

MEMORANDUM

SUBJECT: Background information on VNA interpolation technique

FROM: Jeffrey D. Herrick, OAQPS
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TO: Ozone NAAQS Review Docket (OAR-2005-0172)

DATE: November 22, 2005

The purpose of this memorandum is to place in the ozone (O₃) docket a 1999 letter to the EPA Administrator from the chair of the SAB Advisory Council on Clean Air Compliance Analysis (the Council) and chair of the Air Quality Models Subcommittee (AQMS) of the Council. This letter (see attachment) contains advice to the Agency on a number of aspects of the analyses being conducted in support of the draft 812 Prospective Study *The Benefits and Costs of the Clean Air Act, 1990 to 2010: EPA Report to Congress* (CAAA of 1990, Section 812, Public Law 101-549, November 15, 1990, 104 Stat. 2399), including advice provided in the Council and AQMS responses to six charge questions posed by EPA's Office of Air and Radiation. Two of those charge questions (5, 6) address methods and approaches similar to those being used in the analyses supporting the welfare assessments in the current O₃ NAAQS Review. Specifically, this letter describes the evolution in methods used to represent O₃ and PM air quality in non-monitored areas from traditional spatial interpolation, to an enhanced spatial interpolation using inverse distance weighting (e.g., Voronoi Neighbor Averaging: VNA), to a recommendation that VNA be combined with air quality model outputs.

Attachment