicable procedures.
 - d. The permit shall specify applicable requirements for fugitive emission limitations, regardless of whether the source category in question is included in the list of sources contained in the definition of major source in R18-2-101.
3. Each permit shall contain the following requirements with respect to monitoring:
- a. All monitoring and analysis procedures or test methods required under applicable monitoring and testing requirements, including:
 - i. Monitoring and analysis procedures or test methods under 40 CFR 64;
 - ii. Other procedures and methods promulgated under sections 114(a)(3) or 504(b) of the Act; and
 - iii. Monitoring and analysis procedures or test methods required under R18-2-306.01.
 - b. 40 CFR 64 as adopted July 1, 1998, is incorporated by reference and on file with the Department and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments. If more than one monitoring or testing requirement applies, the permit may specify a streamlined set of monitoring or testing provisions if the specified monitoring or testing is adequate to assure compliance at least to the same extent as the monitoring or testing applicable requirements not included in the permit as a result of such streamlining;

- c. If the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit as reported under subsection (A)(4). The monitoring requirements shall ensure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement, and as otherwise required under R18-2-306.01. Recordkeeping provisions may be sufficient to meet the requirements of this subsection; and
 - d. As necessary, requirements concerning the use, maintenance, and, if appropriate, installation of monitoring equipment or methods.
4. The permit shall incorporate all applicable recordkeeping requirements including recordkeeping requirements established under R18-2-306.01, for the following:
- a. Records of required monitoring information that include the following:
 - i. The date, place as defined in the permit, and time of sampling or measurement;
 - ii. The date any analyses was performed;
 - iii. The name of the company or entity that performed the analysis;
 - iv. A description of the analytical technique or method used;
 - v. The results of any analysis; and
 - vi. The operating conditions existing at the time of sampling or measurement;
 - b. Retention of records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by the permit.

5. The permit shall incorporate all applicable reporting requirements including reporting requirements established under R18-2-306.01 and require the following:
 - a. Submittal of reports of any required monitoring. All instances of deviations from permit requirements shall be clearly identified in the reports. All required reports shall be certified by a responsible official consistent with R18-2-304(I) and R18-2-309(A)(5) and shall be submitted with the following frequency:
 - i. For a Class I permit, at least once every six months;
 - ii. For a Class II permit, at least once per year.
 - b. Prompt reporting of deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of the deviations, and any corrective actions or preventive measures taken. Where the applicable requirement contains a definition of prompt or otherwise specifies a timeframe for reporting deviations, that definition or timeframe shall govern. Where the applicable requirement does not address the timeframe for reporting deviations, the permittee shall submit reports of deviations in compliance with the following schedule:
 - i. Notice that complies with timeframe in R18-2-310.01(A) is prompt for deviations that constitute excess emissions;
 - ii. Except as otherwise provided in the permit, notice that complies with subsection (A)(5)(a) is prompt for all other types of deviation.
6. A permit condition prohibiting emissions exceeding any allowances the source lawfully holds under Title IV of the Act or the regulations promulgated thereunder.
 - a. A permit revision is not required for increases in emissions that are authorized by allowances acquired under the acid rain program, if the increases do not require a permit revision under any other applicable requirement.

- b. A limit shall not be placed on the number of allowances held by the source. The source shall not, however, use allowances as a defense to noncompliance with any other applicable requirement.
 - c. Any allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Act.
 - d. Any permit issued under the requirements of this Chapter and Title V of the Act to a unit subject to the provisions of Title IV of the Act shall include conditions prohibiting all of the following:
 - i. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owner or operator of the unit or the designated representative of the owner or operator,
 - ii. Exceedances of applicable emission rates,
 - iii. Use of any allowance before the year for which it is allocated, and
 - iv. Contravention of any other provision of the permit.
7. A severability clause to ensure the continued validity of the various permit requirements in the event of a challenge to any portion of the permit.
8. Provisions stating the following:
- a. The permittee shall comply with all conditions of the permit including all applicable requirements of Arizona air quality statutes A.R.S. Title 49, Chapter 3, and the air quality rules, 18 A.A.C. 2. Any permit noncompliance is grounds for enforcement action; for a permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. Noncompliance with any federally enforceable requirement in a permit is a violation of the Act.

- b. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
 - c. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
 - d. The permit does not convey any property rights of any sort, or any exclusive privilege to the permit holder.
 - e. The permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon the Director's request, the permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the permittee shall furnish a copy of the records directly to the Administrator along with a claim of confidentiality.
 - f. For any major source operating in a nonattainment area for all pollutants for which the source is classified as a major source, the source shall comply with reasonably available control technology.
9. A provision to ensure that the source pays fees to the Director under A.R.S. § 49-426(E), R18-2-326, and R18-2-511.
10. A provision stating that a permit revision shall not be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes provided for in the permit.

11. Terms and conditions for reasonably anticipated operating scenarios identified by the source in its application as approved by the Director. The terms and conditions shall:
 - a. Require the source, contemporaneously with making a change from one operating scenario to another, to record in a log at the permitted facility a record of the scenario under which it is operating;
 - b. Extend the permit shield described in R18-2-325 to all terms and conditions under each such operating scenario; and
 - c. Ensure that the terms and conditions of each such alternative scenario meet all applicable requirements and the requirements of this Chapter.
12. Terms and conditions, if the permit applicant requests them, and as approved by the Director, for the trading of emissions increases and decreases in the permitted facility, to the extent that the applicable requirements provide for trading the increases and decreases without a case-by-case approval of each emissions trade. The terms and conditions:
 - a. Shall include all terms required under subsections (A) and (C) to determine compliance;
 - b. Shall not extend the permit shield in subsection (D) to all terms and conditions that allow the increases and decreases in emissions;
 - c. Shall not include trading that involves emission units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades; and
 - d. Shall meet all applicable requirements and requirements of this Chapter.
13. Terms and conditions, if the permit applicant requests them and they are approved by the Director, setting forth intermittent operating scenarios including potential periods of downtime. If the terms and conditions are included, the state's emissions inventory shall not reflect the zero emissions associated with the periods of downtime.
14. Upon request of a permit applicant, the Director shall issue a permit that contains terms and conditions allowing for the trading of emission increases and decreases in the permitted facility

solely for the purpose of complying with a federally enforceable emission cap established in the permit independent of otherwise applicable requirements. The permit applicant shall include in its application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The Director shall not include in the emissions trading provisions any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades. The permit shall also require compliance with all applicable requirements. Changes made under this subsection ~~{shall}~~ not include modifications under any provision of Title I of the Act and shall not exceed emissions allowable under the permit. The terms and conditions shall provide, for Class I sources, for notice that conforms to R18-2-317(D) and (E), and for Class II sources, for logging that conforms to R18-2-317.02(B)(5). In addition, the notices for Class I and Class II sources shall describe how the increases and decreases in emissions will comply with the terms and conditions of the permit.

15. Other terms and conditions as are required by the Act, A.R.S. Title 49, Chapter 3, Articles 1 and 2, and the rules adopted in 18 A.A.C. 2.

B. Federally-enforceable Requirements.

1. The following permit conditions shall be enforceable by the Administrator and citizens under the Act:
 - a. Except as provided in subsection (B)(2), all terms and conditions in a Class I permit, including any provision designed to limit a source's potential to emit;
 - b. Terms or conditions in a Class II permit setting forth federal applicable requirements; and
 - c. Terms and conditions in any permit entered into voluntarily under R18-2-306.01, as follows:
 - i. Emissions limitations, controls, or other requirements; and
 - ii. Monitoring, recordkeeping, and reporting requirements associated with the emissions limitations, controls, or other requirements in subsection (B)(1)(c)(i).

2. Notwithstanding subsection (B)(1)(a), the Director shall specifically designate as not being federally enforceable under the Act any terms and conditions included in a Class I permit that are not required under the Act or under any of its applicable requirements.
- C. Each permit shall contain a compliance plan as specified in R18-2-309.
- D. Each permit shall include the applicable permit shield provisions under R18-2-325.
- E. Emergency provision.
1. An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that requires immediate corrective action to restore normal operation and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
 2. An emergency constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of subsection (E)(3) are met.
 3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause or causes of the emergency;
 - b. At the time of the emergency the permitted facility was being properly operated;
 - c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. The permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were

exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
 5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
- F. A Class I permit issued to a major source shall require that revisions be made under R18-2-321 to incorporate additional applicable requirements adopted by the Administrator under the Act that become applicable to a source with a permit with a remaining permit term of three or more years. A revision shall not be required if the effective date of the applicable requirement is after the expiration of the permit. The revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of the standards and regulations. Any permit revision required under this subsection ~~(shall)~~ comply with R18-2-322 for permit renewal and shall reset the five-year permit term.

R18-2-310.01. Reporting Requirements

- A. The owner or operator of any source shall report to the Director any emissions in excess of the limits established by this Chapter or the applicable permit. ~~The owner or operator of any registered source may report excess emissions in accordance with this Section in order to qualify for the affirmative defense established in R18-2-310.~~ The report shall be in two parts as specified below:
1. Notification by telephone or facsimile within 24 hours of the time the owner or operator first learned of the occurrence of excess emissions that includes all available information from subsection (B).
 2. Detailed written notification by submission of an excess emissions report within 72 hours of the notification under subsection (A)(1).

- B.** The excess emissions report shall contain the following information:
1. The identity of each stack or other emission point where the excess emissions occurred;
 2. The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
 3. The time and duration or expected duration of the excess emissions;
 4. The identity of the equipment from which the excess emissions emanated;
 5. The nature and cause of the emissions;
 6. The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of the malfunctions;
 7. The steps that were or are being taken to limit the excess emissions; and
 8. If the source's permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the permit procedures.
- C.** In the case of continuous or recurring excess emissions, the notification requirements of this Section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in the notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to subsections (A) and (B).

R18-2-311. Test Methods and Procedures

- A.** Except as otherwise specified in this Chapter, the applicable procedures and testing methods contained in the Arizona Testing Manual; 40 CFR 52, Appendices D and E; 40 CFR 60, Appendices A through F; and 40 CFR 61, Appendices B and C shall be used to determine compliance with the requirements established in this Chapter or contained in permits issued pursuant to this Chapter.

- B. Except as otherwise provided in this subsection the opacity of visible emissions shall be determined by Reference Method 9 of the Arizona Testing Manual or by alternative method ALT-082 approved by the Administrator on May 15, 2012. A permit may specify a method, other than Method 9 or ALT-082, for determining the opacity of emissions from a particular emissions unit, if the method has been promulgated by the Administrator in 40 CFR 60, Appendix A or approved by the Administrator as an alternative method.
- C. Except as otherwise specified in this Chapter, the heat content of solid fuel shall be determined according to ASTM method D-3176-89; (Practice for Ultimate Analysis of Coal and Coke) and ASTM method D-2015-91; (Test Method for Gross Calorific Value of Coal and Coke by the Adiabatic Bomb Calorimeter).
- D. Except for ambient air monitoring and emissions testing required under Articles 9 and 11 of this Chapter, alternative and equivalent test methods in any test plan submitted to the Director may be approved by the Director for the duration of that plan provided that the following ~~three~~ criteria are met:
 - 1. The alternative or equivalent test method measures the same chemical and physical characteristics as the test method it is intended to replace.
 - 2. The alternative or equivalent test method has substantially the same or better reliability, accuracy, and precision as the test method it is intended to replace.
 - 3. Applicable quality assurance procedures are followed in accordance with the Arizona Testing Manual, 40 CFR 60 or other quality assurance methods which are consistent with principles contained in the Arizona Testing Manual or 40 CFR 60 as approved by the Director.
 - 4. The test plan is submitted to and authorized by EPA.

R18-2-312. Performance Tests

- A.** Except as provided in subsection (J), within 60 days after a source subject to the permit requirements of this Article has achieved the capability to operate at its maximum production rate on a sustained basis but no later than 180 days after initial start-up of such source and at such other times as may be required by the Director, the owner or operator of such source shall conduct performance tests and furnish the Director a written report of the results of the tests.
- B.** Performance tests shall be conducted and data reduced in accordance with the test method and procedures contained in the Arizona Testing Manual unless the Director:

 - 1. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;
 - 2. Approves the use of an equivalent method authorized by EPA;
 - 3. Approves the use of an alternative method authorized by EPA, the results of which he has determined to be adequate for indicating whether a specific source is in compliance; or
 - 4. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Director's satisfaction that the source is in compliance with the standard.

5. Nothing in this Section shall be construed to abrogate the Director's authority to require testing.
- C.** Performance tests shall be conducted under such conditions as the Director shall specify to the plant operator based on representative performance of the source. The owner or operator shall make available to the Director such records as may be necessary to determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard.
- D.** The owner or operator of a permitted source shall provide the Director two weeks prior notice of the performance test to afford the Director the opportunity to have an observer present.

- E.** The owner or operator of a permitted source shall provide, or cause to be provided, performance testing facilities as follows:
1. Sampling ports adequate for test methods applicable to such facility.
 2. Safe sampling platform(s).
 3. Safe access to sampling platform(s).
 4. Utilities for sampling and testing equipment.
- F.** Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs is required to be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Director's approval, be determined using the arithmetic means of the results of the two other runs. If the Director, or the Director's designee is present, tests may only be stopped with the Director's or such designee's approval. If the Director, or the Director's designee is not present, tests may only be stopped for good cause, which includes forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the operator's control. Termination of testing without good cause after the first run is commenced shall constitute a failure of the test.
- G.** Except as provided in subsection (H) compliance with the emission limits established in this Chapter or as prescribed in permits issued pursuant to this Chapter shall be determined by the performance tests specified in this Section or in the permit.
- H.** In addition to performance tests specified in this Section, compliance with specific emission limits may be determined by:
1. Opacity tests.

2. Emission limit compliance tests specifically designated as such in the regulation establishing the emission limit to be complied with.
 3. Continuous emission monitoring, where applicable quality assurance procedures are followed and where it is designated in the permit or in an applicable requirement to show compliance.
- I.** Nothing in this Section shall be so construed as to prevent the utilization of measurements from emissions monitoring devices or techniques not designated as performance tests as evidence of compliance with applicable good maintenance and operating requirements.
- J.** The owner or operator of a source subject to this Section may request an extension to the performance test deadline due to a force majeure event as follows:
1. If a force majeure event is about to occur, occurs, or has occurred for which the owner or operator intends to assert a claim of force majeure, the owner or operator shall notify the Director in writing as soon as practicable following the date the owner or operator first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline. The notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall be given as soon as practicable.
 2. The owner or operator shall provide to the Director a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the owner or operator proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure event occurs.
 3. The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Director. The Director shall notify the owner or operator in writing of approval or disapproval of the request for an extension as soon as practicable.

4. Until an extension of the performance test deadline has been approved by the Director under subsections (1), (2), and (3), the owner or operator remains subject to the requirements of this Section.
5. For purposes of this subsection, a “force majeure event” means an event that will be or has been caused by circumstances beyond the control of the source, its contractors, or any entity controlled by the source that prevents the owner or operator from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the source’s best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the source.

R18-2-334. Minor New Source Review

A. Applicability.

1. Except as provided in subsection (A)(4), this Section shall apply to the following activities:
 - a. Construction of any new Class I or Class II source, including the construction of any source requiring a Class II permit under R18-2-302.01(C)(4); or
 - b. Any minor NSR modification to a Class I or Class II source.
2. This Section shall apply to a regulated minor NSR pollutant emitted by a new stationary source subject to this Section, if the source will have the potential to emit that pollutant at an amount equal to or greater than the permitting exemption threshold.
3. This Section shall apply to an increase in emissions of a regulated minor NSR pollutant from a minor NSR modification, if the modification would increase the source’s potential to emit that pollutant by an amount equal to or greater than the permitting exemption threshold.
4. This Section shall not apply to the emissions of a pollutant from any of the activities identified in this subsection, if the emissions of that pollutant are subject to Article 4 of this Chapter.

- B.** No person shall begin actual construction of a new stationary source, or minor NSR modification, subject to this Section without first obtaining a permit, a permit revision, a proposed final permit, or a proposed final permit revision from the Director in accordance with R18-2-304.
- C.** The Director shall not issue a proposed final Class I permit or permit revision or a Class II permit or permit revision subject to this Section to a person proposing to construct a new source or make a minor NSR modification unless the source or modification meets one of the following conditions for each regulated minor NSR pollutant subject to this Section:
1. The owner or operator elects to implement RACT.
 - a. In the case of a new source, the owner or operator shall implement RACT for each emissions unit that has the potential to emit a regulated minor NSR pollutant in an amount equal to or greater than 20% of the permitting exemption threshold.
 - b. In the case of a minor NSR modification, the owner or operator shall implement RACT for each emissions unit that will experience an increase in the potential to emit a regulated minor NSR pollutant equal to or greater than 20% of the permitting exemption threshold.
 - c. When it is technically feasible and otherwise consistent with the definition of RACT to apply the same devices, systems, process modifications, work practices or other apparatus or techniques to a group of emissions units, that group of emissions units shall be treated as a single emissions unit for purposes of subsections (C)(1)(a) and (b). The following are examples of situations to which this subsection ~~(may)~~ apply:
 - i. Emissions from a group of emissions units can be vented to a single control device.
 - ii. A low-VOC coating can be used in several spray-painting booths.
 2. An ambient air quality assessment demonstrates that emissions from the source or minor NSR modification will not interfere with attainment or maintenance of a national ambient air quality standard in any area.

- a. An owner or operator may elect to have the Director perform a screening model of its emissions. If the results of the screening model indicate that the source or minor NSR modification will interfere with attainment or maintenance of a national ambient air quality standard, the owner or operator may perform a more refined model to make the demonstration required by this subsection.
- b. The requirements of this subsection shall be satisfied, if the results of the screening or more refined model conducted pursuant to subsection (B)(2)(a) demonstrate either of the following:
 - i. Ambient concentrations resulting from emissions from the source or modification combined with existing concentrations of regulated minor NSR pollutants will not interfere with attainment or maintenance of a national ambient air quality standard.
 - ii. Emissions from the source or minor modification will have an ambient impact below the significance levels as defined in R18-2-401.
- c. The assessment required by this subsection shall take into account any voluntarily accepted emissions limitations, controls, or emissions decreases ~~other requirements~~ that are ~~or will be enforceable~~ included in the permit or permit revision for the source and that are permanent, quantifiable, and otherwise enforceable as a practical matter.

D. RACT Determinations.

1. Except as otherwise provided in this subsection, the Director shall determine RACT on the basis of a case-by-case analysis performed by the permit applicant of the emission reduction methods available for each emission unit subject to the RACT requirement under subsection (C)(1).
2. The Director shall accept a requirement proposed by a permit applicant as RACT under subsection (C)(1) if it complies with the most recently adopted of the following guidelines or standards in effect at the time of the application:
 - a. A control technique guideline issued by the Administrator under section 108(f)(1) of the Act.

- b. An emissions standard established or revised by the Administrator for the same type of source under section 111 or 112 of the Act after November 15, 1990.
 - c. An applicable requirement of this Chapter or of air quality control regulations adopted by a County under A.R.S. § 49-479 that has been specifically identified as constituting RACT.
 - d. A RACT standard imposed on the same type of source by a general permit.
 - e. A RACT standard imposed on the same type of source under this Section no more than 10 years before submission of the application by the permit applicant. To facilitate identification of previously imposed RACT standards, the Director shall establish an online database of RACT determinations made under this Section.
- E.** Notwithstanding an election to adopt RACT under subsection (C)(1), a permit applicant subject to this Section shall conduct an ambient air quality impact assessment under subsection (C)(2) upon the Director's request. The Director shall make such a request, if there is reason to believe that a source or minor NSR modification could interfere with attainment or maintenance of a national ambient air quality standards. In making that determination, the Director shall take into consideration:
- 1. The source's emission rates.
 - 2. The location of emission units within the facility and their proximity to the ambient air.
 - 3. The terrain in which the source is or will be located.
 - 4. The source type.
 - 5. The location and emissions of nearby sources.
 - 6. Background concentrations of regulated minor NSR pollutants.
- F.** The Director shall deny an application for a Class I permit or permit revision or a Class II permit or permit revision subject to this Section, if an assessment conducted pursuant to subsection (C)(2) demonstrates that the source or modification will interfere with attainment or maintenance of a national ambient air quality standard.

- G. A copy of the notice required by R18-2-330 for permits or significant permit revisions subject to this Section must also be sent to the Administrator through the appropriate regional office, and to all other state and local air pollution control agencies having jurisdiction in the region in which the source subject to the permit or permit revision will be located. The notice also must be sent to any other agency in the region having responsibility for implementing the procedures required under 40 CFR 51, Subpart I.
- H. All modeling required pursuant to this Section shall be conducted in accordance with 40 CFR 51, Appendix W as of June 30, 2017 (and no future amendments or additions).
- I. The Director shall specify those conditions in the permit that are implemented pursuant to this Section. The specified conditions shall be included in subsequent permit renewals unless modified pursuant to this Section or Article 4 of this Chapter.
- J. The issuance of a permit or permit revision under this Section shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the SIP and any other requirements under local, state, or federal law.

**ARTICLE 4. PERMIT REQUIREMENTS FOR NEW MAJOR SOURCES AND MAJOR
MODIFICATIONS TO EXISTING MAJOR SOURCES**

**R18-2-405. Special Rule for Major Sources of VOC or Nitrogen Oxides in Ozone
Nonattainment Areas Classified as Serious or Severe**

- A. Applicability. The provisions of this Section only apply to stationary sources of VOC or nitrogen oxides in ozone nonattainment areas classified as serious or severe. Unless otherwise provided in this Section, all requirements of Articles 3 and 4 of this Chapter apply.
- B. “Significant” means, in reference to an emissions increase or a net emissions increase, any increase in actual emissions of volatile organic compounds or nitrogen oxides that would result from any

physical change in, or change in the method of operation of, a major source, if the emissions increase of volatile organic compounds or nitrogen oxides exceeds 25 tons per year.

C. Increased emissions of volatile organic compounds or nitrogen oxides resulting from any physical change in, or change in the method of operation of, a stationary source shall constitute a significant net emission increase, if the increase in net emissions of volatile organic compounds or nitrogen oxides from the source equals or exceeds 25 tons when aggregated with all other net increases in emissions from the source over any period of 5 consecutive calendar years which includes the calendar year in which such increase occurred.

CD. For any major source that emits or has the potential to emit less than 100 tons of VOC or oxides of nitrogen per year, a physical or operational change that results in a significant increase in VOC or oxides of nitrogen, respectively, from any discrete operation, unit, or other pollutant emitting activity at the source shall constitute a major modification, except that the increase shall not constitute a major modification, if the owner or operator of the source elects to offset the increase by a greater reduction in emissions of VOC or oxides of nitrogen, as applicable, from other operations, units or activities at the source at an internal offset ratio of at least 1.3 to 1. If the owner or operator does not make such an election, the change shall constitute a major modification but BACT shall be substituted for LAER when applying R18-2-403(A)(1) to the major modification.

DE. For any stationary source that emits or has the potential to emit 100 tons or more of VOC or oxides of nitrogen per year, a physical or operational change that results in any significant increase in VOC from any discrete operation, unit or other pollutant emitting activity at the source or oxides of nitrogen, respectively, shall constitute a major modification except that if the owner or operator of the source elects to offset the increase by a greater reduction in emissions of VOC or oxides of nitrogen, as applicable, from other operations, units or activities within the source at an internal offset ratio of at least 1.3 to 1, R18-2-403(A)(1) shall not apply to the change.

~~EF.~~ For any new major source or major modification that is classified as major because of emissions or potential to emit VOC or nitrogen oxides in an ozone nonattainment area classified as serious, the increase in emissions of these pollutants from the source or modification shall be offset at a ratio of 1.2 to 1. The offset shall be made in accordance with the provisions of R18-2-404.

~~FG.~~ For any new major source or major modification that is classified as such because of emissions or potential to emit VOC or nitrogen oxides in an ozone nonattainment area classified as severe, the increase in emissions of these pollutants from the source or modification shall be offset at a ratio of 1.3 to 1. These offsets shall be made in accordance with the provisions of R18-2-404.

ARTICLE 5. GENERAL PERMITS

R18-2-503. Application for Coverage under General Permit

- A.** Once the Director has issued a general permit, any source which is a member of the class of facilities covered by the general permit may apply to the Director for authority to operate under the general permit. At the time the Director issues a general permit, the Director may also establish a specific application form with filing instructions for sources in the category covered by the general permit. Applicants shall complete the specific application form or, if a specific form has not been adopted, the standard application form provided under R18-2-304(B). The specific application form shall, at a minimum, require the applicant to submit the following information:
1. Information identifying and describing the source, its processes, and operating conditions in sufficient detail to allow the Director to determine qualification for, and to assure compliance with, the general permit.
 2. A compliance plan that meets the requirements of R18-2-514.
- B.** For sources required to obtain a permit under Title V of the Act, the Director shall provide the Administrator with a permit application summary form and any relevant portion of the permit application and compliance plan. To the extent possible, this information shall be provided in

computer-readable format compatible with the Administrator's national database management system.

- C.** The Director shall act on the application for coverage under a general permit as expeditiously as possible. The source may operate under the terms of the applicable general permit during that time. The Director may defer acting on an application under this subsection ~~(if)~~ the Director has provided notice of intent to renew or not renew the permit.
- D.** The Director shall deny an application for coverage from any Class I source that is subject to case-by-case standards or requirements.
- E.** Upon notification from the Director of the availability of a web portal to apply for and obtain a general permit, an applicant shall file all applications and conduct all transactions related to the general permit through the portal.