



ARKANSAS STATE 111(d) PLANS

Standards of Performance for Existing Municipal Solid Waste Landfills, Negative Declaration for Sulfuric Acid Plants, and Revisions for Kraft Pulp Mills

Division of Environmental Quality

Office of Air Quality

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I. Introduction

Arkansas Department of Energy and Environment's Division of Environmental Quality (DEQ) is submitting this state plan to implement the United States Environmental Protection Agency (EPA) revised emission guidelines (EG) for municipal solid waste (MSW) landfills. This plan includes standards of performance; monitoring, recordkeeping, and reporting requirements; and compliance schedules for all MSW landfills in Arkansas that meet the applicability conditions in 40 CFR § 60.31f. These elements were adopted by the Arkansas Pollution Control and Ecology Commission (APC&EC) into Rule 19, Chapter 17, on January 28, 2022. The amendments to Rule 19 will be implemented through incorporation of requirements applicable to each subject MSW landfill into permit conditions in a new or revised permit.

DEQ developed a technical support document "Standards of Performance for Existing Municipal Solid Waste Landfills" ("DEQ TSD") to demonstrate how Chapter 17 of Rule 19 meets all applicable requirements under the Clean Air Act (CAA) and Arkansas law. The DEQ TSD is included as **Appendix A** of this document.

In addition, this plan amends Arkansas state plans for sulfuric acid plants and kraft pulp mills based on revisions to Chapter 8 of Rule 19. These revisions serve to update facility information and amend compliance testing requirements for kraft pulp mills so that the state plan provisions are no more stringent than federal requirements for new sources. The revisions also remove requirements that are no longer applicable to El Dorado Chemical Company, which reconstructed its sulfuric acid plant in 2012 and became subject to a more stringent new source performance standard.

II. State Plan for Municipal Solid Waste Landfills

A. Required State Plan Elements Addressed in this Proposal

State plans must contain specific information and legal mechanisms necessary to implement the EG. Section III. of the DEQ TSD (Appendix A) identifies where each requirement of the emission guidelines for MSW landfills (40 CFR Part 60, Subpart Cf) and additional general requirements for 111(d) state plans contained at (40 CFR Part 60 Subpart Ba) are addressed in the revisions to Rule 19, Chapter 17. Additionally, Section III. of the DEQ TSD outlines EPA-approved state implementation plan provisions, which further support the implementation of this state plan (as required under 40 CFR § 60.25(b)(2) and 40 CFR § 60.25(c)), and it identifies existing state law that grants necessary authority to DEQ to administer and enforce the proposed plan.

B. Identification of Designated Facilities

DEQ identified subject facilities through review of DEQ Title V and solid waste permits, inspection reports, and correspondence between DEQ and subject facilities, as well as review of

the EPA facility inventory that was developed to aid in development of the revised EG. See Section III.A. of the DEQ TSD for a discussion of designated facilities subject to this plan. Please see Table 3 of the DEQ TSD for a list of MSW landfills in Arkansas that are subject to the plan.

C. Standards of Performance

Section III.B. of the DEQ TSD outlines how this plan addresses the standards of performance for designated facilities:

- Section III.B.1. discusses how this plan incorporates methods and procedures for calculating emission rates and conducting surface emission monitoring demonstrations codified at 40 CFR § 60.35f;
- Section III.B.2. discusses how this plan incorporates gas collection and control systems (GCCS) requirements codified at 40 CFR § 60.33f;
- Section III.B.3. discusses how this plan incorporates removal criteria codified at 40 CFR § 60.33f(f);
- Section III.B.4. discusses how this plan incorporates monitoring, recordkeeping, reporting, and compliance requirements codified at 40 CFR § 60.36f, 40 CFR § 60.37f, 40 CFR § 60.38f, and 40 CFR § 60.39f.

D. Compliance Schedules and/or Increments of Progress

Compliance schedule requirements under 40 CFR § 60.32f and the increments of progress included in this plan are discussed in Section III.C. of the DEQ TSD.

E. Demonstration of Plan Adequacy

1. Emissions Performance

Section IV.A. of the DEQ TSD discusses EPA's MSW landfill emissions inventory and provides ground-truthing for the model in relation to subject facilities in Arkansas. Table 5 of the DEQ TSD lists modeled 2019 NMOC generated and collected and potential emission reductions achievable under this plan.

2. Standards are Quantifiable, Non-duplicative, Permanent, Verifiable, and Enforceable

State plans developed in accordance CAA Section 111(d) must demonstrate that the standards implemented are quantifiable, non-duplicative, permanent, verifiable, and enforceable. DEQ discusses these elements in Section IV.B. of the DEQ TSD.

3. Consideration of Factors in Exercise of Powers

APC&EC and DEQ must consider the factors listed in Ark. Code Ann. § 8-4-312, when exercising their powers and responsibilities; Table 6 of the DEQ TSD provides DEQ's

assessment of the statutory factors as applied to the incorporation of applicable elements of 40 CFR Part 60, Subpart Cf into Rule 19 and this plan.

F. Recordkeeping and Reporting Requirements

Recordkeeping and reporting requirements for subject facilities and DEQ under this plan are discussed in Section V. of the DEQ TSD.

III. Revisions to 111(d) plan for Existing Sulfuric Acid Plants

In 1982, EPA approved the Arkansas 111(d) plan for existing sulfuric acid plants. This state plan included emissions limitations and compliance testing requirements for Olin Corporation and the Monsanto Company. In 1998, amendments to the state plan were approved to remove Olin Corporation, which had closed, and reflect a name change for Monsanto Company, which is now El Dorado Chemical Company. In 2012, a reactor at El Dorado Chemical Company exploded causing significant damage to process equipment at the sulfuric acid plant. The sulfuric acid plant was reconstructed in response to this event.

As a result of reconstruction, the sulfuric acid plant at El Dorado Chemical Company became subject to new source performance standard 40 CFR § 60, Subpart H.¹ Therefore, El Dorado Chemical Company is no longer subject to the standard for existing sulfuric acid plants included in the plan approved in 1982. Because there are no longer any subject facilities in Arkansas, APC&EC repealed the implementing provisions contained in Rule 19.803.

Therefore, DEQ requests that EPA withdraw its state plan for sulfuric acid plants and accept this negative declaration. There are no longer any existing sulfuric acid plants in the State of Arkansas subject to 40 CFR § 60, Subpart B.

IV. Revisions to 111(d) plan for Existing Kraft Pulp Mills

In 1984, EPA approved the Arkansas 111(d) plan for existing kraft pulp mills. In 1998, EPA approved a revision to the plan based on name changes and changes to emission limits. Resulting amendments to Rule 19 include additional name changes and closure of the IP Camden Facility (permit voided March 1, 2001). In addition, the amendments realign the frequency of total reduced sulfur compliance testing from annually to every five years, consistent with requirements for new kraft pulp mills under 40 CFR 60 Subpart BBa. The amendments adopted into Rule 19 also include additional nonsubstantive stylistic and formatting changes.

Therefore, DEQ is amending the state 111(d) plan for existing kraft pulp mills based on recent amendments to Rule 19.

¹ See Permit History in Permit #: 0573-AOP-R23 available through the DEQ Facility and Permit Summary Permit Data System: <https://www.adeg.state.ar.us/home/pdssql/pds.aspx#Display>

V. Legal Authority to Implement the Plan

The State's legal authority to adopt and implement state plans can be found in Ark. Code Ann. § 8-1-203(b)(1), § 8-4-311(a), and § 8-4-317. The revisions to Rule 19 included in this plan became effective on May 6, 2022.