

LUCINDA MINTON LANGWORTHY  
STATEMENT TO CASAC'S NO<sub>x</sub> AND SO<sub>x</sub> SECONDARY NAAQS  
REVIEW PANEL ON BEHALF OF THE  
UTILITY AIR REGULATORY GROUP  
(JULY 22, 2009)

Good morning, ladies and gentlemen. My name is Cindy Langworthy, and I am speaking to you today on behalf of the Utility Air Regulatory Group or "UARG." UARG filed comments last week on EPA's second draft of the Risk and Exposure Assessment for Review of the Secondary National Ambient Air Quality Standards for Oxides of Nitrogen and Oxides of Sulfur (the "REA"). UARG's comments challenged the legality of EPA's apparent intended approach of specifying one or more secondary NAAQS in terms of a value of an ecological indicator. Secondary NAAQS, by definition, "specify a level of air quality," not a level of an ecological indicator. Clean Air Act § 109(b)(2). UARG's comments also questioned EPA's authority to base a NAAQS on protection against acidification effects, given the comprehensive congressional approach to acidic deposition reflected in the 1990 Amendments to the Clean Air Act. *See* REA at 1-7. Moreover, those comments asked, even if such standards were legal, how EPA would use the case studies, conducted in particularly sensitive areas, to derive a nationally applicable standard.

My primary purpose in addressing you today is not, however, to repeat those comments, but rather to encourage you to focus on what a NAAQS specified in

terms of an ecological indicator might mean for those charged with implementing it. What am I talking about?

Well, for starters, how would states (and ultimately EPA) determine which areas are nonattainment for a NAAQS that uses an ecological indicator? The REA indicates that to determine whether the NAAQS is met, the state would “Compare measured concentrations of the air quality indicator(s) in ambient air to the calculated combinations of air quality indicators such that the ecological indicator value is greater than or equal to the ecological benchmark.” REA at ES-5, Fig. ES-2.

2. Would this require states to undertake significant new monitoring of non-air metrics such as ANC, ASSETS EI, or even species composition to determine whether “the ecological indicator value is greater than or equal to the ecological benchmark” in a given area? Would it require new air quality monitoring in areas where the current network is not representative? What about deposition monitoring? If so, what would such monitoring cost and how would it be funded?

Would it be necessary to conduct site-specific assessments relating the values of the ecological indicator to the air quality indicator (possibly some measure of concentrations of ambient NO<sub>2</sub> and SO<sub>2</sub> over some averaging time)? Are either ecological or air quality data available to conduct such assessments, even in the studied areas? What about the rest of the country?

Moreover, assuming a lake or a stand of trees fails to attain the ecological benchmark, what would the resulting nonattainment area look like? The Clean Air Act defines a nonattainment area as “any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet)” the NAAQS. CAA § 107(d)(1)(a)(i). How would it be determined which nearby areas contribute to ambient air quality in the areas which fail to meet ecological benchmarks? Would this require additional modeling? Are the tools available for states to delineate and recommend designation of nonattainment areas within the specified 1-year period after a new NAAQS is adopted? CAA § 107(d)(1)(A).

Once a nonattainment area is designated, the state in which it is located must, within 3 years, prepare a plan to bring that area into attainment “as expeditiously as practicable” and submit that plan to EPA. Are tools available to allow states to develop implementation plans within this timeframe? Does the Clean Air Act provide states with adequate authority to bring about attainment? What about a situation in which the ecological benchmark could not be met even if atmospheric deposition of all nitrogen and sulfur were eliminated? What would be the social and economic consequences of eliminating all emissions of NO<sub>x</sub> and SO<sub>x</sub> to the air? These are not idle questions given (1) the natural acidity of some water bodies (for example, bog lakes) and (2) the REA’s findings in both its Potomac River and Neuse River Estuary case studies that elimination of all

nitrogen deposition from the air would fail to improve eutrophication by even one ASSETS EI category.

These are issues that you, as CASAC, should address. CASAC, after all, is not only to advise the Administrator on revisions of NAAQS, but on “areas in which additional knowledge is required to appraise the adequacy and basis of” existing or revised NAAQS. CAA § 109(d)(2)(C)(i). Moreover, CASAC is to advise the Administrator of “any adverse public health, welfare, social, economic, or energy effects” that may result from strategies for attaining NAAQS. CAA § 109(d)(2)(C)(iv).

Thank you for your attention. I’d be glad to address any questions.