

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

SEPTEMBER 23, 1993

MEMORANDUM

SUBJECT: Guidance on Indirect Exposure Assessments for Hazardous  
Waste Combustion Sources

FROM: Jeffery D. Denit  
Office of Solid Waste

TO: Waste Management Division Directors, Regions I-X  
Director, Office of Air Quality Standards and Planning  
Director, Office of Health and Environmental Assessment  
Director, Office of Science, Planning and Regulatory  
Evaluation  
Office of Pollution Prevention and Toxics  
Office of Emergency and Remedial Response  
Office of Science and Technology  
Office of Policy Analysis

This memorandum transmits for your review and comment the Agency's Draft Addendum to the 1990 ORD report, "Methodology for Assessing Health Risks Associated with Indirect Exposure to Combustor Emissions". The memo also transmits for your review and comment another document which contains specific recommendations for implementing this guidance in developing permit conditions for RCRA combustion facilities.

Draft Addendum to 1990 Methodology Document

The Draft Addendum was prepared by an Agency-wide work group in response to the needs identified during evaluations of RCRA combustion permits over the last two years (particularly for the WTI facility in Ohio) and, subsequently, the announcement in the Agency's May 18, 1993, Draft Strategy on Hazardous Waste Minimization and Combustion that comprehensive risk assessments (including indirect risks) would be conducted by the permit-issuing authority for all new RCRA combustion units. This document updates and elaborates on the guidance in the 1990 ORD Report and is intended to be used in combination with that Report. After the Agency has completed its internal review of the Draft Addendum, we intend to submit it for external public review and for scientific peer review. The peer review will likely be by the Science Advisory Board, which also reviewed the original 1990 Report.

## OSW Guidance

While the 1990 Report and the Draft Addendum provide a sound framework for conducting indirect exposure assessments and also provide much of the specific detail needed to conduct these assessments, there are a number of additional risk assessment issues which ultimately affect the development of permit conditions for RCRA combustion facilities. Examples of these issues include the choice of appropriate risk levels and determining how to consider other air emission sources. The second attachment to this memorandum provides, in draft form, our initial recommendations on how to deal with these issues. We would appreciate your comments on the recommended approaches described in this draft document and on other alternatives as discussed below.

In particular, we are interested in your suggestions on additional options which you believe should be explored. For example, the draft OSW guidance recommends being consistent with the target risk level (10-5) used for the original regulation covering boilers and industrial furnaces (BIFs). Another option may be to vary the risk level somewhat because part of the rationale for setting the risk level in the BIF rule was that indirect exposures were not assessed. A third option might be to set a certain risk level as a point of departure, but to recognize that other considerations such as the number of people potentially at risk and technological factors could cause the final risk level to vary from the point of departure for some individuals

Another area where alternative approaches may be appropriate is in how the trial burn data will be used in the risk assessment. The draft OSW guidance suggests that, for each parameter, the data from the trial burn run which is designed to maximize the emissions of that parameter should be used. An alternative would be to use the less conservative average results for each parameter across all trial burn runs.

We welcome any suggestions that could make the risk assessment more appropriate or easier to implement. We would also like to know of any issues that we have not identified which you believe should be addressed.

We would like to get this guidance issued for external review as soon as possible since a number of indirect exposure assessments are already underway with more to come shortly. Therefore, I am asking that you send in any comments by October 22. If you have any questions in the meantime, please contact David Layland at 202-260-4796.

cc: RCRA Branch Chiefs  
RCRA Permit Writers

Attachments