ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[EPA-R09-OAR-2019-0609; FRL-10010-26-Region 9]

Maintenance Plan and Redesignation Request for the Ajo PM$_{10}$ Planning Area; Arizona

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve the “Ajo PM$_{10}$ Redesignation Request and Maintenance Plan (May 3, 2019)” (“Ajo PM$_{10}$ Maintenance Plan” or “Plan”) as a revision to the state implementation plan (SIP) for the State of Arizona. The Ajo PM$_{10}$ Maintenance Plan includes, among other elements, an emissions inventory consistent with attainment, a maintenance demonstration, contingency provisions, and a demonstration that contributions from motor vehicle emissions to PM$_{10}$ in the Ajo planning area are insignificant. The EPA is also proposing to approve the State of Arizona’s request to redesignate the Ajo planning area from nonattainment to attainment for the national ambient air quality standards (NAAQS or “standards”) for particulate matter of ten microns or less (PM$_{10}$). Lastly, the EPA is proposing to delete the area designation for Ajo for the revoked NAAQS for total suspended particulate (TSP) because the designation is no longer necessary. The EPA is proposing these actions because the SIP revision meets the applicable requirements under the Clean Air Act (CAA or “Act”) for maintenance plans and because the State has met the requirements under the Act for redesignation of a nonattainment area to attainment with respect to the Ajo planning area.

DATES: Comments must be received on or before [Insert date 30 days after date of publication in the FEDERAL REGISTER].

This document is scheduled to be published in the Federal Register on 06/04/2020 and available online at federalregister.gov/d/2020-11930, and on govinfo.gov.
ADDRESSSES: Submit your comments, identified by Docket ID No. EPA–R09–OAR–2019–0609, at https://www.regulations.gov, or via email to Ashley Graham, Air Planning Office at graham.ashleyr@epa.gov. For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be removed or edited from Regulations.gov. For either manner of submission, the EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (e.g., audio or video) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the FOR FURTHER INFORMATION CONTACT section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit https://www.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: Ashley Graham, EPA Region IX, (415) 972-3877, graham.ashleyr@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document, the words “we,” “us,” or “our” refer to the EPA.

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I. Background

A. The PM\textsubscript{10} National Ambient Air Quality Standards

   In 1971, pursuant to section 109 of the CAA, the EPA promulgated the original NAAQS for the criteria pollutants, which included carbon monoxide, hydrocarbons, nitrogen dioxide, photochemical oxidant, sulfur dioxide and particulate matter.\textsuperscript{1} The NAAQS are set at concentrations intended to protect public health and welfare. Following promulgation of the NAAQS, under section 110 of the CAA, each state is required to adopt and submit a SIP to provide for the implementation, maintenance and enforcement of the NAAQS within such state.

   The original NAAQS for particulate matter were defined in terms of a reference method that called for measuring particulate matter up to a nominal size of 25 to 45 micrometers or microns. This fraction of total ambient particulate matter is referred to as “total suspended particulate” or TSP. In 1987, the EPA revised the NAAQS for particulate matter, replacing TSP as the indicator for particulate matter for the ambient standards with a new indicator that includes only the particles with an aerodynamic diameter less than or equal to 10 microns in diameter.

\textsuperscript{1} 36 FR 8186 (April 30, 1971).
(PM$_{10}$). At that time, the EPA established two PM$_{10}$ standards: primary and secondary 24-hour standards of 150 micrograms per cubic meter ($\mu$g/m$^3$) and primary and secondary annual standards of 50 $\mu$g/m$^3$. In 2006, the EPA retained the 24-hour PM$_{10}$ standards but revoked the annual standards. More recently, as part of the EPA’s periodic review of the NAAQS, the EPA reaffirmed the 24-hour PM$_{10}$ NAAQS. This proposed action relates to the current 24-hour PM$_{10}$ NAAQS and the revoked TSP NAAQS.

PM$_{10}$ contributes to effects that are harmful to human health and the environment, including premature mortality, aggravation of respiratory and cardiovascular disease, decreased lung function, visibility impairment, and damage to vegetation and ecosystems. Individuals particularly sensitive to exposure include older adults, people with heart and lung disease, and children. PM$_{10}$ can be emitted directly into the atmosphere as a solid or liquid particle (“primary PM$_{10}$” or “direct PM$_{10}$”) or can be formed in the atmosphere (“secondary PM$_{10}$”) as a result of various chemical reactions among precursor pollutants such as nitrogen oxides ($\text{NO}_x$), sulfur dioxide ($\text{SO}_2$), volatile organic compounds (VOC), and ammonia.

B. The Ajo PM$_{10}$ Planning Area

Under section 107 of the CAA, the EPA is required to designate all areas of the country as attainment, nonattainment, or unclassifiable for each of the NAAQS. In response to an area designation of nonattainment, states are required to adopt and submit SIP revisions that, among

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2 52 FR 24634 (July 1, 1987).
3 For a given air pollutant, “primary” standards are those determined by the EPA as requisite to protect public health. “Secondary” standards are those determined by the EPA as requisite to protect public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air. CAA section 109(b).
4 71 FR 61144 (October 17, 2006).
5 78 FR 3086 (January 15, 2013).
6 Id. at 3088.
other things, provide for attainment of the NAAQS within such area. Once a nonattainment area attains the NAAQS and meets certain other prerequisites, the state may request that the EPA redesignate the area to attainment. For the Ajo planning area, the Arizona Department of Environmental Quality (ADEQ) has primary responsibility for air quality planning and has permitting jurisdiction over certain types of sources, including smelting of metal ores. The Pima County Department of Environmental Quality (PDEQ or “District”) has primary permitting authority over most types of stationary sources within Pima County. The ADEQ worked cooperatively with the District in preparing the Ajo PM₁₀ Maintenance Plan.

In 1979, we designated Township T12S, R6W (“Ajo”) in the northwestern portion of Pima County, Arizona as a nonattainment area for the TSP NAAQS. At that time, the Phelps Dodge Corporation copper mining, concentrating, and smelting facilities, collectively known as the Phelps Dodge “New Cornelia Branch,” were the principal sources of fugitive dust in the Ajo nonattainment area. The Ajo mine ceased operation in 1984 and the smelter deactivated in April 1985.

In 1987, the EPA replaced the TSP NAAQS with the PM₁₀ NAAQS. Under the CAA, as amended in 1990, the EPA designated the Ajo planning area as a Moderate nonattainment area for the PM₁₀ NAAQS. By the end of 1991, to minimize windblown fugitive dust from the inactive tailings impoundments, one of the significant sources of fugitive dust in the area, Phelps

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8 Arizona Revised Statutes (ARS) § 49-402(A) and (B).
9 The Pima County Board of Supervisors is the governing body for the Pima County Air Quality Control District, which operates within the PDEQ.
10 44 FR 21261 (April 10, 1979). The unincorporated town of Ajo, Arizona, is located approximately 113 miles west northwest of Tucson, and is located on the edge of a broad desert valley at an elevation of 1,750 feet, bordered by scattered hills and low mountain ranges to the west and south.
11 56 FR 11101 (March 15, 1991). The Ajo planning area is somewhat larger than the Ajo TSP nonattainment area and includes sections 6-8, 17-20 and 29-32 of Township T12S, R5W in addition to Township T12S, R6W. Area designations within the State of Arizona are codified at 40 CFR 81.303. Currently, the population within the Ajo planning area is approximately 3,500 persons, and employment is mainly in the commercial, service, and tourism sectors. Ajo PM₁₀ Maintenance Plan, 8-9.
Dodge covered (or capped) more than 1,900 acres of the tailings with crushed rock. The smelter and copper ore concentrator structures at the facility were effectively dismantled by the end of 1996.

In 2006, based on ambient monitoring data for 2002–2004, the EPA determined that the Ajo PM$_{10}$ nonattainment area had attained the PM$_{10}$ NAAQS.\textsuperscript{12} Based on that determination, the EPA also determined that certain CAA requirements, including obligations to demonstrate reasonable further progress, to provide an attainment demonstration, and to provide contingency measures pursuant to part D of the CAA, were not applicable for so long as the Ajo area continues to attain the PM$_{10}$ NAAQS.

With the closure of the mine and smelter, and the capping of the inactive tailings impoundment, only one significant source of fugitive dust, a slag reprocessing facility, remained active in the Ajo planning area. In 2011 and 2013, the ADEQ’s Ajo PM$_{10}$ monitoring site recorded exceedances of the PM$_{10}$ NAAQS caused in part by high winds that entrained fugitive dust from the slag reprocessing facility and other fugitive sources in the area. In 2015, the slag reprocessing facility was demolished and a slag dust cap was applied on certain process areas.

In 2019, the Pima County Board of Supervisors adopted Pima County Code (PCC) Section 17.16.125 (“Inactive Mineral Tailings Impoundment and Slag Storage Area within the Ajo PM$_{10}$ Planning Area”) to provide for continued maintenance and enforcement of the measures already implemented to control windblown dust from the tailings impoundment and the slag storage area. On May 10, 2019, in light of renewed attainment of the PM$_{10}$ NAAQS in the Ajo planning area and the adoption of PCC Section 17.16.125, the ADEQ submitted the Ajo PM$_{10}$ Maintenance Plan to the EPA as a revision to the Arizona SIP and requested that the EPA

\textsuperscript{12} 71 FR 6352 (February 8, 2006).
redesignate the Ajo planning area from nonattainment to attainment for the PM$_{10}$ NAAQS.$^{13}$ The ADEQ also requested that the EPA delete the TSP nonattainment designation for the Ajo Area.$^{14}$

The Ajo PM$_{10}$ Maintenance Plan includes chapters addressing the various criteria for redesignation under CAA section 107(d)(3)(E); a chapter containing the PM$_{10}$ maintenance plan; a chapter addressing transportation conformity; and three appendices that document the emissions inventory estimates relied upon by the maintenance plan, the compliance with procedural and legal authority requirements, and the process undertaken to adopt PCC Section 17.16.125 (“Inactive Mineral Tailings Impoundment and Slag Storage Area Within the Ajo PM$_{10}$ Planning Area”).

II. Procedural Requirements for Adoption and Submittal of State Implementation Plan Revisions

Section 110(l) of the CAA requires states to make SIP revisions available for public review and comment and to hold a public hearing or provide the public the opportunity to request a public hearing. The Act requires the plan be adopted by the state and submitted to the EPA by the governor or his/her designee. To meet these procedural requirements, every SIP submission should include evidence that the state provided adequate public notice and an opportunity for a public hearing consistent with the EPA’s implementing regulations in 40 CFR 51.102.

In the ADEQ’s May 10, 2019 submittal of the Ajo PM$_{10}$ Maintenance Plan, the State verified that it had adhered to its SIP adoption procedures in Appendix B, which includes the notice of public hearing, the agenda for the January 24, 2019 public hearing, the sign-in sheet,

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$^{13}$ May 10, 2019 refers to the date on which the ADEQ submitted the Ajo PM$_{10}$ Maintenance Plan electronically to the EPA. The ADEQ’s transmittal letter to the EPA is dated May 8, 2019.

$^{14}$ Letter dated May 8, 2019, from Timothy S. Franquist, Director, Air Quality Division, ADEQ, to Michael Stoker, Regional Administrator, EPA Region IX, submitting the SIP Revision “Ajo PM$_{10}$ Redesignation Request and Maintenance Plan.”
the public hearing officer certification and transcript of the hearing, and the State’s responsiveness summary. Specifically, a notice of public hearing was published in the Ajo Copper News on December 25, 2018 and January 1, 2019, and in the Arizona Daily Star on December 26, 2018 and December 27, 2018, newspapers of general circulation in the Ajo area. The notices announced the availability of the Ajo PM\textsubscript{10} Maintenance Plan at the ADEQ Record Center in Phoenix, Arizona, on the ADEQ’s website, and at the Salazar-Ajo branch of the Pima County Public Library in Ajo, Arizona, and opened the comment period for 30 days prior to the public hearing. The public hearing was held on January 24, 2019. No comments on the Ajo PM\textsubscript{10} Maintenance Plan were made during the public hearing, and no written comments were received during the public comment period.

Through the SIP transmittal letter dated May 8, 2019, the ADEQ’s Director of the Air Quality Division adopted the Ajo PM\textsubscript{10} Maintenance Plan as a revision to the Arizona SIP. The Director of the ADEQ is authorized under state law to adopt and submit SIPs and SIP revisions to the EPA, and the Director of the ADEQ has delegated that authority to the Director of the Air Quality Division. Based on the documentation provided in the SIP submittal and summarized in this notice, we find that submittal of the Ajo PM\textsubscript{10} Maintenance Plan as a revision to the Arizona SIP satisfies the procedural requirements of section 110(l) of the Act and of 40 CFR 51.102.\textsuperscript{15}

\textbf{III. Substantive Requirements for Redesignation}

The CAA establishes the requirements for redesignation of a nonattainment area to attainment. Specifically, section 107(d)(3)(E) allows for redesignation provided that the following criteria are met: (1) the EPA determines that the area has attained the applicable NAAQS; (2) the EPA has fully approved the applicable implementation plan for the area under

\textsuperscript{15} On November 10, 2019, the Ajo PM\textsubscript{10} Maintenance Plan was deemed complete by operation of law under CAA section 110(k)(1)(B).
CAA section 110(k); (3) the EPA determines that the improvement in air quality is due to permanent and enforceable reductions in emissions; (4) the EPA has fully approved a maintenance plan for the area as meeting the requirements of CAA section 175A; and (5) the state has met all requirements applicable to the area under section 110 and part D of the CAA. Section 110 identifies a comprehensive list of elements that SIPs must include, and part D establishes the SIP requirements for nonattainment areas. Part D is divided into six subparts. The generally applicable nonattainment SIP requirements are found in subpart 1 of part D, and the particulate matter-specific SIP requirements are found in subpart 4 of part D.

The EPA provided guidance on redesignations in a document titled “State Implementation Plans; General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990,” published in the Federal Register on April 16, 1992, and supplemented on April 28, 1992 (collectively referred to herein as the “General Preamble”). Additional guidance was issued on September 4, 1992, in a memorandum from John Calcagni, Director, Air Quality Management Division, EPA Office of Air Quality Planning and Standards, titled “Procedures for Processing Requests to Redesignate Areas to Attainment” (referred to herein as the “Calcagni memo”), and a 1994 memorandum from Mary D. Nichols, titled “Part D New Source Review (part D NSR) Requirements for Areas Requesting Redesignation to Attainment” (“Nichols memo”).

As noted above, approval of a maintenance plan is one of the CAA prerequisites for redesignation of a nonattainment area to attainment. Section 175A of the CAA provides the general framework for maintenance plans. The initial 10-year maintenance plan must provide for maintenance of the NAAQS for at least 10 years after redesignation, including any additional

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16 57 FR 13498.
17 57 FR 18070.
control measures necessary to ensure such maintenance. In addition, maintenance plans are to contain contingency provisions necessary to assure the prompt correction of a violation of the NAAQS that occurs after redesignation. The contingency provisions must include, at a minimum, a requirement that the state will implement all control measures contained in the nonattainment SIP prior to redesignation. Maintenance plan submittals are SIP revisions, and as such, the EPA is obligated under CAA section 110(k) to approve them or disapprove them depending upon whether they meet the applicable CAA requirements for such plans.

For the reasons set forth in section IV of this document, we propose to approve the Ajo PM$_{10}$ Maintenance Plan and to approve the ADEQ’s request for redesignation of the Ajo nonattainment area to attainment for the PM$_{10}$ NAAQS based on our conclusion that all of the criteria under CAA section 107(d)(3)(E) have been satisfied.

IV. Evaluation of the State’s Redesignation Request for the Ajo PM$_{10}$ Nonattainment Area

A. Determination that the Area Has Attained the PM$_{10}$ National Ambient Air Quality Standards

Section 107(d)(3)(E)(i) of the CAA requires that for an area to be redesignated to attainment, the EPA must determine that the area has attained the relevant NAAQS. In this case, the relevant NAAQS is the 24-hour PM$_{10}$ NAAQS. In 2006, the EPA determined that the Ajo area had attained the PM$_{10}$ standards based on ambient data from 2002–2004. This proposed action updates this determination based on the most recent available PM$_{10}$ monitoring data.

Generally, the EPA determines whether an area’s air quality is meeting the PM$_{10}$ NAAQS based on the most recent complete, quality-assured, and certified data measured at established state and local air monitoring stations (SLAMS) in the nonattainment area and entered into the

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18 The annual PM$_{10}$ standards were revoked effective December 18, 2006 (71 FR 61144, October 17, 2006). Thus, this document discusses only attainment of the 24-hour PM$_{10}$ standards.

19 71 FR 6352 (February 8, 2006).
EPA Air Quality System (AQS) database. Data from air monitoring sites operated by state, local, or tribal agencies in compliance with EPA monitoring requirements must be submitted to AQS. These monitoring agencies annually certify that these data are accurate to the best of their knowledge. Accordingly, the EPA relies primarily on data in AQS when determining the attainment status of an area.\textsuperscript{20} All valid data are reviewed to determine the area’s air quality status in accordance with 40 CFR part 50, appendix K.

The PM\textsubscript{10} NAAQS is attained when the expected number of days per calendar year with a 24-hour concentration in excess of the standard (referred to herein as an “exceedance”),\textsuperscript{21} averaged over a three-year period, is less than or equal to one. The expected number of exceedances averaged over a three-year period at any given monitor is known as the PM\textsubscript{10} design value. The PM\textsubscript{10} design value for the area is the highest design value within the nonattainment area.\textsuperscript{22} Generally, for purposes of redesignation, the most recent three consecutive years of complete\textsuperscript{23} air quality data are necessary to show attainment of the PM\textsubscript{10} NAAQS.

The ADEQ operates the PM\textsubscript{10} monitoring network in the Ajo area. The ADEQ submits annual monitoring network plans to the EPA. These network plans describe the monitoring network operated by the ADEQ within the Ajo nonattainment area and discuss the status of the air monitoring network, as required under 40 CFR 58.10. The EPA regularly reviews these annual plans for compliance with the applicable reporting requirements in 40 CFR part 58. With

\begin{itemize}
\item \textsuperscript{20}40 CFR 50.6; 40 CFR part 50, appendix J; 40 CFR part 53; and 40 CFR part 58, appendices A, C, D, and E.
\item \textsuperscript{21}An exceedance is defined as a daily value that is above the level of the 24-hour standard (i.e., 150 \(\mu g/m^3\)) after rounding to the nearest 10 \(\mu g/m^3\) (i.e., values ending in 5 or greater are to be rounded up). Thus, a recorded value of 154 \(\mu g/m^3\) would not be an exceedance since it would be rounded to 150 \(\mu g/m^3\) whereas a recorded value of 155 \(\mu g/m^3\) would be an exceedance since it would be rounded to 160 \(\mu g/m^3\). 40 CFR part 50, appendix K, section 1.0.
\item \textsuperscript{22}40 CFR 50.6 and 40 CFR part 50, appendix K. The comparison with the allowable expected exceedance rate of one per year is made in terms of a number rounded to the nearest tenth (fractional values equal to or greater than 0.05 are to be rounded up; e.g., an exceedance rate of 1.05 would be rounded to 1.1, which is the lowest rate for nonattainment). 40 CFR part 50, appendix K, section 2.1(b).
\item \textsuperscript{23}For PM\textsubscript{10}, a complete year of air quality data includes all four calendar quarters with each quarter containing a minimum of 75 percent of the scheduled PM\textsubscript{10} sampling days. 40 CFR part 50, Appendix K, section 2.3(a).
\end{itemize}
respect to PM$_{10}$, the EPA has found that the area’s network plans meet the applicable reporting requirements under 40 CFR part 58, appendix D.\textsuperscript{24} The EPA also concluded from its 2018 Technical Systems Audit that the ADEQ’s ambient air monitoring program is robust and meets or exceeds EPA requirements.\textsuperscript{25} The ADEQ annually certifies that the data it submits to AQS are complete and quality-assured.\textsuperscript{26}

The ADEQ operates one PM$_{10}$ SLAMS monitoring site, Ajo (AQS ID: 04-019-0001), within the Ajo PM$_{10}$ nonattainment area. The monitor is located at the Arizona Department of Transportation (ADOT) maintenance yard (see Figure 1-1 in the Ajo PM$_{10}$ Maintenance Plan) and was sited to monitor the effects of the former copper smelter and mine tailings. SLAMS produce data comparable to the NAAQS, and therefore the monitor must be an approved Federal Reference Method, Federal Equivalent Method (FEM), or Approved Regional Method. The Ajo monitor measures hourly PM$_{10}$ concentrations on a daily, year-round basis using a method that has been designated as an FEM by the EPA.

Consistent with the requirements contained in 40 CFR part 50, the EPA has reviewed the quality-assured and certified PM$_{10}$ ambient air monitoring data collected at the Ajo monitoring site, as recorded in AQS, for the applicable monitoring period. We have determined that the data are of sufficient completeness for the purposes of making comparisons with the PM$_{10}$ NAAQS. The EPA’s evaluation of whether the Ajo PM$_{10}$ nonattainment area has attained the PM$_{10}$ NAAQS is based on our review of the monitoring data and takes into account the adequacy of the PM$_{10}$ monitoring network in the nonattainment area and the reliability of the data collected.

\textsuperscript{24} For example, see letter dated November 8, 2019, from Gwen Yoshimura, Manager, Air Quality Analysis Office, EPA Region IX, to Daniel Czecholinski, Acting Director, Air Quality Division, ADEQ.

\textsuperscript{25} Letter dated April 25, 2019, from Elizabeth Adams, Director, Air Division, EPA Region IX, to Timothy Franquist, Director, Air Quality Division, ADEQ.

\textsuperscript{26} For example, see letter dated April 13, 2020, from Daniel Czecholinski, Director, Air Quality Division, ADEQ, to Gwen Yoshimura, Manager, Air Quality Analysis Office, EPA Region IX, Subject: “Certification of 2019 Ambient Air Data.”
by the network as discussed earlier in this section of this proposal.

Table 1 shows the highest measured PM$_{10}$ concentrations and number of expected exceedances at the Ajo monitoring site during the most recent three-year period (2017–2019). One exceedance of the PM$_{10}$ NAAQS was recorded in 2018 at the Ajo monitor. However, the resulting 24-hour design value for the 2017–2019 period is less than 1.0 at the Ajo monitor. Therefore, we find that, based on complete, quality-assured, and certified data for 2017–2019, the Ajo PM$_{10}$ nonattainment area has attained the PM$_{10}$ NAAQS. Preliminary data available in AQS for 2020 indicate that the area continues to attain the PM$_{10}$ NAAQS.

<table>
<thead>
<tr>
<th>Monitoring site name (AQS ID)</th>
<th>Maximum 24-hour average concentration (µg/m$^3$)</th>
<th>Expected exceedances (calendar year)</th>
<th>PM$_{10}$ Design Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ajo (04-019-0001)</td>
<td>109 164 65</td>
<td>0 1.1 0</td>
<td>0.4</td>
</tr>
</tbody>
</table>


B. The Area Must Have a Fully Approved State Implementation Plan Meeting the Requirements Applicable for Purposes of Redesignation Under Section 110 and Part D of the Clean Air Act

Sections 107(d)(3)(E)(ii) and (v) of the CAA require the EPA to determine that the area has a fully approved applicable SIP under CAA section 110(k) that meets all applicable requirements under section 110 and part D for the purposes of redesignation. The EPA may rely on prior SIP approvals in approving a redesignation request as well as any additional measure or element it may approve in conjunction with a redesignation action. In this instance, we are

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27 One exceedance was recorded in 2018; however, the number of expected exceedances for 2018 is 1.1 due to an adjustment applied to the data. 40 CFR part 50 Appendix K.

28 Calcagni Memo, 3; Wall v. EPA, F.3d 426 (6th Cir. 2001); and Southwest Pennsylvania Growth Alliance v. Browner, 114 F.3d 984, 989-990 (6th Cir. 1998).

29 68 FR 25418, 25426 (May 12, 2003) and citations within.
proposing to approve a part D element as part of this action – the emissions inventory under CAA section 172(c)(3). With full approval of this element, the Ajo planning area portion of the Arizona SIP will be fully approved under CAA section 110(k) for the purposes of redesignation of the area to attainment.

1. Basic State Implementation Plan Requirements Under Section 110
   a. Clean Air Act Section 110(a) Requirements

   The general SIP elements and requirements set forth in CAA section 110(a)(2) include, but are not limited to, the following: submittal of a SIP that has been adopted by the state after reasonable public notice and hearing; provisions for establishment and operation of appropriate procedures needed to monitor ambient air quality; implementation of a source permitting program; provisions for the implementation of part C requirements for prevention of significant deterioration (PSD); provisions for the implementation of part D requirements for nonattainment new source review permit programs; provisions for air pollution modeling; and provisions for public and local agency participation in planning and emission control rule development.

   We note that SIPs must be fully approved only with respect to applicable requirements for purposes of redesignation in accordance with CAA section 107(d)(3)(E)(ii). The CAA section 110(a)(2) (and part D) requirements that are linked to a particular nonattainment area’s designation and classification are the relevant measures to evaluate in reviewing a redesignation request. Requirements that apply regardless of the designation of any particular area of a state are not applicable requirements for the purposes of redesignation, and the state will remain subject to these requirements after the nonattainment area is redesignated to attainment.

   For example, CAA section 110(a)(2)(D) requires that SIPs contain certain measures to prevent sources in a state from significantly contributing to air quality problems in another state;
these SIPs are often referred to as “transport SIPs.” Because the section 110(a)(2)(D) requirements for transport SIPs are not linked to a particular nonattainment area’s designation and classification, but rather apply regardless of the area’s attainment status, these are not applicable requirements for the purposes of redesignation under CAA section 107(d)(3)(E).

Similarly, the EPA considers other section 110(a)(2) (and part D) requirements that are not linked to nonattainment plan submissions or to an area’s attainment status as not applicable requirements for purposes of redesignation. The EPA considers the section 110 (and part D) requirements that relate to a particular nonattainment area’s designation and classification as the relevant measures to evaluate in reviewing a redesignation request. This is consistent with the EPA’s existing policy on applicability of the conformity SIP requirement for redesignations.\(^{30}\)

On numerous occasions, the ADEQ and the PDEQ have submitted, and the EPA has approved, provisions addressing the basic CAA section 110 provisions. The Arizona SIP contains enforceable emission limitations; requires monitoring, compiling, and analyzing of ambient air quality data; requires preconstruction review of new or modified stationary sources; provides for adequate funding, staff, and associated resources necessary to implement its requirements; and provides the necessary assurances that the State maintains responsibility for ensuring that the CAA requirements are satisfied in the event that local or regional agencies are unable to meet their CAA obligations.\(^{31}\) There are no outstanding or disapproved applicable SIP submittals that prevent redesignation of the Ajo PM\(_{10}\) nonattainment area for the PM\(_{10}\)

\(^{30}\) 75 FR 36023, 36026 (June 24, 2010) and citations within.

\(^{31}\) For example, see the EPA’s final actions approving provisions of the Arizona SIP addressing section 110 elements under the 1997 and 2006 PM\(_{2.5}\) NAAQS (77 FR 66398) and the 2008 lead and 2008 ozone NAAQS (80 FR 47859).
Therefore, we propose to conclude that the ADEQ and the PDEQ have met all SIP requirements for the Ajo planning area that are applicable for purposes of redesignation under section 110 of the CAA.

b. Federal Implementation Plan at 40 CFR 52.126

In 1972, the EPA determined that Arizona’s SIP “does not provide for the attainment and maintenance of the national standards for particulate matter” in the Phoenix-Tucson Intrastate Air Quality Control Region (AQCR), which includes Pima County.³³ The following year, the EPA promulgated a particulate matter federal implementation plan (FIP), based on a finding that the SIP “was not adequate to attain the primary standards for particulate matter” in the Phoenix-Tucson Intrastate AQCR.³⁴ We explained that the emissions inventory “indicated that the problem is the result of emissions from stationary source[s] (mainly process sources) and fugitive dust sources”, and concluded that “control of both these source categories is necessary to attain the national particulate matter standards.”³⁵ Accordingly, we promulgated “substitute regulations for process sources equivalent to reasonable available control technology.” These regulations were put in place as a replacement for Arizona, Maricopa County, and Pima County rules.

In 1974, Pima County adopted new regulations for process industries under its jurisdiction and ADEQ submitted them to the EPA. These new regulations incorporated the federal emission rates promulgated in the FIP. The EPA proposed to approve the rules on August 32.

³² On June 30, 2017, Arizona submitted a SIP revision to meet the requirements under section 110 of the CAA for the 1987 PM₁₀ NAAQS. The requirements of section 110(a)(2), however, are statewide requirements that are not linked to the 1987 PM₁₀ NAAQS nonattainment status of the Ajo area. Therefore, the EPA concludes that these infrastructure requirements are not applicable requirements for purposes of review of the State’s redesignation request.


³⁴ 38 FR 12702 (May 14, 1973), codified at 40 CFR 52.126.

³⁵ Id. at 12703.
21, 1975.\textsuperscript{36} Upon final approval, the Pima County jurisdiction was removed from the FIP.\textsuperscript{37} As a result, the current FIP only applies to Pima County sources under the ADEQ’s jurisdiction. There are no process sources under ADEQ jurisdiction currently operating within the Ajo PM\textsubscript{10} nonattainment area. Therefore, the EPA finds that the FIP at 40 CFR 52.126 does not apply to any sources in the Ajo area and does not preclude redesignation of the area to attainment. As discussed in more detail in section IV.B.2.b of this document, upon redesignation to attainment, any new major sources with significant PM\textsubscript{10} emissions as defined under 40 CFR 51.166 proposing to locate within the Ajo planning area will be subject to the requirements in the EPA’s PSD regulation at 40 CFR 52.21 unless the new source is subject to the ADEQ’s jurisdiction in which case the new source will be subject to the ADEQ’s SIP-approved PSD permitting program requirements.

2. State Implementation Plan Requirements Under Part D

Subparts 1 and 4 of part D, title I of the CAA contain air quality planning requirements for PM\textsubscript{10} nonattainment areas. Subpart 1 contains general requirements for all nonattainment areas of any pollutant governed by a NAAQS, including PM\textsubscript{10}. The subpart 1 requirements include, in relevant part, provisions for implementation of reasonably available control measures (RACM), a demonstration of reasonable further progress (RFP), emissions inventories, a program for preconstruction review and permitting of new or modified major stationary sources, contingency measures, and transportation conformity.

Subpart 4 contains specific planning and scheduling requirements for PM\textsubscript{10} nonattainment areas. The requirements set forth in CAA section 189(a), (c), and (e) apply specifically to Moderate PM\textsubscript{10} nonattainment areas and include the following: an approved

\textsuperscript{36} 40 FR 36577, 36578.
\textsuperscript{37} 42 FR 46926 (September 19, 1977).
permit program for construction of new or modified major stationary sources; provisions for RACM; an attainment demonstration; quantitative milestones demonstrating RFP toward attainment by the applicable attainment date; and provisions to ensure that the control requirements applicable to major stationary sources of $PM_{10}$ also apply to major stationary sources of $PM_{10}$ precursors, except where the Administrator has determined that such sources do not contribute significantly to $PM_{10}$ levels that exceed the NAAQS in the area.

As noted in section I.B of this document, the EPA determined in 2006 that the Ajo $PM_{10}$ nonattainment area attained the $PM_{10}$ NAAQS based on 2002–2004 data. In accordance with the EPA’s Clean Data Policy, we determined that the following requirements do not apply to the Ajo $PM_{10}$ nonattainment area for so long as the area continues to attain the $PM_{10}$ standards or until the area is redesignated to attainment: an attainment demonstration under CAA section 189(a)(1)(B); RACM provisions under sections 172(c) and 189(a)(1)(C); RFP provisions under section 189(c)(1); and contingency measures under section 172(c)(9).\(^{38}\)

Moreover, in the context of evaluating the area’s eligibility for redesignation, there is a separate and additional justification for finding that requirements associated with attainment are not applicable for purposes of redesignation. Prior to and independently of the Clean Data Policy, and specifically in the context of redesignations, the EPA has interpreted CAA SIP submittal requirements associated with attainment of the NAAQS (such as attainment and RFP demonstrations) as not being applicable for purposes of redesignation.\(^{39}\) The Calcagni memo similarly provides that requirements for RFP and other measures needed for attainment will not

\(^{38}\) For other rulemaking actions applying the Clean Data Policy in the context of $PM_{10}$, see 77 FR 31268, May 25, 2012 (Paul Spur/Douglas, Arizona); 76 FR 10817, February 28, 2011 (Truckee Meadows, Nevada); 75 FR 13710, March 23, 2010 (Coso Junction, California); 73 FR 22307, April 25, 2008 (San Joaquin Valley, California). See also 40 CFR 51.1015.

\(^{39}\) General Preamble, 13564.
apply for redesignations because they have meaning and applicability only where areas do not meet the NAAQS.\textsuperscript{40} With respect to contingency measures, the EPA explained that the section 172(c)(9) contingency measure requirements are directed at ensuring RFP and attainment by the applicable date, and that consequently, these requirements no longer apply when an area has attained the standards and is eligible for redesignation. Furthermore, CAA section 175A(d) provides for specific requirements for maintenance plan contingency provisions that effectively supersede the requirements of section 172(c)(9) for these areas.

Thus, the requirements associated with attainment do not apply for purposes of evaluating whether an area that has attained the standards qualifies for redesignation. The EPA has enunciated this position since the General Preamble was published more than 25 years ago, and it represents the Agency’s interpretation of what constitutes applicable requirements under section 107(d)(3)(E). The courts have recognized the scope of the EPA’s authority to interpret “applicable requirements” in the redesignation context.\textsuperscript{41}

The remaining applicable Part D requirements for Moderate PM\textsubscript{10} areas include the following: (1) an emissions inventory under section 172(c)(3); (2) a permit program for the construction and operation of new and modified major stationary sources of PM\textsubscript{10} under sections 172(c)(5) and 189(a)(1)(A); (3) control requirements for major stationary sources of PM\textsubscript{10} precursors under section 189(e), except where the Administrator determines that such sources do not contribute significantly to PM\textsubscript{10} levels that exceed the standards in the area; (4) requirements under section 172(c)(7) that meet the applicable provisions of section 110(a)(2); and (5) provisions to ensure that federally supported or funded projects conform to the air quality

\textsuperscript{40} Calcagni memo, 6.
\textsuperscript{41} The Seventh Circuit in \textit{Sierra Club v. EPA}, 375 F.3d 537 (7th Cir. 2004) (upholding the EPA’s redesignation of the St. Louis metropolitan area to attainment) is one such example.
planning goals in the applicable SIP under section 176(c). We discuss each of these requirements below.

a. Emissions Inventory

Section 172(c)(3) of the CAA requires states to submit a comprehensive, accurate, current inventory of relevant PM\textsubscript{10} pollutants for the baseline year from all sources within the nonattainment area. We interpret the Act such that the emissions inventory requirement of section 172(c)(3) may be satisfied by the inventory included in the maintenance plan.\textsuperscript{42} In section IV.D.1 of this document, we are proposing to approve the 2018 attainment inventory submitted as part of the Ajo PM\textsubscript{10} Maintenance Plan as satisfying the emissions inventory requirement under section 172(c)(3) for the Ajo planning area for the PM\textsubscript{10} NAAQS.

b. Permits for New and Modified Major Stationary Sources

CAA sections 172(c)(5) and 189(a)(1)(A) require that states submit SIP revisions that establish certain requirements for new or modified major stationary sources in nonattainment areas, including provisions to ensure that major new sources or major modifications of existing sources of nonattainment pollutants incorporate the highest level of control (referred to as the lowest achievable emission rate (LAER)), and that increases in emissions from such stationary sources are offset so as to provide for RFP towards attainment in the nonattainment area. The major source threshold for Moderate PM\textsubscript{10} nonattainment areas is 100 tons per year of PM\textsubscript{10}.\textsuperscript{43}

The process for reviewing permit applications and issuing permits for new or modified stationary sources of air pollution is referred to as new source review (NSR). With respect to nonattainment pollutants in nonattainment areas, this process is referred to as nonattainment NSR (NNSR). Areas that are designated as attainment or unclassifiable for one or more NAAQS

\textsuperscript{42} General Preamble, 13498, 13564.
\textsuperscript{43} CAA section 302(j).
are required to submit SIP revisions that ensure that major new stationary sources or major modifications of existing stationary sources meet the federal requirements for PSD, including application of best available control technology for each applicable pollutant emitted in significant amounts, among other requirements.44

The ADEQ and the PDEQ share air permitting responsibilities in Pima County. ADEQ has an EPA-approved NNSR program for PM$_{10}$.45 With respect to sources subject to PDEQ’s jurisdiction, EPA-approved regulations include rules for the review of applications for new or modified stationary sources. The EPA has not approved PDEQ regulations specifically meeting the NNSR requirements of CAA sections 172(c)(5) and 189(a)(1)(A). However, the EPA interprets section 107(d)(3)(E)(v) of the CAA such that final approval of an NNSR program is not a prerequisite to approving a state’s redesignation request. The EPA has determined in past redesignations that an NNSR program does not have to be approved prior to redesignation provided that the area demonstrates maintenance of the standards without part D NNSR requirements in effect.46

The demonstration of maintenance of the PM$_{10}$ NAAQS in the Ajo PM$_{10}$ Maintenance Plan relies on projections of future emissions based on various growth factors. For the types of stationary sources that are subject to PDEQ jurisdiction, future emissions are projected based on employment growth projections and do not take credit for future control technology

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44 PSD requirements control the growth of new source emissions in areas designated as attainment or unclassifiable for a NAAQS.
45 80 FR 67319 (November 2, 2015); 83 FR 19631 (May 4, 2018).
46 See, generally, the Nichols memo; see also, the more detailed explanations in the following redesignation rulemakings: Detroit, Michigan (60 FR 12467-12468, March 7, 1996); Cleveland-Akron-Lorain, Ohio (61 FR 20458, 20469-20470, May 7, 1996); Louisville, Kentucky (66 FR 53665, 53669, October 23, 2001); Grand Rapids, Michigan (61 FR 31831, 31836-31837, June 21, 1996); and San Joaquin Valley, California (73 FR 22307, 22313, April 25, 2008 and 73 FR 66759, 66766-66767, November 12, 2008).
requirements, such as LAER, or for imposition of emissions offsets.\textsuperscript{47} Thus, we find that the maintenance demonstration for the Ajo planning area does not rely on an NNSR program, and that the area need not have a fully-approved NNSR program prior to approval of the PM\textsubscript{10} redesignation request for the area.

If we finalize the redesignation action as proposed herein, the requirements of the PSD program will apply with respect to PM\textsubscript{10} (PSD already applies with respect to the other pollutants in the Ajo planning area).

The ADEQ has an EPA-approved PSD program under 40 CFR 51.166,\textsuperscript{48} except for greenhouse gases (GHGs),\textsuperscript{49} and the EPA has delegated the PDEQ authority to administer the federal PSD program under 40 CFR 52.21.\textsuperscript{50} These programs will apply to PM\textsubscript{10} emissions from new major sources and major modifications upon redesignation of the area to attainment. Thus, new major sources with significant PM\textsubscript{10} emissions and major modifications of major PM\textsubscript{10} sources, as defined under 40 CFR 51.166 and 52.21, will be required to obtain a PSD permit.

We conclude that the Arizona SIP adequately meets the requirements of section 172(c)(5) and 189(a)(1)(A) for purposes of redesignation of the Ajo planning area.

c. Control Requirements for PM\textsubscript{10} Precursors

Section 189(e) of the CAA provides that control requirements for major stationary sources of direct PM\textsubscript{10} also apply to PM\textsubscript{10} precursors from those sources, except where the EPA determines that major stationary sources of such precursors do not contribute significantly to PM\textsubscript{10} levels that exceed the standards in the area. The CAA does not explicitly address whether it would be appropriate to include a potential exemption from precursor controls for all source

\textsuperscript{47} Ajo PM\textsubscript{10} Maintenance Plan, Appendix A.
\textsuperscript{48} 83 FR 19631 (May 4, 2018).
\textsuperscript{49} The ADEQ administers the requirements for GHGs under a delegation agreement with the EPA.
\textsuperscript{50} 40 CFR 52.144.
categories under certain circumstances. In implementing subpart 4, the EPA permitted states to determine that a precursor was “insignificant” where the state could show in its attainment plan that it would expeditiously attain without adoption of emission reduction measures aimed at that precursor. This approach was upheld in Association of Irritated Residents v. EPA, 423 F.3d 989 (9th Cir. 2005). A state may develop its attainment plan and adopt RACM that target only those precursors that are necessary to control for purposes of timely attainment.

Therefore, because the requirement of section 189(e) is primarily actionable in the context of addressing precursors in an attainment plan, a precursor exemption analysis under section 189(e) and the EPA’s implementing regulations is not an applicable requirement that needs to be fully approved in the context of a redesignation under CAA section 107(d)(3)(E)(ii). As discussed earlier in this document, for areas that are attaining the standards, the EPA does not interpret attainment planning requirements of subpart 1 and subpart 4 to be applicable requirements for the purposes of redesignating the area to attainment.

As previously noted, the EPA determined in 2006 that the Ajo PM$_{10}$ nonattainment area had attained the PM$_{10}$ NAAQS. Therefore, no additional controls of any pollutant, including any PM$_{10}$ precursor, are necessary to bring the area into attainment. In section IV.A of this document, we find that the area continues to attain the NAAQS. In section IV.C, the EPA is proposing to determine that the Ajo PM$_{10}$ nonattainment area has attained the standards due to permanent and enforceable emission reductions. Further, as set forth in section IV.D.2, we find that the Ajo PM$_{10}$ Maintenance Plan demonstrates continued maintenance of the PM$_{10}$ standards through 2031. Finally, the Ajo PM$_{10}$ Maintenance Plan demonstrates that historic violations of the PM$_{10}$ NAAQS were the direct result of operations at facilities that are no longer in operation, there are no major sources of PM$_{10}$ precursors in the Ajo PM$_{10}$ nonattainment area, and emissions of PM$_{10}$
precursors from other sources are sufficiently low that they are insignificant contributors to secondary particle formation in the Ajo PM$_{10}$ nonattainment area. Taken together, these factors support our conclusion that PM$_{10}$ precursors are adequately controlled.

d. Compliance with Section 110(a)(2)

Section 172(c)(7) requires the SIP to meet the applicable provisions of section 110(a)(2). As described in section IV.B.1 of this document, we conclude that the Arizona SIP meets the requirements of section 110(a)(2) applicable for purposes of this redesignation.

e. General and Transportation Conformity Requirements

Under section 176(c) of the CAA, states are required to revise their SIPs to establish criteria and procedures to ensure that federally supported or funded projects in nonattainment areas and former nonattainment areas subject to a maintenance plan (referred to as “maintenance areas”) conform to the air quality planning goals in the applicable SIP. Section 176(c) further provides that state conformity provisions must be consistent with federal conformity regulations that the CAA requires the EPA to promulgate. The EPA’s conformity regulations are codified at 40 CFR part 93, subpart A (referred to herein as “transportation conformity”) and subpart B (referred to herein as “general conformity”). Transportation conformity applies to transportation plans, programs, and projects developed, funded, and approved under title 23 U.S.C. or the Federal Transit Act, and general conformity applies to all other federally-supported or funded projects. SIP revisions intended to address the conformity requirements are referred to herein as “conformity SIPs.” In 2005, Congress amended section 176(c) of the CAA. Under the amended conformity statutory provisions, states are no longer required to submit conformity SIPs for general conformity, and the conformity SIP requirements for transportation conformity have
been reduced to include only those relating to consultation, enforcement, and enforceability.\footnote{CAA section 176(c)(4)(E).}

We have not approved a transportation conformity SIP for the Ajo planning area. However, we consider it reasonable to interpret the conformity SIP requirements as not applying for purposes of a redesignation request under section 107(d) because the conformity SIP requirement continues to apply post-redesignation (because conformity applies in maintenance areas as well as nonattainment areas) and because the federal conformity rules (set forth in 40 CFR part 93, subpart A and subpart B) apply where state rules have not been approved.\footnote{See Wall v. EPA, 265 F.3d 426 (6th Cir. 2001), upholding this interpretation. See also, 60 FR 62748 (December 7, 1995).}

C. The Area Must Show the Improvement in Air Quality is Due to Permanent and Enforceable Emission Reductions

To approve a redesignation to attainment, section 107(d)(3)(E)(iii) of the CAA requires the EPA to determine that the improvement in air quality is due to emission reductions that are permanent and enforceable, and that the improvement results from the implementation of the applicable SIP, applicable federal air pollution control regulations, and other permanent and enforceable regulations. Under this criterion, a state must be able to reasonably attribute the improvement in air quality to permanent and enforceable emission reductions. Attainment resulting from temporary reductions in emission rates (e.g., reduced production or shutdown due to temporary adverse economic conditions) or unusually favorable meteorology would not qualify as an air quality improvement due to permanent and enforceable emission reductions.\footnote{Calcagni memo, 4.}

The Ajo PM\textsubscript{10} Maintenance Plan addresses the redesignation criterion in section 107(d)(3)(E)(iii) by presenting a detailed overview of the sources of PM\textsubscript{10} emissions in the planning area, the emission control measures that have been implemented, the emission
reductions associated with those measures, and an evaluation of the sequence of facility closures and implementation of control measures relative to changes in ambient PM$_{10}$ concentrations measured in the planning area since 1987. In short, the principal sources of PM$_{10}$ emissions in the Ajo planning area were the operations and facilities associated with the Ajo New Cornelia mine and smelter, and the slag reprocessing facility located adjacent to the Ajo tailings piles.

Phelps Dodge ceased operations at the Ajo New Cornelia mine in 1984 and deactivated the smelter in 1985. In 1991, Phelps Dodge arranged for the capping of the Ajo New Cornelia tailings impoundment with 2-4” diameter crushed rock. In 1996, the smelter and copper ore concentrator structures were effectively dismantled and the ADEQ terminated the facility’s permit. With respect to the slag reprocessing facility, the operator closed the facility in 2015, and PDEQ terminated the facility’s permit in 2016. Stabilization of the slag reprocessing worksite, including application of a slag dust cap on select process areas, was completed in 2015. In 2019, the Pima County Board of Supervisors adopted PCC Section 17.16.125 (“Inactive Mineral Tailings Impoundment and Slag Storage Area within the Ajo PM$_{10}$ Planning Area”) to provide for continued maintenance and enforcement of the measures already implemented to control windblown dust from the tailings impoundment and the slag storage area.

Emissions from active operations of the mine, smelter, and slag reprocessing facility ceased with the closure of those facilities, and closure has been made permanent and enforceable by termination of the facilities permits. PCC Section 17.16.125 ensures that the measures already implemented to control windblown dust from the tailings impoundment and slag storage area are permanent and enforceable. In a separate rulemaking, we have proposed to approve PCC Section

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54 Ajo PM$_{10}$ Maintenance Plan, Chapter 4.
17.16.125 as a revision to the Arizona SIP. We will take final action on PCC Section 17.16.125 prior to or concurrent with final action on the redesignation request for the Ajo planning area for the PM$_{10}$ NAAQS. If we take final action to approve PCC Section 17.16.125 as part of the Arizona SIP, the requirements contained therein will become permanent and enforceable for the purposes of CAA section 107(d)(3)(E)(iii). Continued implementation of the measures made permanent and enforceable through PCC Section 17.16.125 will help to ensure that the Ajo planning area maintains the PM$_{10}$ NAAQS.

A sense of the effectiveness of the control measures to reduce PM$_{10}$ emissions can be gained by comparing emissions and monitored air quality concentrations prior to and following the capping of the tailings impoundment in 1991 and prior to and following the stabilization of the slag processing area in 2015. Capping of the tailings impoundments led to a 90 percent reduction of windblown emissions from that source that has persisted through the present day. Similarly, stabilization of the slag processing and storage area led to a reduction in emissions from that source of approximately 99 percent.

With respect to the connection between the emission reductions and the improvement in air quality, we also conclude that the air quality improvement in the Ajo PM$_{10}$ nonattainment area is not the result of a local economic downturn or unusual or extreme weather patterns. Our conclusion is based on the timing of the exceedances of the PM$_{10}$ NAAQS, which occurred in the late 1980’s, prior to the capping of the tailings impoundments in 1991; and in 2011 and 2013, prior to the closure and stabilization of the slag reprocessing facility in 2015.

Thus, we find that the improvement in air quality in the Ajo PM$_{10}$ nonattainment area is

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55 85 FR 25379 (May 1, 2020).
56 Ajo PM$_{10}$ Maintenance Plan, Table 4-1.
57 Id. at 27, Table 4-2.
the result of permanent and enforceable emission reductions from a combination of (1) facility
closures and termination of permits, and (2) control measures approved by the EPA as part of the
Arizona SIP. Therefore, we propose to find that the criterion for redesignation set forth at CAA
section 107(d)(3)(E)(iii) is satisfied.

D. The Area Must Have a Fully Approved Maintenance Plan Under Clean Air Act Section 175A

Section 107(d)(3)(E)(iv) of the CAA requires that, to approve a redesignation to
attainment, the EPA must fully approve a maintenance plan for the area as meeting the
requirements of section 175A of the Act. Section 175A of the CAA sets forth the required
elements of a maintenance plan for areas seeking redesignation from nonattainment to
attainment. Under CAA section 175A, the plan must demonstrate continued attainment of the
applicable NAAQS for at least 10 years after the EPA approves a redesignation to attainment.
Eight years after redesignation, a state must submit a revised maintenance plan that demonstrates
continued attainment for the subsequent 10-year period following the initial 10-year maintenance
period. To address the possibility of future NAAQS violations, the maintenance plan must
contain such contingency provisions as the EPA deems necessary to promptly correct any
violation of the NAAQS that occurs after redesignation of the area. The Calcagni memo provides
further guidance on the content of a maintenance plan, explaining that a maintenance plan should
include an attainment emissions inventory, maintenance demonstration, monitoring and
verification of continued attainment, and a contingency plan. Based on our review and evaluation
of the Plan, as discussed below, we are proposing to approve the Ajo PM$_{10}$ Maintenance Plan as
meeting the requirements of CAA section 175A.

1. Attainment Inventory

A maintenance plan for the PM$_{10}$ NAAQS should include an inventory of direct PM$_{10}$
emissions in the area to identify a level of emissions sufficient to attain the PM$_{10}$ NAAQS.$^{58}$ The inventory should be consistent with the EPA’s most recent guidance on emissions inventories for nonattainment areas available at the time and should represent emissions during the time period associated with the monitoring data showing attainment. The inventory must also be comprehensive, including emissions from stationary point sources, area sources, and mobile sources, and must be based on actual emissions during the appropriate season, if applicable.$^{59}$

The specific PM$_{10}$ emissions inventory requirements are set forth in Air Emissions Reporting Rule (40 CFR part 51, subpart A), which requires that emissions inventories report filterable and condensable components, as applicable.$^{60}$ The EPA has provided additional guidance for developing PM$_{10}$ emissions inventories in “PM$_{10}$ Emissions Inventory Requirements,” EPA-454/R-94-033 (September 1994) and “Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations” (July 2017) (“EPA 2017 EI Guidance”).

The Ajo PM$_{10}$ Maintenance Plan’s demonstration that the area attained the standards is based on monitoring data from 2015–2017, the three most recent years with complete air quality data prior to adoption and submittal of the redesignation request and maintenance plan. The ADEQ selected 2016 for the attainment year inventory, which is consistent with this time period. Emissions are also provided for a 2011 pre-base year and 2014 base year for informational purposes.

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$^{58}$ PM$_{10}$ precursor emissions should also be included depending upon the contribution of secondarily-formed particulate matter to high ambient PM$_{10}$ concentrations in the area. In this instance, an inventory of PM$_{10}$ precursor emissions is not required because PM$_{10}$ precursor controls were not relied upon to achieve attainment of the PM$_{10}$ NAAQS in the Ajo planning area (see section IV.B.2.c of this document) nor are they relied upon to demonstrate maintenance of the NAAQS. While not required, the Ajo PM$_{10}$ Maintenance Plan includes an inventory of PM$_{10}$ precursor emissions in appendix A (“Ajo PM$_{10}$ Emission Inventory Technical Support Document”).

$^{59}$ CAA section 172(c)(3).

$^{60}$ 40 CFR 51.15(a)(1)(vii).
The emissions inventories in the Ajo PM$_{10}$ Maintenance Plan include estimates from all relevant source categories, which the Plan divides among point, nonpoint, windblown, and mobile. The ADEQ developed the emissions inventories based on the EPA’s National Emissions Inventory (NEI) and the ADEQ’s internal point source database. The year 2014 was selected as the base year because the 2014 NEIv1 was the most current, accurate, and comprehensive inventory available when the Plan was being developed. The 2016 inventory has been projected from the 2014 inventory. The Plan includes a description of facility types, emitting equipment, permitted emission limits, operating rates, and emission calculation methods.

The Ajo PM$_{10}$ Maintenance Plan includes inventories for total primary PM$_{10}$ for 2011, 2014, 2016, 2021, 2026, and 2031, and for NO$_X$, SO$_2$, VOC, and ammonia as PM$_{10}$ precursors for 2014. Appendix A to the Ajo PM$_{10}$ Maintenance Plan contains additional details on each of the emissions inventories. The ADEQ determined, based on the fact that there are no major sources of NO$_X$, SO$_2$, VOC, or ammonia in the nonattainment area and the relatively low emissions in 2014 from other sources of these precursors in the nonattainment area, that sources of NO$_X$, SO$_2$, VOC, and ammonia are insignificant contributors to secondary particle formation in the Ajo PM$_{10}$ nonattainment area. Therefore, NO$_X$, SO$_2$, VOC, and ammonia emissions are not included in the PM$_{10}$ emissions inventories in the Ajo PM$_{10}$ Maintenance Plan. The Plan notes that there are no major sources of condensable PM in the area, so condensable PM is not

61 Ajo PM$_{10}$ Maintenance plan, section 6.1 and Appendix A.
62 Id., Table 6-1, and Appendix A Tables A-14 through A-18.
63 Id., Appendix A, section A5.1.
reported in the emissions inventory.\textsuperscript{64}

Table 2 presents a summary of actual PM\textsubscript{10} emissions estimates for the 2014 base year, and projected emissions for the 2016 attainment year, for sources in the Ajo PM\textsubscript{10} nonattainment area. Based on the estimates for the year 2016 in Table 2, windblown dust accounts for approximately 95 percent of total PM\textsubscript{10} emissions in the Ajo nonattainment area. A majority of windblown emissions are from open areas, vacant land, and inactive properties previously associated with mining and smelting activities. Dust associated with construction and unpaved roads are the next largest source categories; together, they account for approximately four percent of total PM\textsubscript{10} emissions in the Ajo nonattainment area. As discussed earlier, there are no major PM\textsubscript{10} point sources in the Ajo nonattainment area.

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<td>Mobile – Non-road equipment</td>
<td>1.09</td>
<td>1.09</td>
</tr>
</tbody>
</table>

\textsuperscript{64} Id. Because approximately 95 percent of the Ajo PM\textsubscript{10} emissions inventory is crustal material (which does not include condensable particulate matter), we find that not including the condensable fraction of PM\textsubscript{10} in the PM\textsubscript{10} inventories for the Ajo PM\textsubscript{10} Maintenance Plan is acceptable.


<table>
<thead>
<tr>
<th>Mobile – On-road</th>
<th>0.29</th>
<th>0.30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>1,731.29</td>
<td>1,680.35</td>
</tr>
</tbody>
</table>

Source: Ajo PM$_{10}$ Maintenance Plan, Tables 6-1 and 6-2.

Based on our review of the emissions inventories in the Ajo PM$_{10}$ Maintenance Plan, including the supporting information in Appendix A, we find that the inventory for year 2016 is comprehensive, that the methods and assumptions used by the ADEQ to develop the inventories are reasonable, and that the 2016 inventory reasonably estimates actual PM$_{10}$ emissions in that year. Therefore, we are proposing to approve the 2016 emissions inventory as satisfying the requirements of section 172(c)(3) of the CAA. We also find that the 2016 emissions inventory is appropriate for use as the attainment inventory for the Ajo PM$_{10}$ Maintenance Plan because the year 2016 is within the 2015–2017 period during which the area was attaining the PM$_{10}$ standards.\(^\text{65}\)

2. Maintenance Demonstration

Section 175A(a) of the CAA requires that the maintenance plan “provide for the maintenance of the national primary ambient air quality standard for such air pollutant in the area concerned for at least 10 years after the redesignation.” A state may generally demonstrate maintenance of the NAAQS by either showing that future emissions of a pollutant or its precursors will not exceed the level of the attainment inventory, or by conducting modeling that shows that the future mix of sources and emission rates will not cause a violation of the NAAQS.\(^\text{66}\)

The Ajo PM$_{10}$ Maintenance Plan demonstrates that the Ajo planning area will maintain the PM$_{10}$ NAAQS though 2031 by comparing the 2014 base year and 2016 attainment year inventories to projected emissions for 2021 (assumed first year of the maintenance period), 2026

\(^{65}\)EPA 2018 PM$_{10}$ Design Value Report, “pm10_designvalues_20162018_final_07_19_19.xlsx.”

\(^{66}\)Calcagni memo, 9-11.
Using the 2014 emissions inventory as a baseline and growth factors described in appendix A of the Plan (see section A5), the ADEQ projected emissions inventories for 2021, 2026, and 2031. These projections were based primarily on Arizona’s forecasts of population and on the EPA on-road emissions model (i.e., MOVES2014a). Table 3 summarizes the ADEQ’s 2016 attainment year PM$_{10}$ emissions and projected PM$_{10}$ emission levels for 2021, 2026, and 2031.

Despite expected growth in the area, the maintenance plan’s projected PM$_{10}$ emissions in Ajo through 2031 are within one percent of the 2016 attainment year inventory emissions and are lower than emissions in 2014, a year in which there were no recorded exceedances of the PM$_{10}$ NAAQS. The decrease in PM$_{10}$ emissions between 2014 and 2016 reflects the closure and stabilization of slag processing activities in the Ajo PM$_{10}$ nonattainment area.

Given the slight increase in PM$_{10}$ emissions over the 10-year maintenance period, the Ajo PM$_{10}$ Maintenance Plan uses a simple rollback modeling approach to further support its conclusion that the Ajo planning area will continue to maintain the PM$_{10}$ standards. The Plan’s

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rollback modeling assumes that PM$_{10}$ concentrations scale linearly with PM$_{10}$ emissions by scaling the 2017 design concentration by the percentage increase in the emissions inventory over the maintenance period. The Ajo PM$_{10}$ Maintenance Plan finds that the projected design concentrations for the Ajo planning area over the maintenance period are less than 70 percent of the NAAQS, within a margin of safety of the PM$_{10}$ standards.

Normally in a rollback modeling approach, some portion of the observed concentration is assumed to be “background” and therefore not affected by emissions from local sources. The background can be estimated by concentrations from a relatively pristine nearby area. The ADEQ’s procedure assumes that the entire PM$_{10}$ concentration scales up with local emissions, whereas in reality the background portion would not scale up. The result is a conservatively high projection for future concentrations.

Based on our review, we find that the methods, growth factors, and assumptions used by the ADEQ to project emissions to 2021, 2026, and 2031 levels are reasonable. Given that the projections (summarized in Table 3) show future emissions through 2031 are within one percent of those in 2016 and below those in 2014 (both of which reflect attainment conditions), we find that the projections provide an adequate basis to demonstrate maintenance of the PM$_{10}$ standards within the Ajo planning area through 2031. We further find that the State’s rollback modeling provides additional support that the area will continue to maintain the standards through the end of the 10-year maintenance period.

Section 175A requires that maintenance plans provide for maintenance of the relevant NAAQS in the area for at least 10 years after redesignation. If this redesignation becomes effective in 2020, the projected 2031 inventory demonstrates that the Ajo area will maintain the PM$_{10}$ NAAQS for more than 10 years beyond redesignation. Moreover, the projected emissions
inventories for 2021 and 2026, i.e., milestone years between the attainment inventory and the maintenance plan horizon year, sufficiently demonstrate that the Ajo planning area will maintain the standards throughout the period from redesignation through 2031. Thus, we conclude that the Ajo PM$_{10}$ Maintenance Plan adequately demonstrates maintenance of the standards through 2031.

3. Verification of Continued Attainment

Once an area has been redesignated, the state should continue to operate an appropriate air quality monitoring network, in accordance with 40 CFR part 58, to verify the attainment status of the area.\textsuperscript{68} Data collected by the monitoring network are also needed to implement the contingency provisions of the maintenance plan.

As discussed in section IV.A of this proposal, PM$_{10}$ is currently monitored by the ADEQ within the Ajo PM$_{10}$ nonattainment area. In section 6.3 of the Ajo PM$_{10}$ Maintenance Plan, the ADEQ commits to continue operating a PM$_{10}$ air quality monitoring network in the Ajo planning area and to consult with EPA regarding any potential changes to the network. We find that the Ajo PM$_{10}$ Maintenance Plan contains adequate provisions for continued ambient PM$_{10}$ monitoring to verify continued attainment through the maintenance period.

The EPA also recommends that the state verify continued attainment through methods in addition to the ambient air monitoring program, e.g., through periodic review of the factors used in development of the attainment inventory to show no significant change.\textsuperscript{69} In the Ajo PM$_{10}$ Maintenance Plan, the ADEQ commits to perform a comprehensive review of the factors and assumptions used to develop the attainment and projected inventories to determine whether significant changes have occurred. The ADEQ’s review will be conducted for the 2026 interim

\textsuperscript{68} Calcagni memo, 11.
\textsuperscript{69} Id.
projection year and may include the following elements: permit applications and source reports, population data, agricultural activity information, wildfire/prescribed burning data, and motor vehicle activity data.⁷⁰ In the Plan, the ADEQ also identifies the legal authority under which the ADEQ and the PDEQ collect the information necessary for the ADEQ to conduct the comprehensive review of the factors and assumptions used to develop the attainment and projected emissions inventories. We find that the ADEQ’s commitment to verify continued attainment of the NAAQS through a comprehensive review of the factors and assumptions used to develop the emissions inventories in the Ajo PM$_{10}$ Maintenance Plan is acceptable.


Section 175A(d) of the CAA requires that maintenance plans contain contingency provisions, as the EPA deems necessary, to promptly correct any violations of the NAAQS that occur after redesignation of the area. Such provisions must include a requirement that the state will implement all measures with respect to the control of the air pollutant concerned that were contained in the SIP for the area before redesignation of the area as an attainment area. These contingency provisions are distinguished from contingency measures required for nonattainment areas under CAA section 172(c)(9) in that they are not required to be fully-adopted measures that will take effect without further action by the state for the maintenance plan to be approved. However, the contingency provisions of a maintenance plan are considered to be an enforceable part of the SIP and should ensure that contingency measures are adopted expeditiously once they are triggered by a specified event. The maintenance plan should clearly identify the measures to be adopted, include a schedule and procedure for adoption and implementation of the measures, and contain a specific timeline for action by the state. In addition, the state should identify the

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⁷⁰ Ajo PM$_{10}$ Maintenance Plan, 45-46.
specific indicators or triggers that will be used to determine when the contingency measures need to be implemented.

The ADEQ has adopted a contingency plan to address possible future PM$_{10}$ air quality problems in the Ajo planning area. The contingency provisions are included in section 6.5 of the Plan. Upon a monitored violation of the PM$_{10}$ NAAQS at the ADEQ’s Ajo PM$_{10}$ monitoring site, the ADEQ commits to the following steps:

1. Within 60 days of the NAAQS violation trigger, the ADEQ will begin analyzing the cause(s) of the exceedance. The analysis will include review and validation of ambient air quality and meteorological data, evaluation to determine if the violation qualifies as an exceptional event per EPA’s Exceptional Event Rule (EER),$^{71}$ and assessment of emissions sources contributing to elevated PM$_{10}$ levels.

2. If the exceedance qualifies as an exceptional event, the ADEQ will prepare and submit to the EPA an exceptional event demonstration. If, during their evaluation, the ADEQ determines that new measures are needed to satisfy the requirements of the exceptional events rule, the ADEQ will adopt and implement new measures that are permanent and enforceable and meet the “reasonable” level of control described in the EER.

3. If the exceedance does not qualify as an exceptional event, the ADEQ will determine which source(s) contributed to the exceedance, identify existing control measures for the source(s), verify source(s) compliance with existing measures, and if necessary, develop, adopt and implement new permanent and enforceable measures or strengthen existing measures.

$^{71}$ 81 FR 68216 (October 3, 2016).
Under the contingency plan, if new measures are needed, the adoption process will begin within 12 months, and final adoption will be completed within 18 months, of the triggering event (i.e., a monitored violation of the PM$_{10}$ NAAQS at the Ajo monitoring site). The ADEQ would require compliance with new measures within six months of final adoption.

The Ajo PM$_{10}$ Maintenance Plan includes a list of contingency measures, focusing on the principal source categories contributing to PM$_{10}$ emissions in the area, that may be considered for implementation in the event the contingency plan is triggered. Table 4 presents the ADEQ’s potential PM$_{10}$ contingency measures for the Ajo planning area.

<table>
<thead>
<tr>
<th>Emissions Category</th>
<th>Potential Contingency Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paved Roads</td>
<td>Increase stabilization of unpaved shoulders.</td>
</tr>
<tr>
<td></td>
<td>Increase stabilization of access points from unpaved roads.</td>
</tr>
<tr>
<td>Unpaved Roads</td>
<td>Increase stabilization of unpaved roads and shoulders.</td>
</tr>
<tr>
<td></td>
<td>Post speed limits to decrease vehicle speeds.</td>
</tr>
<tr>
<td></td>
<td>Restrict access to decrease average daily trips and vehicle miles traveled.</td>
</tr>
<tr>
<td>Unpaved Parking</td>
<td>Pave or stabilize unpaved parking areas.</td>
</tr>
<tr>
<td>Disturbed Open Areas and Lots</td>
<td>Stabilize disturbed open areas.</td>
</tr>
<tr>
<td></td>
<td>Restrict access to minimize disturbance.</td>
</tr>
<tr>
<td>Material Handling and Storage</td>
<td>Review/revise dust control measures for material handling and storage.</td>
</tr>
<tr>
<td>Construction</td>
<td>Review/revise dust control measures for construction activities.</td>
</tr>
</tbody>
</table>

Source: Ajo PM$_{10}$ Maintenance Plan, Table 6-5.

Upon review of the contingency plan summarized above, we find that the ADEQ has

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72 Ajo PM$_{10}$ Maintenance Plan, 48.
established a contingency plan for the Ajo planning area that clearly identifies specific contingency measures, contains tracking and triggering mechanisms to determine when contingency measures are needed, contains a description of the process of recommending and implementing contingency measures, and contains specific timelines for action. Thus, we conclude that the contingency provisions of the Ajo PM$_{10}$ Maintenance Plan are adequate to ensure prompt correction of a violation and to satisfy the requirements of the CAA section 175A(d).

5. Transportation Conformity and Motor Vehicle Emissions Budgets

Section 176(c) of the CAA requires federal actions in nonattainment and maintenance areas to conform to the SIP’s goals of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of the standards. Conformity to the SIP’s goals means that such actions will not: (1) cause or contribute to violations of the NAAQS, (2) worsen the severity of an existing violation, or (3) delay timely attainment of any NAAQS or any interim milestone.

Actions involving Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) funding or approval are subject to the EPA’s transportation conformity rule, codified at 40 CFR part 93, subpart A. Under this rule, metropolitan planning organizations in nonattainment and maintenance areas coordinate with state and local air quality and transportation agencies, the EPA, FHWA, and FTA to demonstrate that an area’s regional transportation plans and transportation improvement programs conform to the applicable SIP. This demonstration is typically done by showing that estimated emissions from existing and planned highway and transit systems are less than or equal to the motor vehicle emissions.
budgets ("budgets") contained in all control strategy SIPs and maintenance plans.\textsuperscript{73}

These control strategy SIPs and maintenance plans typically set budgets for criteria pollutants and/or their precursors to address pollution from cars and trucks. Budgets are generally established for specific years and specific pollutants or precursors and must reflect the motor vehicle control measures contained in the RFP plan and the attainment or maintenance demonstration. Under the Transportation Conformity Rule, budgets must be established for the last year of the maintenance plan for direct PM\textsubscript{10} and PM\textsubscript{10} precursors subject to transportation conformity analyses.\textsuperscript{74} For motor vehicle emissions budgets to be approvable, they must meet, at a minimum, the EPA’s adequacy criteria.\textsuperscript{75}

The Transportation Conformity Rule allows areas to forgo establishment of budgets where the EPA finds through the adequacy or approval process that a control strategy SIP or maintenance plan demonstrates that the regional motor vehicle emissions for a particular pollutant or precursor are an insignificant contributor to the air quality problem in the area. The criteria for insignificance determinations can be found in 40 CFR 93.109(f). In order for a pollutant or precursor to be considered insignificant, the SIP would have to demonstrate that it would be unreasonable to expect that such an area would experience enough motor vehicle emissions growth in that pollutant/precursor for a NAAQS violation to occur. Insignificance determinations are based on a number of factors, including (1) the current state of air quality as determined by monitoring data for that NAAQS; (2) the absence of SIP motor vehicle control measures; (3) historical trends and future projections of the growth of motor vehicle emissions; and (4) the percentage of motor vehicle emissions in the context of the total SIP inventory. The

\textsuperscript{73} Control strategy SIPs refer to RFP and attainment demonstration SIPs. 40 CFR 93.101.

\textsuperscript{74} Section 93.102(b)(2)(iii) of the conformity rule identifies VOC and NO\textsubscript{X} as PM\textsubscript{10} precursor pollutants that are presumed insignificant unless the SIP makes a finding that the precursor is significant.

\textsuperscript{75} 40 CFR 93.118(e)(4).
EPA’s rationale for providing for insignificance determinations is described in the July 1, 2004, revisions to the Transportation Conformity Rule. Specifically, the rationale is explained on page 40061 under the subsection entitled “XXIII. B. Areas With Insignificant Motor Vehicle Emissions.”

In chapter 7 of the Ajo PM Maintenance Plan, the ADEQ included a demonstration that on-road emissions of direct PM are insignificant for conformity purposes, and therefore the State did not submit any budgets. The EPA is proposing to approve the ADEQ’s insignificance demonstration for the on-road motor vehicle contribution of PM to overall PM emissions in the maintenance plan.

The information provided by the ADEQ to the EPA as part of the Ajo PM Maintenance Plan addresses each of the factors listed in 40 CFR 93.109(f), and is summarized below. PM concentrations for the area have been decreasing over the past several years. Furthermore, transportation-related emissions in 2031 are projected to account for less than three percent of total direct PM emissions from all sources in the Ajo planning area. Our detailed evaluation and conclusions are as follows:

(1) The Ajo Planning Area is Attaining the PM NAAQS

The Ajo PM Maintenance Plan demonstrates that the area was attaining the PM standards during the 2015–2017 period upon which the Plan is based. Furthermore, as discussed in section IV.A of this proposal, data from the most recent three-year period (2017–2019), as well as preliminary 2020 data, indicate that area continues to attain the PM standards.

(2) Motor Vehicle Control Measures Were Not Adopted for the Purpose of Bringing the Area into Attainment

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76 69 FR 40004.
77 Ajo PM Maintenance Plan, Figure 4-1.
As discussed in more detail in section IV.C of this document, the control measures relied upon in the Ajo PM$_{10}$ Maintenance Plan to bring the area into attainment are primarily associated with fugitive dust control measures applicable to the Ajo mine tailings and slag storage areas. The Ajo portion of the Arizona SIP does not rely on the control of on-road emissions to demonstrate attainment or maintenance of the PM$_{10}$ NAAQS.

(3) The Percentage of Motor Vehicle Emissions in the Context of the Total SIP Inventory is Low

As shown in Table 5, the percentage contribution of motor vehicle emissions to total emissions for PM$_{10}$ is small. In the 2016 attainment year, emissions of PM$_{10}$ from on-road motor vehicles contributed only 1.98 percent of the Ajo total PM$_{10}$ emissions inventory. At the end of the 10-year maintenance period (2031), motor vehicle PM$_{10}$ emissions are projected to contribute just 2.30 percent.

<table>
<thead>
<tr>
<th>Emission Sector</th>
<th>2014</th>
<th>2016</th>
<th>2021</th>
<th>2026</th>
<th>2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-road mobile</td>
<td>0.29</td>
<td>0.30</td>
<td>0.26</td>
<td>0.27</td>
<td>0.28</td>
</tr>
<tr>
<td>Re-entrained dust</td>
<td>32.78</td>
<td>32.97</td>
<td>35.03</td>
<td>36.88</td>
<td>38.63</td>
</tr>
<tr>
<td>Road construction</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total – Mobile</td>
<td>33.07</td>
<td>33.27</td>
<td>35.29</td>
<td>37.15</td>
<td>38.91</td>
</tr>
<tr>
<td>Total – All</td>
<td>1,731.29</td>
<td>1,680.35</td>
<td>1,685.37</td>
<td>1,690.61</td>
<td>1,695.26</td>
</tr>
<tr>
<td>Percent – Mobile</td>
<td>1.91%</td>
<td>1.98%</td>
<td>2.09%</td>
<td>2.20%</td>
<td>2.30%</td>
</tr>
</tbody>
</table>

Source: Ajo PM$_{10}$ Maintenance Plan, Tables 6-3 and 7-1.

(4) Historical Trends and Future Projections Indicate Motor Vehicle PM$_{10}$ Emissions Will Continue to be a Small Fraction of Total Emissions

Finally, historical trends and future projections of the growth of motor vehicle PM$_{10}$ emissions in the Ajo area suggest that motor vehicle-related PM$_{10}$ emissions are not likely to increase and therefore, are not likely to cause or contribute to a future violation of the PM$_{10}$ standards. The Ajo PM$_{10}$ planning area is geographically small and has a relatively low
population with very modest projected population growth through 2031.\textsuperscript{78} According to the US Census Bureau, the population in Ajo peaked at approximately 7,000 in the 1960s, declining to approximately 3,300 in 2010. The State attributes the reduction to waning mining activities and the shutdown of the Ajo copper smelter in 1985. Since that time, the Ajo area has experienced little growth compared to other parts of Pima County. The population is projected to increase 17 percent between 2016 and 2031, to approximately 3,900 inhabitants.

The main traffic corridor through Ajo is State Route 85, which connects the Mexican border area with Interstate 8. While traffic between the U.S. and Mexico passes through Ajo along this corridor, it is less than the traffic along the two major border crossings in the Yuma and Nogales areas.\textsuperscript{79} Traffic data from the ADOT shows that vehicle miles traveled has not increased substantially over the past decade, and emissions from mobile sources are projected to remain approximately constant and less than 2.5 percent of total PM\textsubscript{10} emissions in Ajo through 2031, as shown in Table 5.

In summary, given the small population, historically declining or modest population growth, and historical and projected traffic information, motor vehicle emissions are not expected to increase in the Ajo area to the point where a violation of the PM\textsubscript{10} NAAQS would occur.

As part of our review of the ADEQ’s insignificance demonstration, we announced receipt of the Ajo PM\textsubscript{10} Maintenance Plan and posted an announcement of availability on the EPA

\textsuperscript{78} Ajo PM\textsubscript{10} Maintenance Plan, section 1.6.3.  
\textsuperscript{79} US Department of Transportation, Bureau of Transportation Statistics, 2018 border crossing data, available at https://explore.dot.gov/t/BTS/views/BTSBorderCrossingAnnualData/BorderCrossingTableDashboard?embed=y&showShareOptions=true&display_count=no&showVizHome=no.
Office of Transportation and Air Quality’s transportation conformity website.\textsuperscript{80} We requested public comments by June 24, 2019. We did not receive any comments.

After evaluating the information provided by the ADEQ and weighing the factors for the insignificance determination outlined in 40 CFR 93.109(f), the EPA is proposing to find that the Ajo PM\textsubscript{10} Maintenance Plan adequately demonstrates that the PM\textsubscript{10} contributions from motor vehicle emissions to the PM\textsubscript{10} air quality problem in the Ajo nonattainment area are insignificant.

If the EPA’s insignificance finding is finalized, the Pima Association of Governments would no longer be required to perform regional emissions analyses for PM\textsubscript{10} as part of future PM\textsubscript{10} conformity determinations for the PM\textsubscript{10} NAAQS for the Ajo planning area. The EPA’s insignificance finding should, however, be noted in the transportation conformity documentation that is prepared for this area. Areas with insignificant regional motor vehicle emissions for a pollutant or precursor are still required to make a conformity determination that satisfies other relevant conformity requirements such as financial constraint, timely implementation of transportation control measures, and project level conformity.

V. Proposed Deletion of the Total Suspended Particulate Designation for Ajo

A. General Considerations

In section I.B of this document, we noted that the ADEQ included in its transmittal letter for the Ajo PM\textsubscript{10} Maintenance Plan a request to the EPA to delete the TSP nonattainment designation for the Ajo planning area. Consistent with section 107(d)(4)(B) of the CAA, we have considered the continued necessity for retaining the Ajo TSP area designation, and as discussed below, we have determined that the TSP designation for Ajo is no longer necessary. As a result, we are proposing to delete the designation from the TSP table in 40 CFR 81.303.

\textsuperscript{80} https://www.epa.gov/state-and-local-transportation/adequacy-review-state-implementation-plan-sip-submissions-conformity
To evaluate whether the TSP area designation should be retained or can be deleted, we have relied upon the final rule implementing the PM\textsubscript{10} NAAQS,\textsuperscript{81} a policy memorandum on TSP redesignations,\textsuperscript{82} and our proposed and final rules establishing maximum allowable increases in concentrations (also known as “increments”) for PM\textsubscript{10}.\textsuperscript{83}

Based on the above references, we consider the relevant considerations for evaluating the necessity of retaining the TSP area designations to depend upon the status of a given area with respect to TSP and PM\textsubscript{10}. For areas that are nonattainment for TSP but attainment for PM\textsubscript{10}, we generally find that the TSP designations are no longer necessary and can be deleted when the EPA (1) approves a state’s revised PSD program containing the PM\textsubscript{10} increments, (2) promulgates the PM\textsubscript{10} increments into a state’s SIP where the state chooses not to adopt the increments on its own, or (3) approves a state’s request for delegation of PSD responsibility under 40 CFR 52.21(u).\textsuperscript{84}

For areas that are nonattainment for TSP and nonattainment for PM\textsubscript{10}, an additional consideration is whether deletion of the TSP designation would automatically relax any emission limitations, control measures, or programs approved into the SIP. If such a relaxation would occur automatically with deletion of the TSP area designation, then we will not delete the designation until we are satisfied that the resulting SIP relaxation would not interfere with any applicable requirement concerning attainment, RFP, or maintenance of the NAAQS or any other requirement of the CAA in the affected areas.\textsuperscript{85}

In the case of the Ajo planning area, we believe that the considerations for both types of

\textsuperscript{81} 52 FR 24634 (July 1, 1987).
\textsuperscript{82} Memorandum dated May 20, 1992, from Joseph W. Paisie, Acting Chief, SO\textsubscript{2}/Particulate Matter Programs Branch, EPA Office of Air Quality Planning and Standards, to Chief, Air Branch, Regions I-X, entitled “TSP Redesignation Request.”
\textsuperscript{83} See the proposed rule at 54 FR 41218 (October 5, 1989), and the final rule at 58 FR 31622 (June 3, 1993).
\textsuperscript{84} 58 FR 31622, 31635 (June 3, 1993).
\textsuperscript{85} CAA section 110(l).
areas described above are relevant because although Ajo is nonattainment for PM$_{10}$, we are proposing to redesignate the area to attainment for PM$_{10}$ in this action. Thus, we must take into account both the potential for relaxation that would be inconsistent with continued maintenance of the PM$_{10}$ NAAQS as well as protection of the PM$_{10}$ increments (as applies in areas designated attainment or unclassifiable).

B. Deletion of Total Suspended Particulate Nonattainment Area Designation for Ajo

With respect to protection of the PM$_{10}$ increments, the TSP nonattainment designations are no longer necessary in Ajo because the EPA’s PSD pre-construction permit program promulgated at 40 CFR 52.21 applies to those sources under the PDEQ’s jurisdiction under a delegation agreement with the EPA. We recognize that the ADEQ retains jurisdiction over certain types of sources in Pima County but note that we have approved the ADEQ’s NSR regulations as satisfying the related PSD requirements.

To ensure that deletion of the TSP nonattainment designation for Ajo would not result in any automatic relaxations in SIP emission limitations, control measures, or programs that would interfere with attainment, RFP, or maintenance of the NAAQS (including PM$_{10}$) or any other requirement of the Act, we reviewed the following portions of the Pima County portion of the Arizona SIP:

- Pima County air pollution control regulations: Chapter III (“Universal Control Standards”), particularly, Regulation 31 (“Design or Work Practice Control Standards”) – Rule 315 (“Roads and Streets”), Rule 316 (“Particulate Materials”), and Rule 318 (“Vacant Lots and Open Spaces”); Regulation 32 (“Emissions-Discharge Opacity Limiting Standards”) – Rule 321 (“Standards and

86 40 CFR 52.144.

- Pima County air pollution control regulations: Chapter IV (“Performance Standards for New Major Sources”), particularly, Regulation 41 (“Designation of Attainment/Nonattainment Areas”) – Rule 412 (“Ajo Area”) and Regulation 42 (“Standards for Nonattainment Areas”) – Rule 422 (“TSP Clean-Air Plan”).

We have focused our review on the Pima County portion of the Arizona SIP, rather than on state rules in the SIP, because essentially all the types of stationary and area sources that remain in the Ajo planning area fall under the PDEQ’s rather than the ADEQ’s jurisdiction. Based on our review of the items listed above, we find that none are contingent upon continuation of the TSP nonattainment designation and thus deletion of the TSP designation would not automatically relax any standard.

In summary, because upon redesignation the PSD PM$_{10}$ increments will apply in the Ajo planning area and because deletion of the TSP nonattainment designation for Ajo would not automatically relax any emission limitations or control measures in the Arizona SIP, we find that the TSP nonattainment designation is no longer necessary and can be deleted. Based on the above discussion and evaluation, we are therefore proposing to delete the TSP nonattainment area designation for Ajo from the “Arizona-TSP” table in 40 CFR 81.303.

**VI. Proposed Action and Request for Public Comment**

Under CAA section 110(k)(3), and for the reasons set forth above, the EPA is proposing to approve the Ajo PM$_{10}$ Maintenance Plan submitted by the ADEQ on May 10, 2019, as a revision to the Arizona SIP. In so doing, we are proposing to approve the attainment inventory as
meeting the requirements of CAA section 172(c)(3), the maintenance demonstration and contingency provisions as meeting all of the applicable requirements for maintenance plans and related contingency provisions in CAA section 175A, and the demonstration that the PM$_{10}$ contributions from motor vehicle emissions to the PM$_{10}$ problem in the Ajo planning area are insignificant.

In addition, under CAA section 107(d)(3)(D), we are proposing to approve ADEQ’s request to redesignate the Ajo planning area from nonattainment to attainment for the PM$_{10}$ NAAQS. We are doing so based on our conclusion that the area has met, or will meet as part of this action, all the criteria for redesignation under CAA section 107(d)(3)(E). More specifically, we propose to find the following: that the Ajo planning area has attained the PM$_{10}$ NAAQS based on the most recent three-year period (2017–2019) of quality-assured, certified, and complete PM$_{10}$ data; that relevant portions of the Arizona SIP are, or will be as part of this action, fully approved; that the improvement in air quality is due to permanent and enforceable reductions in emissions; that Arizona has met all requirements applicable to the Ajo planning area with respect to section 110 and part D of the CAA if we finalize our approval of the attainment inventory in the Ajo PM$_{10}$ Maintenance Plan, as proposed herein; and that the Ajo planning area will have a fully approved maintenance plan meeting the requirements of CAA section 175A if we finalize our approval of it, also as proposed herein.

Lastly, the EPA is proposing to delete the area designation for Ajo for the revoked NAAQS for TSP because the designation is no longer necessary.

We are soliciting comments on these proposed actions. We will accept comments from the public for 30 days following publication of this proposal in the *Federal Register* and will consider any relevant comments before taking final action.
VII. Statutory and Executive Order Reviews

Under the CAA, redesignation of an area to attainment and the accompanying approval of a maintenance plan under section 107(d)(3)(E) are actions that affect the status of a geographic area and do not impose any additional regulatory requirements on sources beyond those imposed by state law. Redesignation to attainment does not in and of itself create any new requirements, but rather, results in the applicability of requirements contained in the CAA for areas that have been redesignated to attainment. Moreover, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA’s role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, these proposed actions merely propose to approve a state plan and redesignation request as meeting federal requirements and do not impose additional requirements beyond those imposed by state law. For these reasons, the proposed actions:

- Are not a “significant regulatory action” subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Are not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866;
- Do not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- Are certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- Do not contain any unfunded mandate or significantly or uniquely affect small
governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);

- Do not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Are not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Are not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Are not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Do not provide the EPA with the discretionary authority to address disproportionate human health or environmental effects with practicable, appropriate, and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, there are no areas of Indian country within the Ajo planning area, and the state plan for which the EPA is proposing approval does not apply on any Indian reservation land or in any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, this proposed action does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because redesignation is an action that affects the status of a geographical area and does not impose any new regulatory requirements on tribes, impact any existing sources of air pollution on tribal lands, nor impair the maintenance of NAAQS in tribal lands.
List of Subjects

40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide, Volatile organic compounds.

40 CFR Part 81

Environmental protection, Air pollution control, National parks, Wilderness areas.

Authority: 42 U.S.C. 7401 et seq.

Dated: May 27, 2020. John Busterud, Regional Administrator, Region IX.

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