UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

September 23, 1991

MEMORANDUM

SUBJECT: Interpretation of EPA's Guidance for Residential Wood Combustion Emission Control Measures

FROM: Fred H. Renner, Jr., Acting Chief Fred Renner
SO_2/Particulate Matter Programs Branch, AQMD (MD-15)

TO: Chief, Air Branch
Regions I-X

In September 1989, the U.S. Environmental Protection Agency (EPA) issued guidance for controlling wood smoke emissions from residential wood combustion (RWC) in a document entitled Guidance Document for Residential Wood Combustion Emission Control Measures (EPA-450/2-89-015). The document was issued as a recommendation to State and local agencies developing wood smoke control programs and not to prevent such agencies from considering other wood smoke control devices or measures not discussed in the document. However, it has been brought to EPA's attention that, despite its purpose, the guidance has in some cases been construed as restrictive and exclusionary in nature. The purpose of this memorandum is to clarify EPA's intent behind issuing this guidance and explain what documentation EPA expects in evaluating control measures discussed and not discussed in the guidance.

The nonexclusionary nature of the guidance document is embodied in EPA's policy regarding RWC emission reduction credits as explained in Chapter 1.0 of the guidance document. To reiterate, the emission reduction credits recommended in Appendix F of the document are only suggested and should thus be considered starting points in assessing the effectiveness of RWC control programs and regulations. Any application for credit in a State implementation plan (SIP) must be accompanied by a justification in the implementing agency's specific program or regulation. For instance, for a mandatory curtailment program to receive a 50 percent wood stove credit, it should contain documentation in the SIP that the implementing agency has addressed each of the elements described in Table 5-9 of the document. All credit applications in SIP's are, of course, subject to EPA review to ensure the credit level is justified.

In their SIP's, State and local agencies can also request credit greater than that recommended in the document, as well as credit for measures not included in the document. Contrary to how the RWC guidance document may, in some cases, be interpreted, EPA will consider well-supported requests for credit for wood-burning devices not listed in Table 3-1 and Appendix F of the document. Merely because a wood-burning device is not EPA-certified does not mean it does not merit emission reduction credit and, hence, status as a device that burns more cleanly than a conventional wood stove. To obtain credit, however, proponents for such devices must provide justification for credit to be granted in the same manner as the devices currently listed in the guidance document (e.g., EPA-certified Phase II cordwood and pellet stoves), as described below.

The suggested credits currently in the guidance document for the conversion of conventional wood stoves to EPA-certified catalytic, noncatalytic, and pellet stoves are based on field test data documenting the emissions reductions associated with the different advanced wood-burning technologies. Therefore, if SIP credit is sought for conversion to wood heaters not listed in the guidance document [including wood heaters determined to be "not affected" by EPA's wood heater new source performance standard definition (see 53 Federal Register February 26, 1988) and hence exempt], the request should be accompanied by a justification based on emission reductions documented through "in-home" field testing (versus laboratory testing). The EPA recommends that the field testing employ an emissions sampling and data-gathering technique that is reviewed by EPA prior to the start of testing.

If EPA finds that field test data indicate a wood-burning device not currently listed in the guidance document is clean burning relative to conventional stoves and, therefore, warrants emission reduction credit, depending on its emissions performance, that stove may be afforded status similar to that of an EPA-certified stove with demonstrated emissions significantly lower than that of conventional stoves. That is, EPA will approve control strategies under SIP's to the extent of demonstrated emission reduction credits for such devices.

In-use testing to establish emission reduction potential should be conducted in accordance with valid procedures established in consultation with EPA's Air and Energy Engineering Research Laboratory within the Office of Research and Development. Should you be contacted by an air pollution control agency or by any other entity seeking credit for devices that have not already been subject to in-use testing, please refer them to Robert McCrillis at 919/541-2733.

If you have any questions regarding this clarification, please contact Chris Stoneman (FTS 629-0823).

Attachment

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