



Department of Energy
Washington, DC 20585
July 2, 2004

OAD Docket
Environmental Protection Agency
Mailcode: B102
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Attention Docket ID No. OAR-2004-0022

Dear Sir or Madam:

The Department of Energy (DOE) has reviewed the Environmental Protection Agency's (EPA) proposed rule, "National Emission Standards for Hazardous Air Pollutants: Proposed Standards for Hazardous Air Pollutants for Hazardous Waste Combustors (Phase I Final Replacement Standards and Phase II)," published in the April 20, 2004, *Federal Register* (69 FR 21197). Enclosed please find a copy of the Department's comments and recommendations on the proposed regulations based on our review of their potential impacts on DOE operations and sites.

The Department appreciates the opportunity to comment on the proposed rule. If there are any questions concerning the enclosed comments, please contact Ted Koss of my staff (202-586-7964; theodore.koss@eh.doe.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Andrew Wallo".

Andrew Wallo
Director
Office of Air, Water and Radiation
Protection Policy and Guidance

Enclosure

United States Department of Energy
Comments on
“National Emission Standards for Hazardous Air Pollutants: Proposed Standards for Hazardous Air Pollutants for Hazardous Waste Combustors (Phase I Final Replacement Standards and Phase II)”

Notice of Proposed Rulemaking
(69 FR 21197; April 20, 2004)

- 1. Data Base for Phase I Hazardous Waste Incinerators (HWIs). In the *Federal Register* preamble of the proposed rule, the Environmental Protection Agency (EPA) discusses on pages 21217-21218 background on the data base used to establish the proposed maximum achievable control technology (MACT) standards for hazardous waste combustors (HWCs). EPA believes that a revised 2002 data base, updated based on public comments to a July 2002 *Federal Register* notice, is the most appropriate data set available for the setting of the MACT standards. EPA indicates that, according to industry stakeholders, the 2002 data base for HWIs includes data from three HWIs whose emissions were reduced to meet EPA’s Phase I standards promulgated in September 1999. On pages 21217-21218, EPA explicitly solicits comment on the 2002 data base.**

The Department of Energy (DOE) believes that the use of an alternative HWI data set other than the 2002 data base selected by EPA would yield a more equitable data base for the establishment of MACT standards for HWIs. The inclusion of sources whose emissions controls have already been upgraded to comply with the earlier Phase I standards creates an inherently biased data set that could lead to more stringent emission standards than warranted under Section 112(d) of the Clean Air Act (CAA) being imposed on existing sources. We believe that this would establish an undesirable precedent. By including emissions data from upgraded sources in the data base used to establish the proposed final replacement Phase I MACT standards, EPA has raised the question of whether such final standards are more stringent than they would have been if either the original 1999 database had been used, or the database had been updated with only data from non-upgraded sources.

Also, if there were further substantive delays in the promulgation of the final MACT standards, then, following this rationale, EPA would presumably develop a newer data set that would include even more HWIs which have reduced their emissions to comply with the February 2002 interim standards, and the ensuing MACT analysis would lead to even more stringent standards. The HWI data base used to establish MACT standards should be reflective of the current universe of HWI emissions, without sources that were upgraded to meet EPA’s September 1999 Phase I standards.

We recommend that, to maintain equity, EPA, employing the methodology discussed in the April

2004 proposal to determine MACT standards, use the 2002 data base and delete data that were obtained from sources that source owners and operators assert were upgraded to meet the September 1999 Phase I standards or the February 2002 interim standards.

- 2. Comments on EPA's Proposed Alternative Risk-Based Standard for Total Chlorine in Lieu of the MACT Standard. Under the authority of Section 112(d)(4) of the CAA, EPA has proposed standard procedures to allow a source owner or operator to establish an alternative risk-based, site-specific emission limit for total chlorine, in lieu of compliance with the Section 112(d)(2) MACT emission standard. Section 112(d)(4) allows EPA to establish emission standards for hazardous air pollutants (HAPs) when regulating HAPs for which health threshold levels have been established. EPA discusses these proposed risk-based standards for total chlorine and the procedures to be used on pages 21297-21306 in the preamble of the proposal.**

DOE supports EPA's overall proposal to allow a source owner or operator to develop a site-specific, risk-based emission limit for total chlorine, because the proposal provides flexibility to the regulated community in providing an alternative means of complying with the total chlorine emission standard. As EPA points out on page 21297, this alternative may be important to the managers of many HWIs, because the total chlorine MACT standard proposed in this notice is substantially more stringent than the current interim standard.

However, the Department has technical reservations about EPA's procedures in that we believe that the proposed risk-based modeling analysis is not consistent with existing EPA guidance. On page 21299, EPA indicates that collocated sources of hydrogen chloride and chlorine gas (other than other HWCs) need not be incorporated in the risk-based analysis, nor do ambient background levels of respiratory irritant HAPs need to be considered. This position seems to contravene EPA-recommended air dispersion modeling practices in the Agency's *Guideline on Air Quality Models* (40 CFR Part 51, Appendix W) related to the need to consider nearby sources, and ambient background. The Guideline is EPA's reference compendium of acceptable air quality dispersion modeling techniques, and its recommended modeling procedures and practices are widely used by regulatory agencies and industry in source impact studies. Guideline models and procedures are to be used for source impact studies that have regulatory implications. Although risk-based models are not explicitly covered in the Guideline, Guideline modeling practices (*e.g.*, consideration of complex terrain, treatment of nearby sources) are relevant to EPA's proposed analysis for risk-based standards for total chlorine. The Guideline states that, "Background concentrations are an essential part of the total air quality concentration to be considered in determining source impacts."¹ The Guideline further indicates that nearby sources expected to cause a significant concentration gradient in the vicinity of the source should be explicitly modeled, and that background concentrations from non-nearby sources, which can be represented by monitored air quality data, should be accounted for in the modeling analysis, if these background ambient levels are measured, or can be estimated. EPA should address this deviation in its modeling guidance in the rule preamble, and EPA should provide the rationale for how this approach is protective with

¹ 68 FR 18463; April 15, 2003

“an ample margin of safety,” as Section 112(d)(4) requires.

DOE agrees with EPA’s proposal to allow a source owner or operator to establish an alternative risk-based, site-specific emission limit for total chlorine, but we believe it is important that EPA explicitly discuss the reduced conservatism and justify or explain the bases or limitations to the changes in modeling procedures.

3. EPA’s Proposed Permitting Approach for HWCs. The Notice of Proposed Rulemaking indicates on pages 21316-21317 that EPA is proposing a permitting approach for both Phase I and Phase II sources that would place the MACT air emissions and related operating requirements in the CAA Title V permit and would require provisions within Resource Conservation and Recovery Act (RCRA) permits for other aspects of HWCs that are governed by RCRA.

DOE supports EPA's effort to remove dual regulation of HWCs under RCRA and the CAA. Specifically, DOE favors the proposed permitting approach, under which the RCRA stack emissions national standards would be removed from the RCRA permit (via permit modification) after the HWC has demonstrated compliance with the MACT standards by conducting a comprehensive performance test and submitting a Notification of Compliance (NOC) to the EPA (or an authorized State). DOE agrees with EPA's assertion that this approach, which was implemented for Phase I sources in 1999, would be preferable to implementing a new permitting scheme.