

## **Comment 1 for AAQS for Nitrogen Dioxide (no207) - 45 Day.**

First Name: Behrouz

Last Name: Farsi

Email Address: Behrouz\_Farsi@yahoo.com

Affiliation:

Subject: Please regulate production of nitrogen dioxide

Comment:

As a medical professional, bay area resident and citizen interested in stopping acid rain and global warming I urge the board to regulate industries that produce nitrogen dioxide and reward those businesses which promote zero-emission technologies.

Fact is 10% of earth's nitrogen dioxide is man-made and is generally concentrated in urban areas- where human population is most dense.

Man's contribution of nitrogen dioxide is known to give photochemical smog its yellow-brown appearance, degrading the aesthetics of our living environment and hampering visibility for birds and other flying creatures and technologies.

Nitrogen dioxide is, under the right conditions, also a precursor to acid rain, which discharges acid into the soil, where it is sequestered, consumed and henceforth injurious to both plant and animal-life. And because we, as humans depend upon both for our livelihood, we too will be further maligned.

It is understood that the temperature at which a fuel is combusted is the key factor in determining how much nitrogen dioxide is released. Therefore, please promote:

1. low excess-air firing
2. low-combustion temperatures
3. use of low-nitrogen fuels (such as natural gas and light distillate oil)
4. staged combustion in which localized fuel-rich conditions are created where both thermal and fuel nitrogen-oxide compounds are minimized
5. use of low-nitrogen oxide burners and fluidized-bed combustion

As we have come to learn, once some things have been set in motion, they are hard to stop, and many times costly and even impossible to reverse.

Please vote strong for measures to limit nitrogen dioxide production as well as other gases known to pollute the land, water and soil for the sake of the citizens and the environment which

sustains us.

Please commit yourselves to voting for cleaner technologies and promoting zero-emissions technologies.

Thanks for your time and attention.

Sincerely yours,

Behrouz Farsi  
San Jose, CA resident

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2007-01-31 21:59:28

No Duplicates.

## **Comment 2 for AAQS for Nitrogen Dioxide (no207) - 45 Day.**

First Name: Giedrius

Last Name: Ambrozaitis

Email Address: gambrozaitis@autoalliance.org

Affiliation: Alliance of Automobile Manufacturers

Subject: Comments to NO2 staff report

Comment:

Comments by Alliance of Automobile Manufacturers on January 5, 2007, NO2 Staff Report (attached)

Attachment: 'www.arb.ca.gov/lists/no207/3-alliance\_cal\_no2\_comments\_1-29-07.pdf'

Original File Name: Alliance Cal NO2 comments 1-29-07.pdf

Date and Time Comment Was Submitted: 2007-02-02 09:22:06

No Duplicates.

### **Comment 3 for AAQS for Nitrogen Dioxide (no207) - 45 Day.**

First Name: Robert  
Last Name: Harley  
Email Address: harley@ce.berkeley.edu  
Affiliation: UC Berkeley

Subject: NO2 measurement methods  
Comment:

The staff report discusses the accuracy and precision of chemiluminescent methods for measuring NO2. Accurate measurement methods for NO2 are available (Ryerson et al., 2000, JGR, vol 105, pp. 26447-26461; Thornton et al., 2000, Analytical Chemistry, vol 72, pp. 528-539), but these are methods are not routinely used in ambient air monitoring networks. I recommend inclusion of these newer measurement methods in Chapter 3 of the technical support document.

It is known (e.g., Winer et al., 1974, ES&T, vol 8, pp. 1118-1121) that chemiluminescent analyzers respond not only to NO2 but also to other nitrogen-containing air pollutants including peroxyacyl nitrates. This could be a significant source of positive bias in ambient NO2 measurements. PANs are one example, but are not the only class of pollutants for which interferences with the NO2 measurement may occur. Nitrous and nitric acids may also get reported as NO2, assuming they are not lost in air sampler inlet lines.

This could be important in comparing clinical studies where the exposure is presumably to pure & well-characterized levels of NO2, and the real atmosphere where exposures include not only NO2 but also other pollutants that may have different types and/or severity of health effects.

In summary, I disagree with the characterization of routine NO2 measurements as being accurate, in the sense of being free of significant interferences. This issue may be deserving of further consideration.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2007-02-19 15:16:47

No Duplicates.

**Comment 4 for AAQS for Nitrogen Dioxide (no207) - 45 Day.**

This comment was posted then deleted because it was unrelated to the Board item or it was a duplicate.

**There are no comments posted to AAQS for Nitrogen Dioxide (no207) that were presented during the Board Hearing at this time.**