

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 6 1201 ELM STREET, SUITE 500 DALLAS, TEXAS 75270

September 30, 2021

Ms. Erika Droke Division of Environmental Quality Arkansas Department of Energy and Environment 5301 Northshore Drive North Little Rock, Arkansas 72118

RE: EPA Comments on Proposed Revisions to the Rules of the Arkansas Plan of Implementation for Air Pollution Control – Rule No. 19 (Docket No. 21-001-R)

Dear Ms. Droke:

Thank you for the opportunity to review and provide comments on the substantive revisions to the Arkansas Plan of Implementation for Air Pollution Control, contained in Rule No. 19. We understand that the Arkansas Department of Energy and Environment, Division of Environmental Quality (DEQ) has proposed these revisions to update Rule No. 19 consistent with recent revisions to federal rules, remove obsolete provisions, and update certain outdated references to federal law. The revisions also include the adoption of standards of performance for municipal solid waste landfills as required by federal law.

The EPA is generally supportive of these proposed revisions and the goal of updating the regulations to remove any obsolete or duplicative requirements. However, we are concerned that not all the proposed VOC rule repeals for Pulaski County have been conclusively shown to meet the requirements of Clean Air Act (CAA) section 110(1) that the SIP revision will not contribute to nonattainment or interfere with maintenance of any standard. We have discussed in the attachment areas where further information or analysis may be necessary.

We look forward to working with you as you move forward. Please note that our comments today do not constitute final determinations concerning the approvability of the revisions to the Arkansas Plan of Implementation for Air Pollution Control or the SIP. If you have any questions about the EPA's review of your proposed rulemaking, please feel free to contact me at (214) 665-7242 or Mr. Jeff Riley of my staff at (214) 665-8542.

Sincerely,

Guy Donaldson Branch Chief State Planning & Implementation Branch

Enclosure

cc: Becky Keogh, Arkansas Department of Energy and Environment Will Montgomery, Arkansas Department of Energy and Environment Enclosure - EPA Comments on Arkansas' "Proposed Changes to Rule 19"

(APC&E Commission Docket #21-001-R)

Rule 19, Chapter 2: Definitions

1. Under the definition of "Volatile Organic Compounds", DEQ is proposing to exempt compound cis1,1,1,4,4,4-hexafluorobut-2-ene also known as HFO-1336mzz-Z (CAS number 692-49-9) from the regulatory definition of volatile organic compounds (VOCs). This revision is consistent with EPA's action published at 83 FR 61127.¹ We also support DEQ listing compounds trans-1-chloro-3,3,3-triflouroprop-1-ene, and trans-1,3,3,3-tetrafluoropropene with their IUPAC preferred names as (1E)-1-chloro-3,3,3-trifluoroprop-1-ene and (1E)-1,3,3,3-tetrafluoroprop-1-ene, respectively.

Rule 19, Chapter 8: 111(d) Designated Facilities

- 2. EPA notes the proposed changes to Chapter 8: 111(d) Designated Facilities, which contains Arkansas's CAA section 111(d) state plans for sulfuric acid plants (for the control of sulfuric acid mist) and kraft pulp mills (for the control of total reduced sulfur emissions).
 - a. From the proposed changes, it appears that Arkansas no longer has any sulfuric acid plants subject to 40 CFR part 60, subpart Cd (Emissions Guidelines and Compliance Times for Sulfuric Acid Production Units), within its jurisdiction and has removed the contents of that section related to sulfuric acid plants from this chapter. If it is correct that there are no longer any designated facilities subject to 40 CFR part 60, subpart Cd, in Arkansas's jurisdiction, EPA recommends that a negative declaration letter and a request to withdraw the previously approved Arkansas 111(d) plan for sulfuric acid plants (previously approved by EPA on March 10, 1998) be submitted to the EPA.
 - b. As revisions to Chapter 8 also includes changes to the state regulations incorporating Emission Guideline requirements for kraft pulp mills and is part of the EPA-approved Arkansas 111(d) plan for kraft pulp mills, EPA recommends a plan revision be submitted to EPA for changes to this portion of the chapter.

Rule 19, Chapter 10: Rules for the Control of Volatile Organic Compounds in Pulaski County

3. DEQ is proposing to delete and remove Section 19.1004(H) – "Malfunctions, Breakdowns, Upsets" in its entirety from the EPA-approved Arkansas SIP. This section was identified as substantially inadequate in the national 2015 Startup, Shutdown, and Malfunction (SSM) SIP Call². We support this effort and strongly encourage deletion and removal of the Section 19.1004(H) from the Arkansas SIP. On a separate, but related matter, although DEQ is not proposing a revision to Section 19.602 titled "Emergency Conditions of Rule 19" currently, we remind you that Section 19.602 remains subject to the national 2015 SSM SIP Call.

¹ EPA Docket ID No. EPA-HQ-OAR-2017-0175 available at www.regulations.gov

² (80 FR 33967), June 12, 2015.

Rule 19, Chapter 15: Best Available Retrofit Technology

- 4. EPA has reviewed Arkansas DEQ's proposed amendments to Rule 19 Chapter 15, which addresses regional haze and best available retrofit technology (BART) requirements for certain sources in Arkansas. We remind DEQ that Rule 19 Chapter 15 was submitted to EPA on September 23, 2008, as part of the Arkansas Regional Haze SIP. On August 3, 2010, DEQ submitted a SIP revision that further amended Rule 19 Chapter 15. When we took final action on the Arkansas Regional Haze SIP and the August 3, 2010 amendments to Rule 19 Chapter 15 in our final rulemaking published on March 12, 2012, we approved into the SIP portions of Rule 19 Chapter 15 (see 77 FR at 14675). The portions of Rule 19 Chapter 15 that are currently SIP approved are:
 - 19.1501 "Purpose"
 - 19.1502 "Definitions"
 - 19.1503 "BART Eligible Sources"
 - 19.1504(A) "Facilities Subject to BART"
 - 19.1504(B) "Facilities Subject to BART" [partially approved]
 - 19.1504(C) "Facilities Subject to BART"
 - 19.1505(A)(3) [addressing PM BART at SWEPCO Flint Creek Power Plant]
 - 19.1505(F)(3) [addressing PM BART for bituminous coal burning at White Bluff Unit 1]
 - 19.1505(G)(3) [addressing PM BART for sub-bituminous coal burning at White Bluff Unit 1]
 - 19.1505(I)(3) [addressing PM BART for bituminous coal burning at White Bluff Unit 2]
 - 19.1505(J)(3) [addressing PM BART for sub-bituminous coal burning at White Bluff Unit 2]
 - 19.1505(M)(2) [addressing PM BART for natural gas burning at Lake Catherine Unit 4]
 - 19.1506 "Compliance Provisions"
 - 19.1507 "Permit Reopening"

We remind DEQ that amendments to these SIP approved portions of Chapter 15 must be made via a SIP revision that includes a CAA section 110(1) analysis.

We agree with the proposed removal of the sections of Chapter 15 that were disapproved by EPA in the March 12, 2012 final rulemaking and are thus not SIP approved. However, we disagree with the proposed removal of 19.1503 and 19.1504(A), which are SIP approved and list the sources in Arkansas determined to be BART eligible and subject to BART. Arkansas' determination of BART eligible and subject to BART sources was approved into the SIP in the March 12, 2012 final rulemaking and it would therefore be inappropriate to remove these sections from Chapter 15. Particularly, sources that were determined to be subject to BART in the March 12, 2012 final rulemaking continue to be

subject to BART. DEQ should also explain why it is necessary to remove 19.1507, which relates to the reopening of Part 70 permits. Finally, we note that proposed new 19.1505(E) appears to be identical to 19.1505(H) and therefore 19.1505(H) may have been added in error.

Rule 19, Chapter 17: 111(d) Requirements for Landfills

5. EPA supports the proposed changes to Chapter 17: 111(d) Requirements for Landfills, which contains Arkansas's state regulations incorporating Emission Guideline requirements at 40 CFR part 60, subpart Cf (Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills). EPA has no additional comments on changes to this chapter nor the accompanying Appendix A: Technical Support Document - Standards of Performance for Existing Municipal Solid Waste Landfills.

<u>Technical Support Document / Changes to the Rules of the State Implementation Plan</u> <u>Appendix A: CAA 110(l) Demo for Repeal of VOC Regulations of Pulaski County</u>

6. CAA section 110(1) prohibits EPA from approving any SIP revision if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress (RFP), or any other applicable requirement of the CAA. EPA has generally taken the position that it can approve SIP revisions that either 1) don't cause an increase in emissions, 2) include offsetting emission decreases if there are emissions increases or are 3) supported with modeling of the increase in emissions to show that it will not interfere with attainment. Because SIP revisions must rely on enforceable limits, if limits are removed, we must assume the source is uncontrolled for the purposes of 110(1).

As explained in detail below, the SIP revision does not show that there would not be an increase in emissions as outlined in the first approach. With regard to the second approach, it is worth noting that while the Rule 19 provisions were adopted for attainment of previous versions of the ozone standard, EPA must consider whether the repeal will interfere with attainment of the standard which is in effect today. The SIP revision in and of itself does not provide any substitute state rules. The SIP revision does discuss numerous Federal rules that have been implemented over the years. But it is likely that these Federal rules are part of the reason that Pulaski County has continued to make progress in ozone reduction and now has air quality meeting the more recent standards and as such any of the reductions from these rules likely cannot be used to offset a current increase in emissions due to the repeal of the rules.

That leaves the third approach of modeling the projected increase in VOC emissions to show that the increase will not interfere with attainment. As further discussed below, it is unclear how large the potential increase in VOC's is from the proposed rule changes. As such it is not certain that the EPA sensitivity modeling cited in the Technical Support Document (TSD) will be adequate to support the 110(1) demonstration and it may be necessary to do more refined modeling.

EPA's review of this CAA section 110(1) anti-backsliding demonstration to support the proposed repeal of the VOC regulations of Pulaski County has raised concerns that the demonstration has not conclusively determined the net effect on VOC emissions due to removal of these

regulations. Table 1 of DEQ's TSD ("Relative Contribution to Total Pulaski County VOC inventory of Rule 19.1005 Regulated Processes by SCC Code") lists the regulated processes by source classification code (SCC) that would be impacted by removal of the Pulaski County regulations. Section IV.A ("Pulaski County Volatile Organic Compound Emission Inventory") explains on pg. A-4 that the sum of emissions from the impacted SCC codes was 1,309 tons in 2017, approximately 5% of the 2017 Pulaski County VOC emission inventory (EI).

We have clarified with DEQ technical staff that the 1,309 tons represents approximately five percent of the total combined (anthropogenic + biogenic) 2017 VOC emissions for Pulaski County. We estimate that the 1,309 tons would represent approximately 11% of the anthropogenic VOCs in Pulaski County, and this 11% would be the controlled level of VOC emissions prior to repeal of these regulations. As discussed above, after the repeal of the Rule 19 provisions the emissions of no longer regulated sources must be assumed to be uncontrolled. The State should estimate the potential increase in emissions. The 110(1) demonstration should indicate how this new percentage matches up with the 50% VOC reduction value contained in EPA's Office of Air Quality Planning and Standards ozone sensitivity modeling results released as part of the Ozone Advance program guidance. This modeling is cited in Section III of DEQ's TSD (pg. A-3). Once the emission increases have been identified we offer to discuss whether the cited modeling is appropriate or if other modeling may be needed.

The TSD does not estimate the total increase in VOC emissions after removal of the Chapter 10 requirements, such as an estimate of the 2017 EI after repeal. The demonstration argues that most of the impacted sources, but not all are covered by federal rules netting similar reductions (not completely for some categories such as floating roof tanks and cutback asphalt). Because not all impacted sources are covered, we recommend identifying and listing all of the individual sources in the Pulaski County area covered by the SIP demonstration, detailing the existing VOC emissions limits on these sources required by Chapter 10, and identify each federal standard that currently applies to these individual sources, explaining how the proposed repeal of the Pulaski County regulations will result in either greater, lesser or equivalent reductions of VOC emissions in the area.

It is important to make clear how the applicability criteria for each of the federal standards apply. For example, for each of the New Source Performance Standards (NSPS) you list in your analysis, detail each Pulaski County source where the NSPS applies and verify that the sources do not predate the NSPS or are not in any way exempt from the NSPS requirements and that the VOC emissions will not increase due to the proposed Rule 19 changes.

For the National Emission Standards for Hazardous Air Pollutants (NESHAP), verify the control requirements for the individual hazardous air pollutants apply to all the VOCs emitting from the source as well as the listed hazardous air pollutants for the NESHAPs applicable at the source.

Below are specific examples of how certain source categories could have sources that would have significant emissions if uncontrolled:

- <u>Bulk Gasoline Plants</u>: The SIP explains for bulk gasoline plants with a daily throughput between 23,000 gallons and 250,000 gallons, the requirements of Rule 19.1005(A)(3) may be more stringent. With this exception, NESHAP Subpart BBBBBB is just as stringent as Rule 19.1005(A)(2) and (3) for subject facilities. The SIP should explain how many facilities fall into this range and what the uncontrolled emissions from these facilities would be.
- <u>Storage Tanks</u>: The draft SIP explains how the NSPS regulation are as stringent or more stringent than Rule 19 requirements. EPA agrees that this is likely the case for storage tanks subject to NSPS. Rule 19 requirements, however, potentially apply to storage tanks which construction predates the applicability of the NSPS. The SIP should clarify whether there are any of these older storage tanks in Pulaski County and estimate the uncontrolled emissions from any such tanks.
- <u>Cutback Asphalt</u>: EPA understands that the Arkansas rules prohibit the use of cutback asphalt to when temperatures are above 59 degrees Fahrenheit. This approach is similar to the approach in other states in Region 6 with current and past ozone nonattainment areas where the use of cutback asphalt is prohibited during the ozone season. As noted in the draft SIP revision, these rules are based on EPA's control technique guideline which was issued in 1977. Restrictions based on the CTG have been successfully implemented in nonattainment areas and former nonattainment areas since that time using alternative paving methods. The SIP notes that emissions from this category are only a small amount which is not surprising given the current restrictions. The SIP, however, should address any potential increases in use of cutback asphalt are lifted.
- <u>The Coating Rule</u>: The SIP explains in detail that the HAP controls achieved by EPA's NESHAPS are more stringent for affected sources. The draft SIP acknowledges that the NESHAPS do not apply to non-HAP VOCs. As a result, the repeal of the Rule 19 coating requirements could leave non-HAP sources uncontrolled. In addition, the repeal of the Rule 19 requirements could provide additional incentive for sources to reformulate coatings to use non-HAP ingredients further increasing VOC emissions. Again, the SIP should estimate the uncontrolled emissions from sources that would no longer be subject to the Rule 19 requirements and not covered by the NESHAPS.

EPA believes it is important to verify that the analyses comprising the CAA section 110(l) antibacksliding demonstration are complete and result in a thorough accounting of all increases of VOCs that can be expected to occur due to the proposed changes to Rule 19.