

Statement of the American Lung Association on

EPA's Integrated Review Plan for Oxides of Nitrogen -- Health Criteria

**(First External Review Draft, November 2013)
EPA/600/R-13/202**

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**Deborah Shprentz
Consultant to the American Lung Association**

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Good Morning. I am Deborah Shprentz, consultant to the American Lung Association on the review of the NAAQS.

I'd like to offer just a few comments on the Integrated Review Plan for the review of the NAAQS for Oxides of Nitrogen.

Monitoring Issues

First, we would like to commend the agency for including a review of the NO₂ monitoring issues in the Integrated Review Plan. The monitoring network and protocol are critical attributes of any NAAQS, and they can impact the health protection afforded by the standard just as much as the form or level of the standard.

In the last review cycle, EPA instituted for the first time a limited near road monitoring requirement for NO₂.

That program required the largest metropolitan areas to institute monitoring in the near road environment. The first of these monitors were deployed in summer of 2013, ahead of the January 2014 deadline. Additional monitors will be phased in for

the next several years, until a total of about 120 NO₂ monitors are deployed in areas of maximum expected highway emissions.

These 120 monitors are far too few and monitoring will be too limited in every urban area in the nation. It is impossible for a single monitor, or two monitors to adequately characterize NO₂ pollution from traffic sources in a large metropolitan area.

The monitoring regime is an important attribute of any NAAQS and should be thoroughly evaluated in the course of the review.

We would like to see an objective evaluation of the adequacy of the current monitoring requirements to accurately measure compliance with the NAAQS for NO₂.

Exposure Assessment

Traffic and transportation sources expose millions of Americans to oxides of nitrogen. EPA cites the 2009 American Housing Survey finding that 17.5 percent of the U.S. population lives within 90 meters of 4-lane roads, airports and railroads, all major sources of NO_x emissions. The Health Effects Institute report on traffic pollution concluded that the zone of harmful exposures was broader—roughly 300-500 feet from the roadway—and where 45 percent of all North Americans in urban areas live or work.

Some areas of the country, notably in California, deployed the first of the near-road monitors ahead of schedule, in the summer of 2013. EPA should evaluate the monitoring data available in the course of this review, and consider the data in the exposure assessment.

The exposure assessment is not a regulatory document like a nonattainment determination, so it is not necessary to await lengthy quality control procedures to assess what can be learned from the limited data available.

We hope that EPA can develop an exposure assessment to better characterize exposures to NO₂ in both near-road and other high exposure environments.

Health Risks

The first draft ISA makes reaches important new conclusions about the toxicity of NO₂. The draft reaches stronger conclusions about NO₂'s causal role in inducing adverse health effects for a variety of health endpoints, and it finds that adverse effects are occurring at lower concentrations than previously recognized.

EPA conducted a very limited risk assessment in the last review, and we are concerned that the IRP contemplates shortcutting this process in the current review. To the extent that the risk and exposure assessment can clarify the public health implications of alternative standards, it can be a useful exercise.

We are further concerned by the implication in the IRP that EPA might only need one draft of the Policy Assessment, if it concludes that the current standard is protective of public health. The Lung Association supported a one-hour standard of 50 ppb in the last review. Given the strength of the new findings, it is appropriate to undertake a thorough review of the standard with full consideration of alternative standards that are necessary to provide protection of public health with an adequate margin of safety.