

DIVISION OF AIR QUALITY  
June 7, 2010

**MEMORANDUM**

TO: Don Van der Vaart, Chief, Permits Section

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

SUBJECT: Interim 1-Hr SO<sub>2</sub> Significant Impact Level (SIL)

Until EPA develops and promulgates a 1-hr SO<sub>2</sub> SIL for the recently signed new SO<sub>2</sub> 1-hr NAAQS, I recommend we adopt an interim 1-hr SO<sub>2</sub> SIL of 10 ug/m<sup>3</sup>.

A 10 ug/m<sup>3</sup> SIL was initially developed by the Northeast States for Coordinated Air Use Management (NESCAUM) for NO<sub>2</sub> 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/m<sup>3</sup>). CO is the only other criteria pollutant with a 1-hr NAAQS. NCDAQ reviewed and agreed with their assessment and subsequently, adopted the 10 ug/m<sup>3</sup> SIL for NO<sub>2</sub> for use in NC (attachment). Since the new SO<sub>2</sub> standard is also a 1-hr NAAQS, I believe the same logic / procedure can be used to develop an interim SO<sub>2</sub> SIL for NC ((i.e.  $2000 \text{ ug/m}^3 / 40,000 \text{ ug/m}^3) \times 196 \text{ ug/m}^3 = 10 \text{ ug/m}^3$  (rounded up from 9.8 ug/m<sup>3</sup>)).