



**BEFORE THE ARKANSAS POLLUTION CONTROL
AND ECOLOGY COMMISSION**

In the Matter of Amendments to Regulation No. 18, Arkansas Air Pollution Control Code)))	DOCKET NO. 14-009-R
In the Matter of Amendments to Regulation No. 19, Regulations of Arkansas Plan of Implementation for Pollution Control)))	DOCKET NO. 14-010-R
In the Matter of Amendments to Regulation No. 26, Regulations of Arkansas Operating Air Permit Program)))	DOCKET NO. 14-011-R

**COMMENTS OF THE ARKANSAS ENVIRONMENTAL FEDERATION ON
PROPOSED REVISIONS TO ARKANSAS POLLUTION CONTROL AND
ECOLOGY COMMISSION REGULATION NOS. 18, 19 AND 26**

The Arkansas Environmental Federation (AEF) appreciates consideration by the Arkansas Pollution Control & Ecology Commission (APC&EC) and Arkansas Department of Environmental Quality (ADEQ) of the following public comments offered on the proposed revisions to APC&EC Regulation Nos. 18, 19 and 26. The AEF is a non-profit association with over 200 members, primarily Arkansas businesses and industries that manufacture products, provide services, and employ skilled workers in Arkansas while also insuring that their operations comply with all federal and State environmental, safety and health regulations. As such, the AEF and its members have an ongoing interest in the adoption and implementation of the NAAQS in accordance with the requirements of State and federal law and regulations and sound scientific and engineering practices.

The AEF generally supports the incorporation of the newer National Ambient Air Quality Standards (NAAQS) into the State air pollution control regulations. Updating the State's regulations to refer to these national standards is required in the normal course of federal-state regulatory affairs. However, the newer NAAQS are very stringent by historical standards. Due to the complexity of sources that contribute to ambient concentrations of the pollutants in question, it is critical that the State develop a comprehensive plan for

implementation of the standards in question, consistent with the requirements of Arkansas statute and the federal Clean Air Act.

I. Comments on Proposed Revisions to APC&EC Regulation No. 18

A. Regulation No. 18 is Arkansas' "state-only" air pollution regulation and its provisions are not federally enforceable as part of an EPA-approved SIP. As such, no changes are required to comply with federal requirements. Although the proposed revisions to Regulation No. 18 may be desirable for the sake of consistency, they are not required for Arkansas to retain delegation of the federal air program. The AEF supports not changing Regulation No. 18 at this time since it is not necessary to do so in order for ADEQ to retain delegation of the federal air program. In the event ADEQ and/or the Commission decide that Regulation No. 18 should be revised, for the purpose of consistency and uniformity between Regulation Nos. 18, 19 and 26, Regulation No. 18 should be revised as further set out below:

1. *De minimis* Changes Should Consider Corresponding Emissions Reductions

In the event Regulation No. 18 is revised, in order to maintain uniformity and consistency between Regulation Nos. 18 and 19, the proposed revision to Regulation 18.307(C)(2) should correspond to the proposed revision to Regulation 19.407(C)(2). Specifically, Regulation 18.307(C)(2) should be revised as follows:

The environmental impact of a proposed change generally will be considered trivial if the ~~potential emissions increase from the change alone, without taking into account any corresponding emission reductions,~~ will:

Additionally, should the proposed revisions to Regulation No. 18 be adopted, the Commission should also incorporate a definition of "emissions increase," consistent with the proposed definitions found in Regulation Nos. 19 and 26, and as further discussed herein (*see* Comment III.A., below).

2. Definitions of PM_{2.5} and PM₁₀ Should be Amended

The proposed definition of "PM_{2.5}" in Regulation 18, Chapter 2, defines PM_{2.5} by how it is measured (*e.g.* "by a reference method based on Appendix L of 40 C.F.R. Part 50, as of the effective date of the federal rule published by EPA in the Federal Register on October 17, 2006 (71 FR 61226), or by an approved regional method designated in accordance with

concentrations in the ambient air, not in emissions. There is no separate definition of “PM_{2.5} Emissions” in Regulation 18 as is proposed for Regulation 19, but there are several instances in Regulation 18 where PM_{2.5} is intended to refer to emissions (*e.g.* Regulation 18.307(C)(2)). The proposed definition of PM_{2.5} (and PM₁₀) should be amended to mirror those definitions proposed for Regulation No. 19.

B. In the event ADEQ and/or the Commission decide that Regulation No. 18 should be revised as proposed and does not adopt the changes set out above, ADEQ’s proposed revisions are not exempt from the Small Business Administration Act and will require an environmental and economic benefit analysis as further explained below:

1. Proposed Revisions Require an Environmental and Economic Benefit Analysis

Arkansas statute requires that, when changes to any rule or regulation are proposed that are more stringent than federal requirements, the Commission must consider the economic impacts in the environmental benefits of such rules or regulations. Ark. Code Ann. § 8-4-311(b)(1)(B). Because the proposed revisions to Regulation No. 18 are not required to comply with federal requirements, the Commission is mandated to undertake an appropriate environmental and economic benefit analysis.

2. Proposed Revisions Not Exempt from Small Business Administration Act Requirements

Item number 3 of the Questionnaire for filing proposed rules and regulations with the Arkansas Legislative Council and Joint Interim Committee states that the proposed amendments to Regulation No. 18 are “required to comply with a federal statute, rule, or regulation”, and therefore are exempt from the requirements of the Small Business Administration Act, Ark. Code Ann. § 25-15-301 et seq. However, as discussed above, the proposed revisions to Regulation No. 18 are not required by federal law and do not codify existing federal law. As such, in the event Regulation No. 18 is revised, Arkansas statute requires completion of a proper economic impact statement with respect to the effects that the proposed revisions to Regulation No. 18 will have on small businesses.

II. Comments on Proposed Revisions to APC&EC Regulation No. 19

- A. Regulation 19.305(A) Should Directly Adopt *De minimis* Thresholds

ADEQ proposes to add a provision at Regulation 19.305(A) stating that, for modifications to existing sources which involve emissions increases of less than the pollutant-

specific amounts established in 19.407(C), the resulting environmental impact is trivial and no further air quality analysis is required for each such pollutant. To eliminate potential confusion and in light of the status of EPA's approval of Regulation 19.407 as part of the Arkansas State Implementation Plan, the Commission should codify the *de minimis* permitting thresholds currently found in Regulation 19.407(C)(2) (including the proposed thresholds for PM_{2.5} emissions) directly into the provisions of Regulation 19.305(A). Incorporating the *de minimis* thresholds directly into the proposed provisions of Regulation 19.305(A) will reduce uncertainty among the regulated community, which is particularly important given the uncertainty surrounding the SIP-approval status of Regulation 19.407(C). In the alternative, should the Commission elect not to directly codify the *de minimis* permitting thresholds directly into the provisions of Regulation 19.305(A), the Commission should revise proposed Regulation 19.305(A) to specifically reference the "pollutant specific amounts established in 19.407(C)(2)."

B. "Emission increase" Should Exclude Emission Changes Subject to PSD

ADEQ proposes to add a definition for "Emission increase" to Regulation 19, Chapter 2. However, the proposed definition for "Emission increase" should clarify that the definition in no way supersedes the Prevention of Significant Deterioration (PSD) applicability determination calculation requirements found in Regulation 19, Chapter 9. To eliminate potential confusion among the regulated community and provide clarity to regulators and third parties, the proposed definition of "Emission increase" should be revised to state that emissions increases are calculated as described for those emission changes not subject to Chapter 9 of Regulation 19, consistent with the corresponding definition proposed in Regulation 26, Chapter 2 (*see* Comment III.A., below).

III. Comments on Proposed Revisions to APC&EC Regulation No. 26

A. "Emission increase" Exclusion Should Reference Chapter 9 of Regulation 19

ADEQ proposes to add a definition for "Emission increase" to Regulation 26, Chapter 2 which describes how changes in emissions at a unit are to be calculated for purposes of modifications to air operating permits, *i.e.*, based on the difference between the sum of the proposed permitted rates for all emission units and the sum of the previously permitted emission rates for all emission units. Instead of the proposed reference to 40 C.F.R. § 52.21, the definition of "Emission increase" should reference and clarify that the definition in no way supersedes the Prevention of Significant Deterioration (PSD) applicability determination calculation requirements found in Regulation 19, Chapter 9. The proposed reference to 40 C.F.R. § 52.21 lacks a date certain and may represent an impermissible delegation of the Commission's authority. To eliminate potential confusion among the regulated community

and provide clarity to regulators and third parties, the proposed definition of “Emission increase” should be revised to state that emissions increases are calculated as described for those emission changes not subject to Chapter 9 of Regulation 19, consistent with the revisions suggested for the proposed definition of “emissions increase” found in Regulation 19, Chapter 2. Further, the Department should provide explanation or guidance to the regulated community regarding how this definition is to be applied, similar to the example provided herewith.

The AEF sincerely appreciates the Commission’s thoughtful consideration of the above comments and suggestions.

Respectfully submitted,

Arkansas Environmental Federation

A handwritten signature in black ink, appearing to read "Charles Miller", with a stylized, cursive script.

Charles Miller, Executive Director

EVALUATION OF EMISSION INCREASE FOR NATURAL GAS BOILER VS. WOOD FIRED BOILER

This evaluation provides an example of how the proposed air regulation and existing regulations quantify "emissions increases". The example uses replacement of an existing wood fired boiler with a new natural gas boiler. Both boilers have the same capacity (99 MMBtu/hr). The following table shows estimated emissions from both boilers.

Pollutant	NG Boiler		Wood Fired Boiler	
	Emission Factor ^{*1} [lb/MMBtu]	Emissions [TPY]	Emission Factor ^{*2} [lb/MMBtu]	Emissions [TPY]
PM	0.0075	3.25	0.35	151.77
PM10	0.0075	3.25	0.35	151.77
PM2.5	0.0075	3.25	0.35	151.77
SOx	0.0006	0.27	0.025	10.84
VOC	0.0054	2.37	0.017	7.37
CO	0.0824	35.75	0.60	260.17
NOx	0.0980	42.53	0.22	95.40

Note:

1 = Emission Factor is from AP-42 Chapter 1.4, Small Boiler (< 100 MMBtu/hr)

2 = Emission Factor is from AP-42 Chapter 1.6

With Current Regulations

Natural gas boiler emissions are compared against *De Minimis*/minor change thresholds. The following table summarizes *De Minimis* determination.

Pollutant	NG Boiler Emissions [TPY]	De Min Threshold [TPY]	Qualify For De Min?
PM	3.25	25	Yes
PM10	3.25	15	Yes
PM2.5	3.25	10	Yes
SOx	0.27	40	Yes
VOC	2.37	40	Yes
CO	35.75	75	Yes
NOx	42.53	40	NO

Due to the NO_x emission exceeding the 40 TPY *De Minimis*/minor threshold, the modification for replacing the wood fired boiler with a natural gas boiler does not qualify for Minor Modification/*De Minimis* Modification permitting. This permitting level change will result in an extra three (3) to six (6) month of permitting process at ADEQ.

With Proposed Regulations

Proposed regulations will use “emissions increases” to compare against *De Minimis*/minor change thresholds. The following table summarizes *De Minimis*/minor determination.

Pollutant	WF Boiler Emissions [TPY]	NG Boiler Emissions [TPY]	Emission Increase [TPY]	De Min Threshold [TPY]	Qualify For De Min?
PM	151.77	3.25	-148.52	25	Yes
PM ₁₀	151.77	3.25	-148.52	15	Yes
PM _{2.5}	151.77	3.25	-148.52	10	Yes
SO _x	10.84	0.27	-10.57	40	Yes
VOC	7.37	2.37	-5	40	Yes
CO	260.17	35.75	-224.42	75	Yes
NO _x	95.40	42.53	-52.87	40	YES

As indicated above, replacing the wood fired boiler with a natural gas boiler results in significant emission reductions for all pollutants and the “emissions increases” are below *De Minimis*/minor threshold. Therefore, this modification qualifies for a Minor Modification/*De Minimis* Modification permitting.

Conclusion

As indicated above, the proposed regulation will allow projects with emission reductions or trivial net increases to be approved on an expedited basis.