Interactive comment on “Evaluation of nitrogen dioxide chemiluminescence monitors in a polluted urban environment” by E. J. Dunlea et al.

E. J. Dunlea et al.

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Response Short Comment by Dr. Ezra Wood:

While such direct spectroscopic measurements are ideal, it is worth remembering that the cause of the interference is not the chemiluminescence technique itself but rather the non-specific catalytic conversion of most nitrogen oxides (NO2, alkyl nitrates, etc) to NO in the hot molybdenum converter. Photolysis, on the other hand, is a much more specific method of converting NO2 to NO. Development of low-cost photolytic converters designed to replace the standard molybdenum converter is another option for addressing this wide-spread problem.

The authors agree with this point concerning photolytic NO2 converters and thank Dr. Wood for pointing this out; this has been added to the recommendations in the
revised version of the paper (see Section 4).