



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 1

DATE: July 3, 1991

SUBJ: NHARD Policy Guide

FROM: Ian D. Cohen  
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TO: David Conroy, Chief  
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I do not recommend approval of the NHARD Policy and Procedure for Air Quality Modeling as part of New Hampshire's SIP for these reasons:

1. There are several inconsistencies between the policy expressed in this document and EPA policy. If these are to be part of a SIP, they must be justified.
2. There is no clear statement if and when EPA policy should take precedence over NHARD policy.
3. Although a review by OAQPS is not required at this time, there are several sections which would benefit from such a review. EPA policy on some of the issues covered (e.g. GEP Stack Height computations, building downwash calculations, etc.) is complex, and a review by OAQPS before the submittal is finalized will help insure consistency with EPA policy.

A quick review of the document revealed these problems:

1. Page 2: The stated policy implies that variations in modeling procedures can be done without the approval of EPA. In fact, if the modeling is done for federally enforceable regulatory purposes, EPA should approve any changes NHARD or others make to EPA procedures.
2. Page 6: The definition of simple terrain (IIIB2) differs from that given in EPA's Guideline on Air Quality Models. EPA's definition of simple terrain includes only all terrain below stack top height. Terrain above stack top height but below plume impaction is called "intermediate terrain". Also, EPA does not distinguish between what NHARD refers to as "flat terrain" and simple terrain.

3. Page 9: NHARD does not explain that Table IV-2 only applies to PSD Class II areas. Section IV-B should explain what Class I, II, and III areas are. The omission of any mention of Class I areas is a serious problem since two federal Class I areas are located in New Hampshire, and the PSD increment in Class I areas is much less than that listed in Table IV-2. Also, the significance levels listed in Table IV-3 may not apply to Class I areas.

4. Page 11: Section E implies that the conversion factors are universally acceptable. In fact, these values only apply in certain cases, are often questioned, and are subject to revision. If a conversion factor is to be used, it should be stated in the modeling protocol and discussed with NHARD and EPA.

I suggest that the four points listed above be addressed, and that the entire document be given a more thorough review prior to its acceptance as part of New Hampshire's SIP.

cc: Patti Kelling, PTES