



# SIP Revision: Minor New Source Review

*Air Quality Division  
May 1, 2020 Proposed*

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## Table of Contents

Table of Contents .....	iii
List of Tables .....	iii
List of Appendices .....	iv
Completeness Criteria (40 C.F.R. Part 51, Appendix V, § 2.0).....	v
Appendix V § 2.1 - Administrative Materials.....	v
Appendix V § 2.1 - Technical Support .....	vii
1 Introduction.....	1
2 Rules to Be Added to and Removed from SIP.....	2
3 Minor NSR Deficiencies Addressed by Rule Changes.....	4
4 Demonstration of Adequacy .....	6
4.1 Clean Air Act Minor NSR Requirements .....	6
4.2 The Permit Exemption for “Normal Farm Operations” .....	7
4.2.1 Statutory and Regulatory Exemptions .....	8
4.2.2 Scope of Permit Applicability and Exemptions.....	8
4.2.3 Operations Subject to the Normal Farm Operations Exemption .....	9
4.2.4 Applicability of the Fugitive Emissions Exclusion .....	9
4.2.5 Applicability When Stack Emissions Above PET Are Present.....	10
4.2.6 Permit Terms and Minor NSR Requirements for Normal Farm Operations....	11
4.3 Permit Exemption for Stationary Fuel Burning Equipment.....	11
4.4 Minor NSR Thresholds for Nonattainment Areas .....	12
4.4.1 Source Distribution Reanalysis .....	14
4.4.2 Emissions Metric for Threshold .....	15
4.4.3 Nonattainment Areas Subject to ADEQ Minor NSR Program.....	16
4.5 Minor NSR Threshold for PM2.5 .....	18

## List of Tables

Table 2-1 Rules to Be Added to and Removed from the SIP .....	2
Table 3-1 Correction of Minor NSR Deficiencies .....	4
Table 4-1 Original Source Distribution Analysis .....	13
Table 4-2 Source Distribution Reanalysis .....	14

## List of Appendices

Appendix A - Amended Rules

Appendix B - Statutory Authority

Appendix C - Evidence of Adoption

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## Completeness Criteria (40 C.F.R. Part 51, Appendix V, § 2.0)

### Appendix V § 2.1 - Administrative Materials

**(a) A formal signed, stamped, and dated letter of submittal from the Governor or his designee, requesting EPA approval of the plan or revision thereof (hereafter “the plan”). If electing to submit a paper submission with a copy in electronic version, the submittal letter must verify that the electronic copy provided is an exact duplicate of the paper submission.**

See the cover letter for this SIP submission [TBD] and attached delegation of authority from Misael Cabrera, Director of ADEQ, to Daniel Czecholinski Director of the ADEQ Air Quality Division, authorizing Mr. Czecholinski to perform any act the ADEQ Director is authorized to perform under the state air quality statutes, including the submission of SIPs to EPA.

**(b) Evidence that the State has adopted the plan in the State code or body of regulations; or issued the permit, order, consent agreement (hereafter “document”) in final form. That evidence shall include the date of adoption or final issuance as well as the effective date of the plan, if different from the adoption/issuance date.**

As described in greater detail in section 1, this SIP submission consists of revisions to ADEQ’s New Source Review (NSR) program. These revisions pertain primarily to requirements for minor sources, and are designed to cure deficiencies identified in EPA’s Limited Approval/Limited Disapproval of the 2012 Arizona NSR SIP Revision.

The Notice of Final Rulemaking (NFRM) for the NSR revisions, published in the Arizona Administrative Code on February 10, 2017, is attached as **Appendix A**. Under ARS § 49-1013(A)(9), included in **Appendix C**, the AAR is the official Arizona publication for final rules.

In addition, **Appendix C** includes (1) the certificate of approval of the NFRM by the Governor’s Regulatory Review Council (GRRC) and (2) a receipt from the Arizona Secretary of State showing that the approved NFRM was filed on January 20, 2017. Under ARS §§ 41-1052(A) and 41-1031(A) (included in **Appendix C**), approval by GRRC and filing with the Secretary of State are the final steps in the adoption of an Arizona rule. Under ARS § 41-1032(A), also attached in **Appendix C**, the final rules became final sixty (60) days after they were filed and time-stamped, or on March 21, 2017, according to the NFRM.

**(c) Evidence that the State has the necessary legal authority under State law to adopt and implement the plan.**

ADEQ is authorized to issue and administer NSR rules and to submit the rules for approval in the SIP under Arizona Revised Statutes sections 49-104, 49-106, 49-404, 49-406, 49-425, and 49-426, which are attached as **Appendix B**.

**(d) A copy of the actual regulation, or document submitted for approval and incorporation by reference into the plan, including indication of the changes made (such as redline/strikethrough) to the existing approved plan, where applicable. The submission shall include a copy of the official State regulation/document, signed, stamped, and dated by the appropriate State official indicating that it is fully enforceable by the State. The effective date of any regulation/document contained in the submission shall, whenever possible, be indicated in the regulation/document itself; otherwise the State should include a letter signed, stamped, and dated by the appropriate State official indicating the effective date. If the regulation/document provided by the State for approval and incorporation by reference into the plan is a copy of an existing publication, the State submission should, whenever possible, include a copy of the publication cover page and table of contents.**

The rulemaking for the 2017 amendments to the regulations, which shows the changes made to the rules approved into the existing plan, is attached as Appendix A. Also included in Appendix A are existing rules cross-referenced in the rules submitted in 2012 but not previously included in the SIP.

**(e) Evidence that the State followed all of the procedural requirements of the State's laws and constitution in conducting and completing the adoption/issuance of the plan.**

[TBD]

**(f) Evidence that public notice was given of the proposed change consistent with procedures approved by EPA, including the date of publication of such notice.**

[TBD]

**(g) Certification that public hearing(s) were held in accordance with the information provided in the public notice and the State’s laws and constitution, if applicable and consistent with the public hearing requirements in 40 CFR 51.102.**

[TBD]

**(h) Compilation of public comments and the State’s response thereto.**

[TBD]

## **Appendix V § 2.1 - Technical Support**

**(a) Identification of all regulated pollutants affected by the plan.**

ADEQ’s minor NSR program covers all regulated minor NSR pollutants, defined in AAC R18-2-101(123) as follows:

“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<sub>2.5</sub>.

**(b) Identification of the locations of affected sources including the EPA attainment/ nonattainment designation of the locations and the status of the attainment plan for the affected areas(s).**

ADEQ’s NSR program applies to the areas of the state subject to ADEQ’s permitting jurisdiction. As explained in the July 2, 2014 supplement to the October 29, 2012 New Source Review State Implementation Plan Submission, this consists of all counties in Arizona other than Maricopa, Pima, and Pinal, except where ADEQ asserts jurisdiction or has jurisdiction over certain source categories in these counties.

**(c) Quantification of the changes in plan allowable emissions from the affected sources; estimates of changes in current actual emissions from affected sources or, where appropriate, quantification of changes in actual emissions from affected sources through calculations of the differences between certain baseline levels and allowable emissions anticipated as a result of the revision.**

Not applicable.

**(d) The State's demonstration that the national ambient air quality standards, prevention of significant deterioration increments, reasonable further progress demonstration, and visibility, as applicable, are protected if the plan is approved and implemented. For all requests to redesignate an area to attainment for a national primary ambient air quality standard, under section 107 of the Act, a revision must be submitted to provide for the maintenance of the national primary ambient air quality standards for at least 10 years as required by section 175A of the Act.**

The regulations submitted with this SIP revision are as stringent or more stringent than the existing SIP rules they are replacing.

**(e) Modeling information required to support the proposed revision, including input data, output data, models used, justification of model selections, ambient monitoring data used, meteorological data used, justification for use of offsite data (where used), modes of models used, assumptions, and other information relevant to the determination of adequacy of the modeling analysis.**

Not applicable.

**(f) Evidence, where necessary, that emission limitations are based on continuous emission reduction technology.**

Not applicable.

**(g) Evidence that the plan contains emission limitations, work practice standards and recordkeeping/reporting requirements, where necessary, to ensure emission levels.**

Not applicable.

**(h) Compliance/enforcement strategies, including how compliance will be determined in practice.**

Not applicable.

**(i) Special economic and technological justifications required by any applicable EPA policies, or an explanation of why such justifications are not necessary.**

Not applicable.





# 1 Introduction

The primary purposes of this SIP revision are to cure deficiencies in ADEQ's minor new source review (minor NSR) program identified by EPA and to secure full approval of that program.

On October 29, 2012, ADEQ submitted a SIP revision designed to bring the state's new source review (NSR) program into compliance with Clean Air Act (CAA) requirements. The revision included comprehensive amendments to ADEQ's air quality permitting rules designed to satisfy both the NSR requirements for major sources in Title I, Parts C and D of the CAA (major NSR) and the minor NSR requirements in section 110(a)(2)(C) of the CAA.

On November 2, 2015, the EPA Region 9 Administrator published a notice of final rulemaking issuing a limited approval/limited disapproval (LA/LD) of the 2012 SIP revision.<sup>1</sup> The limited disapproval identified deficiencies in both the major and minor NSR rules submitted by ADEQ.

On April 28, 2017, ADEQ submitted a SIP revision with rule amendments designed to address deficiencies related to *major NSR*. EPA approved the 2017 revision on May 4, 2018.<sup>2</sup>

This SIP revision addresses the outstanding LA/LD deficiencies in ADEQ's NSR program, primarily relating to *minor NSR*.

Section 2 of this SIP revision lists the rules that ADEQ is submitting for incorporation by reference into the Arizona SIP, as well as the existing SIP rules that the new rules are replacing and that should be removed from the SIP. Section 2 also identifies a federal implementation plan (FIP) provision that should be repealed in light of EPA's approval of the major NSR SIP revision in 2018.

Section 3 identifies the specific rule revisions designed to address all but four of the minor NSR deficiencies identified in the 2015 LA/LD.

Section 4 addresses the remaining deficiencies. In the LA/LD EPA identified four deficiencies that did not necessarily require rule amendments:

- the permit exemption for "normal farm operations";
- the permit exemption for certain stationary fuel burning equipment;
- the minor NSR applicability thresholds for nonattainment areas; and
- the minor NSR threshold for emissions of primary PM<sub>2.5</sub>.

EPA stated that it could approve these elements of the minor NSR program, if ADEQ submitted an analysis demonstrating that they are consistent with CAA requirements. Section 4 provides that analysis.

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<sup>1</sup> 80 FR 67319.

<sup>2</sup> 83 FR 19631.

## 2 Rules to Be Added to and Removed from SIP

The Notice of Final Rulemaking (NFRM) published in the Arizona Administrative Register on February 10, 2017, which shows changes to the rules from the version submitted on October 29, 2012, is attached as Appendix A. Also included in Appendix A are existing rules cross-referenced in the rules submitted in 2012 but not previously included in the SIP.

Table 2-1 identifies the rules from the Arizona Administrative Code (AAC), as amended on February 10, 2017, that ADEQ is requesting be approved into the SIP and, where appropriate, the existing SIP rules that they are replacing. ADEQ requests that EPA remove the replaced rules from the Arizona SIP. The table also includes existing rules inadvertently omitted from the 2012 SIP Revision.

**Table 2-1 Rules to Be Added to and Removed from the SIP**

Rule	Title	Existing SIP Rule(s) Requested to be Removed from SIP
R18-2-301	Definitions	R18-2-301 (8/7/2012) <sup>3</sup>
R18-2-302	Applicability; Registration; Classes of Permits	R18-2-302 (8/7/2012)
R18-2-302.01	Source Registration Requirements	R18-2-302.01 (8/7/2012)
R18-2-304	Permit Application Processing Procedures	R18-2-304 (8/7/2012)
R18-2-306	Permit Contents	R18-2-306 (8/7/2012)
R18-2-306.01	Permits Containing Voluntarily Accepted Emission Limitations and Standards	R18-2-306.01 (8/7/2012)
R18-2-317	Facility Changes Allowed Without Permit Revisions - Class I	N/A – Cross referenced in other minor NSR rules but not included in 2012 SIP
R18-2-317.01	Facility Changes that Require a Permit Revision - Class II	N/A – Cross referenced in R18-2-317.02
R18-2-317.02	Procedures for Certain Changes that Do Not Require a Permit Revision - Class II	N/A – Cross referenced in other minor NSR rules but not included in 2012 SIP

<sup>3</sup> Adoption date for SIP-approved version.

Rule	Title	Existing SIP Rule(s) Requested to be Removed from SIP
R18-2-319	Minor Permit Revisions	R18-2-319 (8/7/2012)
R18-2-320	Significant Permit Revisions	R18-2-320 (8/7/2012)
R18-2-334	Minor New Source Review	R18-2-334 (8/7/2012)
		R9-3-217, paragraph A (May 14, 1979)

Amendments to AAC R18-2-101, R18-2-330, and R18-2-332 also relate to minor NSR but have already been approved into the Arizona SIP in the May 4, 2018 SIP approval.

On January 10, 2017, EPA adopted a FIP that incorporated 40 CFR 52.27 and 52.28 into the Arizona SIP.<sup>4</sup> These rules apply to states with SIPs that do not comply with the visibility NSR requirements in 40 CFR 51.307.<sup>5</sup> In EPA’s May 4, 2018 approval of ADEQ’s major NSR program, EPA approved R18-2-410, which is designed to satisfy 40 CFR 51.307 as well as the PSD visibility requirements in 40 CFR 51.166(p).<sup>6</sup>

ADEQ therefore requests that in addition to removing the rules listed in Table 2-1 from the SIP, EPA repeal the FIP in 40 CFR 52.145(b) as it applies to sources for which ADEQ has permitting jurisdiction.

<sup>4</sup>82 FR 3078, 3128-29 (Jan. 10, 2017) (amending 40 CFR 52.145).

<sup>5</sup>50 FR 28544 (July 12, 1985).

<sup>6</sup> 83 FR 19631, 19632, 19635 (May 4, 2018).

### 3 Minor NSR Deficiencies Addressed by Rule Changes

Table 3-1 lists the deficiencies with ADEQ's minor NSR program identified in the LA/LD and the amended rules designed to correct those deficiencies.

**Table 3-1 Correction of Minor NSR Deficiencies**

Federal Requirement	Deficiency Identified in LA/LD	Amended Rules Correcting Deficiency
40 CFR 51.160(a) and (b)	ADEQ rules do not ensure review of NAAQS in neighboring areas outside ADEQ permitting jurisdiction.	R18-2-302.01(C), R18-2-334(C)(2), (E) (F), and R18-2-406(A)(5)(a), (b)
40 CFR 51.160(a) and (b)	Registration rule does not reference "maintenance" of a NAAQS.	R18-2-302.01(C)(4)
40 CFR 51.160(b)(1)	Registration rule missing requirement to ensure sources must comply with all applicable portions of control strategy, similar to language in other portion of rules, e.g. R18-2-306(A)(2).	R18-2-302.01(E)(1)
40 CFR 51.160(c)	R18-2-302.01 does not fully meet requirement to submit necessary information for ADEQ to review source.	R18-2-302.01(A)(3)
40 CFR 51.160(c)(1)	Rules allow some emissions units to be exempt from being included in applications for NSR purposes.	R18-2-304(F)(8)
40 CFR 51.160(d)	Registration rule missing provision that approval does not affect responsibility of o/o to comply with other requirements.	R18-2-302.01(I)
40 CFR 51.160(e)	Thresholds for minor NSR in nonattainment areas and exemptions from permitting program require additional justification.	See section 4
40 CFR 51.160(f)(1)	Registration program missing requirement to use Appendix W, when applicable.	R18-2-302.01(C)(3) "Screening model" requirement R18-2-301(21) Definition of "screening model" requires compliance with Appendix W

Federal Requirement	Deficiency Identified in LA/LD	Amended Rules Correcting Deficiency
40 CFR 51.161(a)	Does not require public notice in all instances for permitting program.	R18-2-302.01(B)(3). <sup>7</sup> Repeal of former R18-2-334(G)
40 CFR 51.161(a)	Elective limits for registrations need additional requirements to ensure enforceability: technically accurate limit and the portion of the source subject to the limit, time period over which the limit applies, daily records if limit is not on a daily basis.	R18-2-302.01(F)
40 CFR 51.161(b)(1)	Public notice requirements do not fully satisfy requirement that materials be available in the "area affected" and that the Director's analysis be available.	R18-2-330(D)
40 CFR 51.161(d)	Notice to additional parties required for registrations.	R18-2-302.01(B)(4)
40 CFR 51.163	Submittal contains references to AAC R18-2-317 and R18-2-317.02, which are not included in the submittal or the existing SIP.	As indicated in Table 2-1, R18-2-317 and R18-2-317.02 are included in this submittal. R18-2-304(B) <sup>8</sup>

<sup>7</sup> Existing R18-2-101(32) defines "construction" to include "any physical change or change in the method of operation." Thus, the requirement for public notice of the registration of the construction of a source applies to the registration of both a newly constructed source under R18-2-302(B)(3)(a) and a source undergoing a physical or operational change that increases its maximum capacity to emit above the permitting exemption threshold under R18-3-302(B)(3)(d).

<sup>8</sup> This subsection has been amended to allow ADEQ to specify the contents required for a class II permit application in a form to be provided by the Director rather than spelling them out in rule. The class II application requirements relating to minor NSR, however, continue to be specified in existing R18-2-304(F)(3).

## 4 Demonstration of Adequacy

This analysis demonstrates that the following features of the ADEQ program satisfy CAA minor NSR requirements (described in section 4.1):

- the permit exemption for “agricultural equipment used in normal farm operations” (section 4.2);
- the permit exemption for certain stationary fuel burning equipment (section 4.2);
- the minor NSR applicability thresholds for nonattainment areas (section 4.4); and
- the minor NSR threshold for emissions of primary PM<sub>2.5</sub> (section 4.5).

### 4.1 Clean Air Act Minor NSR Requirements

Section 110(a)(2)(C) of the CAA requires a SIP 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, including a permit program as required in parts C and D of this subchapter....<sup>9</sup>

Because regulations adopted under this section apply to newly constructed and modified sources, as opposed to existing sources, they are commonly referred to as “new source review” (NSR) programs.

Part C of title I of the CAA establishes NSR requirements for *major sources* that are constructed or modified in areas that have attained the NAAQS for one or more criteria pollutants. Part D of Title I establishes NSR requirements for *major sources* and modifications in nonattainment areas.

In addition to requiring compliance with the specific major NSR requirements of Parts C and D, section 110(a)(2)(C), requires “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.*” (Emphasis added.) EPA refers to 110(a)(2)(C) programs that apply to non-major sources and to minor modifications to major sources as “minor NSR.”<sup>10</sup>

Under EPA regulations implementing section 110(a)(2)(C), a state minor NSR program must include procedures to prevent the construction of a “facility, building, structure or installation,” that will result in:

- (1) A violation of applicable portions of the control strategy; or
- (2) Interference with attainment or maintenance of a national standard in the State in which the proposed source (or modification) is located or in a neighboring State..<sup>11</sup>

The program must “identify types and sizes of facilities, buildings, structures, or installations which will be subject to review.” The minor NSR SIP must “discuss the basis for determining which facilities will be subject to review.”<sup>12</sup>

The demonstrations of adequacy for the four program elements addressed in this section all relate to these core minor NSR requirements. The issue is whether the four limitations on the applicability of the ADEQ

<sup>9</sup> 42 USC 7410(a)(2)(C).

<sup>10</sup> 76 Fed. Reg. 38748, 38752 (July 1, 2011).

<sup>11</sup> 40 CFR 51.160(a), (b).

<sup>12</sup> 40 CFR 51.160(e).

minor NSR program identified by EPA interfere with the program's ability to protect the NAAQS or ensure compliance with the SIP control strategy.

## 4.2 The Permit Exemption for “Normal Farm Operations”

As EPA notes in the LA/LD, both the state statute and regulation relating to the applicability of the ADEQ air quality permit program include exemptions for “equipment used in normal farm operations.”

EPA has requested a demonstration that “regulation of the [exempt] equipment...is not needed to meet federal NSR requirements for attainment and maintenance of the NAAQS or review for compliance with the control strategy.” EPA states that this demonstration should include “identification of the types of equipment ADEQ considers to be ‘agricultural equipment used in normal farm operations,’” and an explanation of how the statutory and regulatory provisions “apply to ADEQ’s NSR program.”<sup>13</sup>

The discussion below addresses these requests and demonstrates that the exemption in ADEQ’s program is consistent with federal NSR requirements. As explained below:

- ADEQ determines the applicability of permit requirements and permit exemptions on a stationary-source-wide basis.
- Equipment used in normal farm operations will normally be located at a stationary source that would not in any case require a permit because of the SIP-approved fugitive emissions exclusion.
- In the overwhelming majority of the remaining cases, equipment used in normal farm operations will be located at a stationary source that either qualifies as a title V source or includes equipment subject to a new source performance standard (NSPS). In these cases the exemption will not apply and the stationary source will require a permit.
- In the few, if any, cases where equipment used in normal farm operations is located at a non-title V source that has stack emissions<sup>14</sup> above the permitting exemption thresholds<sup>15</sup> but does not include NSPS equipment, ADEQ retains the authority to require a permit to the extent necessary to assure protection of the NAAQS and the control strategy.
- A permit issued to a stationary source that includes normal farm operations will include all requirements of the control strategy applicable to that source, including a requirement to comply with the BMP rules applicable to the source. Specific best management practices (BMP) applicable to a stationary source under A.R.S. § 49-457 will be incorporated into the permit only to the extent and in a manner consistent with the SIP-approved provisions relating to permitting and enforcement in A.R.S. § 49-457(I)-(K).

<sup>13</sup> United States Environmental Protection Agency, Region 9 Air Division, Technical Support Document; EPA’s Notice of Proposed Rulemaking Revision to the Arizona State Implementation Plan for the Arizona Department of Environmental Quality Revisions to Air Plan; Arizona; Stationary Sources; New Source Review (March 2015) (the “2015 TSD”).

<sup>14</sup> The term “stack emissions” is used in this document to refer to those emissions that do not meet the definition of fugitive emissions in R18-2-101(59). Fugitive emissions refers to those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

<sup>15</sup> The permitting exemption thresholds, defined in R18-2-101(101), are set at one-half the significant emission rates for criteria pollutants and precursors. They constitute the applicability thresholds for both the registration program that serves as a screening mechanism for minor NSR, *see* R18-2-302(B)(3)(a), R18-2-302.01(C), and for modifications subject to minor NSR, *see* R18-2-301(14), R18-2-334(A)(1).



### 4.2.1 Statutory and Regulatory Exemptions

Section 49-426(A) of the Arizona Revised Statutes (ARS) provides that a “permit shall...be required for any person...beginning actual construction of or operating any *source*, except as prescribed in subsection B of this section....” (Emphasis added). ARS § 49-426(B) provides that subsection A’s permit requirement “shall not apply to...agricultural equipment used in normal farm operations.”

The regulatory version of this exemption, AAC R18-2-302(C), provides as follows:

C. Notwithstanding subsections (A) and (B), the following *stationary sources* do not require a permit or registration unless the source is a major source, or *unless operation without a permit would result in a violation of the Act*:

....

2. Agricultural equipment used in normal farm operations. “Agricultural equipment used in normal farm operations” *does not include equipment classified as a source that requires a permit under Title V of the Act, or that is subject to a standard under 40 CFR 60, 61 or 63.*

(Emphasis added.)

This rule represents ADEQ’s official implementation and interpretation of the statutory exemption under its rulemaking authority in ARS §§ 49-425 and 49-426(B). The rule has been recognized as valid by the Arizona Attorney General in its opinion supporting the state’s Title V program in 1993.<sup>16</sup> In approving Arizona’s Title V program in 1996, EPA deferred to this opinion but stated that it would revisit this issue if “a successful legal challenge to [the regulatory exemption] occurs.”<sup>17</sup> In the subsequent 23 years, there has been no such challenge.

### 4.2.2 Scope of Permit Applicability and Exemptions

As noted above, ARS § 49-426(A) applies the requirement to obtain a permit to “any source.” ADEQ’s implementing regulations employ the term “stationary source.”<sup>18</sup> Both terms are defined as:

all of the pollutant-emitting activities that 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....<sup>19</sup>

The exemptions in R18-2-302(B) also apply to “stationary sources.”

Permit<sup>20</sup> and minor NSR applicability determinations are therefore made on a source-wide basis. For an exemption to apply, all the pollutant emitting activities within the same stationary source must qualify for the exemption. If equipment used in normal farm operations is located at the same stationary source as non-exempt equipment that requires a permit, then permit requirements, and potentially minor NSR, extend to the entire source, including the farm operations.

<sup>16</sup> Attorney General’s Opinion at 2 (Nov. 15, 1993) (Appendix D).

<sup>17</sup> 61 FR 55910, 55915 (Oct. 30, 1996)

<sup>18</sup> AAR R18-2-302(B).

<sup>19</sup> ARS 49-402.01(34), (8); AAC R18-2-101(140).

<sup>20</sup> In this discussion, the term “permit” is used to refer to all three forms of licenses issued to stationary sources under ADEQ’s program, Class I permits, Class II permits, and registrations.

### 4.2.3 Operations Subject to the Normal Farm Operations Exemption

The term “normal farm operations” is not defined by statute or rule. However, in addition to adopting this exemption, the Arizona Legislature has adopted the Agricultural Best Management Practices (Ag BMP) program for PM<sub>10</sub> nonattainment areas. Based on its experience with implementing both the normal farm operations exemption and the Ag BMP program, ADEQ believes they are based on similar concerns about problems that could arise if air quality programs designed for industrial operations were applied directly to farms. It is therefore appropriate to look to the Ag BMP statute for guidance on what constitutes normal farm operations.

Under the statute, the following activities at a commercial farm, dairy, beef cattle feed lot, swine facility, poultry facility, or in a PM<sub>10</sub> nonattainment area designated after July 1, 2009, an irrigation district, must be subject to Ag BMPs:

- tillage, planting, and harvesting;
- areas of a commercial farm that are not normally in crop production (i.e. fallow);
- areas of a commercial farm that are normally in crop production;
- significant agricultural earthmoving activities;
- traffic over unpaved access connections or unpaved roads or feed lanes;
- animal waste handling and transporting;
- arenas, corrals, and pens;
- canals.<sup>21</sup>

ADEQ interprets the normal farm operations exemption for all stationary sources as applicable to the types of equipment used for the activities listed above and to crop and feed processing equipment that produce only fugitive emissions.

### 4.2.4 Applicability of the Fugitive Emissions Exclusion

Under the ADEQ minor NSR program:

The fugitive emissions of a stationary source shall not be considered in determining whether the source requires a Class II permit under subsection (B)(2)(a) or (b) or a registration under subsection (B)(3)(a) or (d), unless the source belongs to a section 302(j) category. If a permit is required for a stationary source, the fugitive emissions of the source shall be subject to all of the requirements of this Article.<sup>22</sup>

This exclusion has been approved into the Arizona SIP.<sup>23</sup> Moreover, the definition of a “section 302(j) category” duplicates the list of source categories that are subject to the fugitive emissions exclusion in EPA’s major NSR and tribal minor NSR regulations.<sup>24</sup> Application of the fugitive emissions exclusion to normal farm operations therefore does not raise an approvability issue.

<sup>21</sup> ARS § 49-457(P)(1).

<sup>22</sup> AAC R18-2-302(F).

<sup>23</sup> 80 FR 67319, 67320 Table 1 (Nov. 2, 2015)

<sup>24</sup> AAC R18-2-101(129), (23); *see, e.g.*, 40 CFR 52.21(b)(1)(iii), 40 CFR 49.152(d) (definition of “minor source”).

Normal farm operations do not belong to any of the categories defined by ADEQ regulations as a “section 302(j) category.” Fugitive emissions from normal farm operations therefore do not count in determining permit applicability. Thus, when emissions from normal farm operations consist solely of fugitive dust or of fugitive dust with stack emissions below the permitting exemption threshold, those operations do not require a permit and are not subject to minor NSR, regardless of the normal farm operations exemption.

In ADEQ’s experience, the overwhelming majority of normal farm operations would be excluded from permitting on this basis, even if the normal-farm-operations exemption were not available. Farm emissions tend to consist almost exclusively of fugitive dust generated by the disturbance of soils.

#### 4.2.5 Applicability When Stack Emissions Above PET Are Present

Of course, it is possible for equipment used in normal farm operations to be part of a stationary source that produces stack emissions greater than the permitting exemption threshold. Normal farm operations may be collocated with (i.e. adjacent or contiguous to) items of non-farm equipment – such as boilers, stationary engines, or fuel storage tanks – that produce stack emissions. If the collocated equipment also belongs to the same industrial grouping and is under the control of the same person or persons under common control, the non-farm and farm equipment will constitute a single stationary source. It may also be possible for normal farm operations themselves to be configured in such a way as to produce stack emissions.

In most cases, such a stationary source would not qualify for the exemption. As noted in section 4.2.1, R18-2-302(C) provides that equipment used in normal farm operations “does not include equipment classified as a source that requires a permit under Title V of the Act, or that is subject to” an NSPS or NESHAP. As noted in section 4.2.2, permit applicability is determined on a stationary-source-wide basis. Thus, if a stationary source that engaged in normal farm operations qualified as a title V source or included equipment subject to an NSPS or NESHAP,<sup>25</sup> the source as a whole would require a permit and potentially be subject to minor NSR.

Under section 111 of the Clean Air Act, EPA is required to maintain a list of, and adopt NSPS for, all categories of sources that cause or significantly contribute to “air pollution which may reasonably be anticipated to endanger public health or welfare.”<sup>26</sup> Consistent with the breadth of this charge, EPA has adopted standards for dozens of common sources of criteria pollutants, criteria pollutant precursors, greenhouse gases, and other pollutants. In ADEQ’s experience, most permitted sources include one or more pieces of equipment subject to an NSPS. It is therefore likely that if equipment used in normal farm operations were collocated with equipment with stack emissions exceeding the permitting exemption thresholds, at least some of that equipment would be subject to an NSPS, and the exemption would not apply.

It is also possible, although probably less likely, that equipment used in normal farm operations could be at a stationary source that includes equipment subject to a NESHAP or that qualifies as a title V source. In these cases as well, the exemption would not apply.

The statement in R18-2-302(C) that equipment used in normal farm operations is not exempt if “operation [of the equipment] without a permit would result in a violation of the Act” provides a final safeguard. In

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<sup>25</sup> The exemptions from registration in R18-2-302(B)(3)(b) and (c) for a stationary source subject to the listed NSPS and NESHAPS apply only when the source would otherwise be required to register “solely because it is subject to” the specified standards. A stationary source, including a source with normal farm operations, that required a permit because it exceeded an applicable emissions threshold or because it was subject to another, unlisted NSPS or NESHAP, would not be exempt.

<sup>26</sup> 42 USC § 7411(b), (d).

the few remaining cases where equipment used in normal farm operations is located at a stationary source with stack emissions above the permitting exemption threshold but below the major source threshold, ADEQ will invoke this provision to insure that any such source does not endanger attainment or maintenance of the NAAQS or enforcement of the control strategy. Whenever ADEQ becomes aware of such a source through citizen complaint, inspection of the facility under the Ag BMP program, inspection of a nearby or related facility, notice from a building permit agency, or other means, ADEQ will evaluate the facility using the methodology in R18-2-302.01(C) to determine whether it should be subject to permitting and minor NSR.

#### 4.2.6 Permit Terms and Minor NSR Requirements for Normal Farm Operations

A stationary source that was subject to permitting under the circumstances described in section 4.2.5 would be subject to the same permit requirements as any other stationary source. Minor or major NSR, or both, would apply to the construction of a new source and potentially to changes that result in emissions increases at an existing source. If minor NSR applied, it would apply to all emissions, including fugitive emissions produced by normal farm operations.

In addition, all applicable requirements, including any applicable to normal farm operations, would be included in the source's permit, guaranteeing that the control strategy is protected.

It is important to note that if a stationary source subject to the agricultural BMP program were required to obtain a permit under these circumstances, that permit would not necessarily include BMPs as applicable requirements.

Under the SIP-approved permitting and enforcement provisions of ARS § 49-457(H)-(K),<sup>27</sup> a person engaged in regulated activities<sup>28</sup> has the right to operate those activities under the general permit rather than an individual permit. The person only loses that right if he or she violates the general permit, as well as compliance orders issued under section 49-457(I) and (J), and then ADEQ revokes the general permit for that person under ARS § 49-457(K).

ADEQ believes that in order to be consistent with these provisions, it should only incorporate BMPs into an individual permit issued under the circumstances described section 4.2.5, to a person who has lost the right to operate under the general permit under ARS § 49-457(K). Permits for other sources subject to the agricultural BMP program would include a condition

### 4.3 Permit Exemption for Stationary Fuel Burning Equipment

In addition to exempting equipment used in normal farm operation, ARS 49-426(B) exempts "fuel burning equipment which, at a location or property other than a one or two family residence, is rated at less than one million British thermal units per hour." With respect to this exemption, EPA requests an adequacy demonstration that addresses:

ADEQ's interpretation of the exemption...and how it does, or does not, apply in the context of its major and minor NSR programs, and, to the extent such equipment is not subject to NSR review, ADEQ's basis for determining that equipment exempted under

<sup>27</sup> Effective May 29, 1998 and approved into the SIP in 64 FR 34726 (June 29, 1999).

<sup>28</sup> Defined in the current statute as "commercial farming practices that may produce PM<sub>10</sub> emissions within" a PM<sub>10</sub> nonattainment area. A.R.S. § 49-457(P)(5), (6).

this provision does not need to be reviewed as part of ADEQ's minor NSR program under 40 CFR 51.160(e).

As indicated in section 4.2.2, ADEQ determines permit applicability on a source-wide basis. A stationary source therefore would be eligible for the statutory fuel-burning equipment exemption, only if it consisted *solely* of equipment with a *cumulative* heat input rate of less than one million Btu per hour.

This interpretation is reflected in ADEQ's regulatory implementation of the exemption in R18-2-302(C)(1), which exempts "a stationary source that consists solely of a single categorically exempt activity plus a combination of trivial activities." Categorically exempt activities consist of various combinations of fuel burning equipment with different capacities specified in horsepower or Btu per hour. As EPA has recognized, emissions from these activities will consistently be below the permitting exemption thresholds and therefore would not in any case require a permit.<sup>29</sup> Their purpose is to provide exemptions for common small fuel-burning installations that do not require these installations to perform unnecessary emissions calculations.

Stationary sources eligible for the fuel burning equipment exemption, i.e., "fuel burning equipment which, at a location or property other than a one or two family residence, is rated at less than one million British thermal units per hour," would not in any case require a permit under the approved SIP, based on the exemption in R18-2-302(C)(1). Therefore, they do not need to be reviewed under ADEQ's minor NSR program.

### 4.4 Minor NSR Thresholds for Nonattainment Areas

ADEQ's minor NSR thresholds were based on an analysis similar to that used by EPA to develop the emission thresholds for its Tribal minor NSR program.<sup>30</sup> Using a 2006 Maricopa County emission inventory, ADEQ compared how two alternative sets of threshold levels ( $\frac{1}{2}$  and  $\frac{1}{4}$  of the significant emission rates [SER]) would affect the percentage of emissions versus the percentage of sources subject to the program. The results are summarized in the following table:

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<sup>29</sup> 2015 TSD at 25. For example, the NO<sub>x</sub> emission factor for a small boiler burning no. 6 fuel oil is approximately 0.37 lb/mmBtu. AP-42 Compilation of Air Pollutant Emission Factors Table 1.3-1 at 1.3-12 (NO<sub>x</sub> factor = 55 lb/10<sup>3</sup> gal), § 1.3.4.3 at 1.3-7 (convert lb/10<sup>3</sup> gal to lb/mmBtu by dividing by 140 mmBtu/10<sup>3</sup> gal). Annual NO<sub>x</sub> emissions for a combination of boilers with a heat input rate of ten million Btu/hour (a categorically exempt activity under R18-2-101(24)(e)) burning No. 6 fuel oil therefore would be approximately 16.1 tons per year (1 mmBtu/hr X 0.37 lb/mmBtu X 8760 hrs/yr X 1 ton/2,000 lb).

<sup>30</sup> 18 AAC 1542, 1547-49 (July 26, 2012) (Appendix A to 2012 NSR SIP Revision); 2015 TSD at 23-24.

**Table 4-1 Original Source Distribution Analysis****Scenario 1 (½ SER)**

	<b>CO</b>	<b>NO<sub>x</sub></b>	<b>Pb</b>	<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>VOC</b>
% of emissions regulated	34.86	78.38	0	79.47	22.19	59.96
% of sources regulated	2.06	7.60	0	12.57	0.59	8.85

**Scenario 2 (¼ SER)**

	<b>CO</b>	<b>NO<sub>x</sub></b>	<b>Pb</b>	<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>VOC</b>
% of emissions regulated	56.86	85.65	0	84.22	72.57	75.89
% of sources regulated	5.00	13.16	0	15.52	4.13	16.49

ADEQ selected Scenario 1, reasoning that:

Both scenarios result in a relatively large percentage of emissions being subject to regulation compared to the percentage of sources brought into the program. Based on the Maricopa County data, using Scenario 2 rather than Scenario 1 would result in considerable gains in coverage of carbon monoxide and sulfur dioxide emissions. Stationary source emissions of carbon monoxide, however, are dwarfed by mobile source emissions and do not contribute significantly to nonattainment of the carbon monoxide NAAQS. In areas under state jurisdiction, the sources that could contribute to noncompliance with the sulfur dioxide NAAQS are well-defined and consist of large industrial sources already subject to the permitting program. For purposes of minor source regulation, Scenario 2 does not offer any substantial benefits over Scenario 1.

EPA found this analysis sufficient to justify the thresholds for attainment areas. The agency determined, however, that ADEQ did “not provide a clear basis [for concluding] that the permitting thresholds selected by ADEQ will ensure a sufficient percentage of minor sources are subject to review in nonattainment areas.” EPA noted that:

- (1) some of the other permitting programs [that both ADEQ and EPA used as points of comparison] have lower permitting thresholds in nonattainment areas than those applicable in attainment areas under their jurisdiction;
- (2) in looking at a similar analysis of minor source emissions for [the Sacramento Metropolitan Air Quality Management District minor NSR program], the permitting agency generally set thresholds that include a larger percentage of emissions in the NSR program than the percentage included in ADEQ’s program; and
- (3) typically, nonattainment areas have more control requirements that apply to smaller minor sources, as compared to attainment areas.<sup>31</sup>

The following discussion demonstrates that ADEQ’s minor NSR thresholds assure adequate minor NSR coverage in nonattainment areas based on the following factors:

- A source distribution reanalysis shows that ADEQ’s minor NSR thresholds capture a much higher percentage of total stationary source emissions than anticipated in the original analysis.

<sup>31</sup> 2015 TSD § 5.2.2.3, at 71 (footnotes omitted).

- The original comparisons of ADEQ’s thresholds to those of other programs did not account for the much more conservative emissions metric used by ADEQ.
- The threshold for PM<sub>10</sub> is adequate to assure that exempt sources of PM<sub>10</sub> will not produce a significant increase in ambient emissions.
- The characteristics of the areas of the state subject to ADEQ jurisdiction make the utility of lower minor NSR thresholds highly doubtful.

#### 4.4.1 Source Distribution Reanalysis

ADEQ has conducted a reanalysis of the distribution of emissions versus sources covered by the state minor NSR thresholds using 2014 National Emission Inventory (NEI) point source facility summary dataset for the entire state.<sup>32</sup> EPA used an earlier version of this is the same dataset for the tribal minor NSR rule.<sup>33</sup> This inventory includes 313 sources with actual emissions below the permitting exemption thresholds, including 143 in counties subject to state minor NSR jurisdiction.

The following table shows the results of the reanalysis for:

- the entire state,
- areas of the state subject to ADEQ minor NSR jurisdiction (i.e. all counties except Maricopa, Pima, and Pinal), and
- the four counties subject to state minor NSR jurisdiction that include nonattainment areas (Cochise, Gila, Santa Cruz, and Yavapai).<sup>34</sup>

**Table 4-2 Source Distribution Reanalysis**

Location	Distribution	Pb	CO	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	VOC
Entire State	% emissions	68.5	95.7	99.2	98.2	97.6	99.6	90.3
	% sources	73						
Counties Subject to ADEQ Jurisdiction	% emissions	75.5	94.6	99.5	98.7	98.3	99.8	86.6
	% sources	70						
Counties Subject to ADEQ Jurisdiction with NAA	% emissions	86.9	NA	99.5	96.3	95.6	100.0	90.9
	% sources	50						

The percentage of emissions covered by ADEQ’s program is comparable to the percentage covered by the Sacramento permit program that EPA referenced in its evaluation. As noted by EPA, the Sacramento program “generally exclude[s] less than 5% of the emissions inventory except for SO<sub>2</sub>.”<sup>35</sup> ADEQ’s

<sup>32</sup> A printout of the Excel spreadsheet containing this analysis is attached as **Appendix D**. The spreadsheet itself is also being provided to EPA.

<sup>33</sup> Stephen Edgerton, EC/R Incorporated, Analysis of the Proposed Minor NSR Thresholds (Oct. 25, 2009).

<sup>34</sup> As explained in the July 2014 State Implementation Plan Revision New Source Review: Supplemental Information, ADEQ has authority to assume jurisdiction over sources subject to the minor NSR jurisdiction of Maricopa, Pima, and Pinal Counties. In that case, ADEQ would be obligated to enforce any more stringent requirements of the county’s minor NSR program.

<sup>35</sup> 2015 TSD § 5.2.2.3, at 26, n.20.

thresholds achieve the same level of coverage except with respect to lead and VOC. ADEQ's coverage is also comparable to the coverage estimated for the Tribal minor NSR program, again with exception of lead and VOC.<sup>36</sup> As discussed in section 4.4.3, more extensive minor NSR coverage in the lead and ozone nonattainment areas in ADEQ's jurisdiction is not necessary to protect the NAAQS.

#### 4.4.2 Emissions Metric for Threshold

If it were possible to use the actual program metrics, rather than actual emissions, in the source distribution analyses, the results of the comparisons in section 4.4.1 would be even more favorable to ADEQ's minor NSR program.

By necessity, source distribution analyses are based on actual emissions reported to the NEI.<sup>37</sup> Minor NSR programs, however, generally use metrics other than actual emissions to determine applicability. The Sacramento and Tribal minor NSR programs discussed above, for example, both use potential to emit to identify sources subject to the program.<sup>38</sup>

Potential to emit is an inherently conservative method for calculating emissions, in the sense that it tends to produce higher emission levels than a source's actual emissions. A source's potential to emit is defined as:

the maximum capacity of a source to emit a pollutant 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 enforceable as a practical matter.<sup>39</sup>

Because sources generally operate at levels below those allowed by enforceable limits, their actual emissions are lower than their potential to emit. Thus, a source with actual emissions below a minor NSR threshold as reported in the NEI may still be subject to minor NSR on the basis of its potential to emit.

The metric used in ADEQ's minor NSR program is even more conservative than potential to emit. To determine the applicability of the registration program, a source's "maximum capacity to emit any regulated minor NSR pollutant" is compared to the permitting exemption thresholds. "Maximum capacity to emit" is defined as "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."<sup>40</sup>

<sup>36</sup> 71 FR 48696, 48702, Table 2 (Aug. 21, 2006). The analysis conducted in support of the Tribal minor NSR program included a detailed breakdown of emissions coverage for the thresholds by pollutant, area designation, and nonattainment classification. Coverage ranged from 93.4 % for severe ozone nonattainment areas to 99.96 % for sulfur dioxide nonattainment areas. EC/R, Analysis of the Proposed Minor NSR Thresholds at 3-2, 3-5, Tables 3-2 and 3-6 (October 24, 2005).

<sup>37</sup> Producing a comprehensive compilation of other emission metrics would probably require the review of thousands of permits.

<sup>38</sup> 40 CFR 49.152 (definition of minor source), 49.153(a)(1)(i)(B), (ii)(B); United States Environmental Protection Agency, Region IX Air Division, Technical Support Document for EPA's Notice of Proposed Rulemaking for the California State Implementation Plan Sacramento Metropolitan Air Quality Management District Rule 214 Federal New Source Review Rule 217 Public Notice Requirements for Permits at 6 (January 23, 2013).

<sup>39</sup> 40 CFR 49.152.

<sup>40</sup> AAC R18-2-302(B)(3)(a), R18-2-301(12). A source subject to registration can avoid mandatory review for impacts on the NAAQS by adopting specific "elective limits" that reduce its "maximum capacity to emit with any elective limits" below the permitting exemption thresholds. AAC R18-2-302.01(C)(1), R18-2-301(13). Even these



The source distribution analysis reflects the conservatism of this metric. Of the 203 state jurisdiction sources included in the inventory, only 60 have actual emissions of *any* pollutant exceeding the permitting exemption threshold. For 98 of the sources, the actual emissions of *every* regulated minor NSR pollutant are less than one ton per year.

Thus, although the Sacramento and Tribal minor NSR thresholds are uniformly lower than ADEQ's, it would be possible for any given source to be above ADEQ's threshold but below the Sacramento and Tribal thresholds when the appropriate emissions metric is considered. A source, for example could have a maximum capacity to emit VOC greater than 20 TPY, the ADEQ threshold, but a potential to emit below 10 TPY, the Sacramento and Tribal threshold.

If the regulatory emissions metrics were used for the source distribution analyses, all three of the programs discussed in section 4.4.1 would cover a higher percentage of emissions than indicated by the analyses based on actual emissions. But because the metric used by ADEQ's program is the most conservative, the increase in predicted coverage would in all likelihood be significantly greater for ADEQ than for Sacramento or EPA's Tribal program.

### 4.4.3 Nonattainment Areas Subject to ADEQ Minor NSR Program

The nature of the areas subject to ADEQ's minor NSR jurisdiction also militates against lower minor NSR thresholds for nonattainment areas. These areas are substantially different from the types of nonattainment areas that typically have lower permitting thresholds and "more control requirements that apply to smaller minor sources."<sup>41</sup>

For example, the average population density of the thirteen counties subject to ADEQ's minor NSR jurisdiction is approximately 19 persons per square mile, compared to 309 for Maricopa County. In a highly urbanized and densely populated area such as Maricopa County, where a large number of small stationary sources may have a significant aggregate impact on air pollutant concentrations, relatively low permitting thresholds make sense. In the largely rural areas subject to ADEQ's jurisdiction, however, it is much less likely that lower minor NSR thresholds are necessary to protect the NAAQS.

In addition to these general characteristics of areas under ADEQ's minor NSR jurisdiction, two features of the nonattainment areas in particular counsel against reducing the minor NSR thresholds for these areas. First, some of the areas under ADEQ's jurisdiction designated as nonattainment are not in fact violating the NAAQS. Second, small to mid-size stationary sources, of the kind that could be subject to minor NSR, are insignificant contributors to the emissions inventories for all of these areas.

#### 4.4.3.1 PM<sub>10</sub> Nonattainment Areas

##### 4.4.3.1.1 Hayden

The Hayden PM<sub>10</sub> NAA is dominated by primary PM<sub>10</sub> emissions from windblown dust and three very large industrial facilities – the Hayden smelter and concentrator and Ray mine. For windblown dust, actual emissions are approximately 2,000 tons per year. Annual emissions from the three Asarco facilities average over 3,000 tons per year. Emissions from all other point sources in the NAA total less 10 tons per year.

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sources, however, remain subject to discretionary review for NAAQS impacts. AAC R18-2-302.01(C)(2). In addition, the universe of limits that can be considered in determining a source's "maximum capacity to emit with any elective limits" is much smaller than the universe of limits that can be considered in determining potential to emit.

<sup>41</sup> 2015 TSD § 5.2.2.3, at 26.

#### 4.4.3.1.2 Miami

The Miami area is nonattainment for PM<sub>10</sub> in name only. The area has never had a monitored violation of the PM<sub>10</sub> NAAQS and is designated nonattainment because it was at one time included in a single “Group III” area with Hayden. The predominant source of PM<sub>10</sub> emissions in the area is the copper smelter.

#### 4.4.3.1.3 Douglas Paul Spur

In the Douglas Paul Spur NAA, area sources make up 99.96 percent of the PM<sub>10</sub> emissions inventory, while point sources contribute only 0.0005 percent.

#### 4.4.3.1.4 Yuma

In the Yuma NAA, point source emissions constitute less than one percent of the design day emissions inventory. The predominant sources of PM<sub>10</sub> emissions are paved and unpaved roads, road construction, and local windblown dust.

#### 4.4.3.1.5 Nogales

The Nogales PM<sub>10</sub> NAA attained the NAAQS in 2011.<sup>42</sup> Although violations of the NAAQS occurred subsequently, the area has a current design value of less than 1 exceedance per year.

PM<sub>10</sub> concentrations in the area are attributable to area, rather than point sources, including paved road dust, construction, and residential wood burning. In addition, in 2012 ADEQ submitted a demonstration under CAA § 179B that the Nogales area would have attained the NAAQS but for the transport of emissions from Mexico.<sup>43</sup>

#### 4.4.3.2 Nogales PM<sub>2.5</sub>

The Nogales PM<sub>2.5</sub> nonattainment area was found to have attained the 2006 24-hour PM<sub>2.5</sub> NAAQS in 2017. Moreover, point sources contribute only 0.3 % of primary PM<sub>2.5</sub> emissions and 0 to 1.3 % of emissions of PM<sub>2.5</sub> precursors.<sup>44</sup>

#### 4.4.3.3 Hayden and Miami SO<sub>2</sub>

Nonattainment for SO<sub>2</sub> in the Hayden and Miami areas is attributable to the two copper smelters operating there. Reducing the thousands of tons per year of SO<sub>2</sub> emitted by these two facilities is the sole focus of the SIP revisions designed to bring Hayden and Miami areas into compliance with the 2010 one-hour SO<sub>2</sub> NAAQS.<sup>45</sup>

#### 4.4.3.4 Hayden Lead

As in the case of SO<sub>2</sub>, nonattainment with the lead NAAQS in Hayden is attributable to a single very large stationary source, the Asarco Smelter.

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<sup>42</sup> 76 FR 1532 (Jan. 11, 2011).

<sup>43</sup> ADEQ, Final 2012 State Implementation Plan: Nogales PM<sub>10</sub> Nonattainment Area (Aug. 24, 2012).

<sup>44</sup> Primary PM<sub>2.5</sub> and Secondary Precursor Emissions Inventories for 2008 and 2010 at 28 (July 26, 2013), Appendix A to Final Arizona State Implementation Plan Revision for the Nogales PM<sub>2.5</sub> Nonattainment Area (Sep. 6, 2013).

<sup>45</sup> Arizona State Implementation Plan Revision: Hayden Sulfur Dioxide Nonattainment Area for the 2010 SO<sub>2</sub> NAAQS § 4.5, at 62 (March 8, 2017); Arizona State Implementation Plan Revision: Miami Sulfur Dioxide Nonattainment Area for the 2010 SO<sub>2</sub> NAAQS § 4.5, at 65 (March 8, 2017).

#### 4.4.3.5 Yuma Ozone

Ozone nonattainment in Yuma is likely attributable largely to interstate and international transport.<sup>46</sup>

Thus, in the nonattainment areas subject to ADEQ jurisdiction, any concentrations that continue to exceed the NAAQS are attributable to sources other than the very small stationary sources that would be subject to the minor NSR program if ADEQ reduced the permitting exemption thresholds.

### 4.5 Minor NSR Threshold for PM<sub>2.5</sub>

PM<sub>2.5</sub> emissions data was not available for the original source distribution analysis. The reanalysis in Table 4-2 shows that the minor NSR threshold for PM<sub>2.5</sub> is likely to cover a percentage of emissions comparable to other programs that EPA has adopted or approved.

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<sup>46</sup> ADEQ, 2015 Ozone NAAQS Boundary Recommendations § 4.2.4, at 50 (Aug. 30, 2016).