

# PEER REVIEW PLAN

Title:

Integrated Science Assessment (ISA) for Oxides of Nitrogen and Sulfur Environmental Criteria (Second External Review Draft)

Purpose/Objective:

The current secondary NAAQS for SOX, set in 1973, is a 3-h average 0.5 ppm of SO<sub>2</sub>, not to be exceeded more than once per year. The secondary NOX NAAQS is identical to the primary standard set in 1971: 0.053 ppm NO<sub>2</sub> as an annual average. These secondary standards are intended to protect against direct damage to vegetation by exposure to gas-phase NOX or SOX. Acute and chronic exposures to SO<sub>2</sub> can have phytotoxic effects on vegetation, such as foliar injury, decreased photosynthesis and decreased growth. Similarly, exposure to sufficient concentrations of NO<sub>2</sub>, NO, PAN, and HNO<sub>3</sub> can cause foliar injury, decreased photosynthesis and decreased growth. In addition, these gas-phase NOX may contribute to N saturation in some areas of the U.S. There is little new evidence overall for direct effects of exposure to gas-phase NOX or SOX on vegetation at current concentrations. However, there is some evidence that vegetation in regions with high concentrations of photochemical oxidants may be affected by HNO<sub>3</sub> exposure.

Product Completion Date (Actual):

08/08/2008

OMB Category:

Highly Influential

Peer Review Leader:

Cheryl Itkin  
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External Peer Review Mechanism:

Nominated to the Science Advisory Board for Peer Review

Peer Review Expected to Begin:

1st Quarter, Fiscal Year 2009

EPA's Fiscal Years run from October to September.  
Quarters for Fiscal Year 2009:  
1st: October - December, 2008  
2nd: January - March, 2009  
3rd: April - June, 2009  
4th: July - September, 2009

Was a deferral to peer review invoked?

No

Will an alternative peer review process be employed?

No

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|--|---|
| Number of Peer Reviewers   | more than 10  |
| Primary Disciplines needed in the review:  | Carcinogenesis-Epi-Genetic,<br>Chemistry-Atmospheric,<br>Ecology-Ecosystem, Epidemiology,<br>Exposure Assessment, Risk<br>Assessment-Ecological, Risk<br>Assessment-Human Health,<br>Toxicology-Neurotoxicology |
| Who will select the reviewers?   | FACA  |
| Will the public, including scientific or professional societies be asked to nominate peer reviewers?                     | Yes   |
| Will public nominations be allowed through the Peer Review Agenda?   | No  |
| Will there be opportunity for public comment on the product?   | Yes   |
| Describe How and When  | Federal Register  |
| Will the Agency provide significant and relevant public comments to the peer reviewers before they conduct their review? | Yes   |
| Will the review be a panel, conducted in public?   | Yes   |
| Will public comments be allowed at the panel review?   | Yes   |