SIP Comments: It is critical that ADEQ and the regulated community recognize the Clean Air Act requirements that State Implementation Plans (SIPs) provide a pre-construction review process for new sources and modifications. Subpart I of 40 CFR Part 51 includes legally-enforceable procedures for such reviews (Part 51.160). These procedures must identify:

a. The basis for determining the types and sizes of construction or modifications which will be subject to review;
b. An application process disclosing the nature and amounts of emissions to be emitted;
c. The approval process (permits); and
d. The procedures must discuss the air quality data and the dispersion or other air quality modeling used to meet the requirements of this subpart.

Recognizing that this review and approval process is to be addressed in the SIPs for the new NAAQS for $PM_{2.5}$, NO_2 hourly and SO_2 hourly, and that in some instances air dispersion modeling will be used to evaluate significant increases of those pollutants, the following suggestions are intended to help clarify such a process for both the public and the regulated community:

I. Modeling Protocol: ADEQ's modeling protocol should be published as an open public document. A "draft" modeling protocol should be announced and distributed for comment with the "final" modeling protocol published on the ADEQ website. Any modifications to the final modeling protocol should be announced in a draft format and public comments should be requested and encouraged. Pending air permit applications should be "grandfathered" and allowed to complete the permitting process using the protocol in effect at the time the application was judged complete.

II. Emission Factors: When a new type of pollutant such as $PM_{2.5}$ or NO_2 (rather than NO_x) becomes a standard, facilities are forced to use overly conservative historical emission standards for dispersion modeling. Because $PM_{2.5}$ is a fractional component of PM_{10} and NO_2 is a fractional component of NO_x, there are very few approved emission factors for NO_2 and $PM_{2.5}$. Consequently, during the time it takes to develop and publish EPA-approved $PM_{2.5}$ and NO_2 emission factors (i.e. years), facilities use PM_{10} and NO_x emission factors for air dispersion modeling. The implementation of new NAAQS will create unique challenges for smaller businesses related to accurately estimating emissions for $PM_{2.5}$ and NO_2 due to the lack of published and accepted emission factors. Although large national and international corporations will have resources to conduct expensive stack analyses to generate accurate $PM_{2.5}$ and NO_2

emission factors, smaller Arkansas-based facilities will generally not have the financial means for such expensive and extensive testing. The Air Division should establish a link on the ADEQ website where $PM_{2.5}$ and NO_2 emission factors judged acceptable by ADEQ for use as the basis in final permits are listed and described. This information conveniently displayed would allow smaller entities to more accurately describe the actual expected impacts from new or modified sources. Once $PM_{2.5}$ emission factors are used as a basis for a permit, those factors should be made public and published for use by others.

III. Modeling Impacts: EPA has recognized that intermittent sources, if modeled at the maximum hourly rate continuously for 8,760 hours per year, often results in the "modeled impact being significantly higher than actual impacts would realistically be expected to be for those emission scenarios" (EPA - Additional Clarification Regarding Appendix W in Modeling Guidance for the 1-hour NO_2 NAAQS dated March 1, 2011 – the guidance also applies to the 1-hour SO_2 NAAQS). For example, the guidance suggests using an average hourly rate such as 500 hours divided by 8,760 hours as a way to create an average hourly emission rate to use for an emergency generator rather than the maximum hourly rate for every hour of the year.

This same recognition of "significantly higher than actual impacts" is needed by ADEQ if modeling is used to evaluate modeled impacts from intermittent sources of $PM_{2.5}$ emissions. Intermittent sources have an extremely small potential impact on overall $PM_{2.5}$ ambient concentrations. This small logical adjustment would adjust the modeled impacts to be more representative of actual air quality impacts without overall negative environmental impact. This adjustment is critically important for smaller facilities where intermittent $PM_{2.5}$ sources such as grinding, sanding, loading or unloading, sandblasting, or roads are often near property boundaries and are low (elevation) sources with modeled impacts being much higher than realistic actual impacts when maximum potential emission rates are used for every hour (8,760 hrs/yr).