

DIVISION OF AIR QUALITY
May 25, 2010

MEMORANDUM

TO: Don Van der Vaart, Chief, Permits Section

FROM: Jim Roller, Supervisor, Air Quality Analysis Branch (AQAB)

SUBJECT: Interim 1-Hr NO₂ Significant Impact Level (SIL)

Until EPA develops and promulgates a 1-hr NO₂ SIL for the recently promulgated NO₂ 1-hr NAAQS, I recommend we adopt an interim 1-hr NO₂ SIL of 10 ug/m³.

The 10 ug/m³ SIL was developed by the Northeast States for Coordinated Air Use Management (NESCAUM) and is based on the ratio of the existing 1-hr CO SIL to the 1-hr CO NAAQS ($(2000 \text{ ug/m}^3 / 40,000 \text{ ug/m}^3) \times 188 \text{ ug/m}^3 = 10 \text{ ug/m}^3$ (rounded up from 9.4 ug/m³). CO is the only other criteria pollutant with a 1-hr NAAQS. Recognizing that spatial and temporal variations of short-term 1-hr impacts tend to be much more volatile than longer averaging times such as an annual average, NESCAUM reasoned that using the ratio of the 1-hr CO SIL and NAAQS would be more appropriate than using the SIL/NAAQS ratios of any of the other criteria pollutants. I intend to agree. In addition, the new 1-hr NO₂ NAAQS will be applied to hot spot type modeling near roadways, not unlike the 1-hr CO NAAQS.