

memorandum

DATE: May 10, 2002

REPLY TO
ATTN OF: Office of Environmental Policy and Guidance: Boulos: 6-1306

SUBJECT: Proposed Clean Air Act Rule Related to the National Emission Standards for Hazardous Air Pollutants for Semiconductor Manufacturing Operations, for Review and Comment

TO: Distribution

The purpose of this memorandum is to solicit comments from Department of Energy (DOE) program offices and field organizations on the Environmental Protection Agency's (EPA's) notice of proposed rulemaking, "National Emission Standards for Hazardous Air Pollutants: Semiconductor Manufacturing." The proposed rule (67 FR 30848; May 8, 2002) is available at the Office of Environmental Policy and Guidance (EH-41) Home Page at: <http://www.eh.doe.gov/oepa/rules/67/67fr30848.pdf>.

In this notice, the EPA proposes national emission standards for hazardous air pollutants (NESHAP) from existing and new sources at semiconductor manufacturing facilities. The semiconductor manufacturing industry is a segment of the electronics manufacturing industry, and produces integrated circuits or "chips." Examples of semiconductor or related solid-state devices include semiconductor diodes, semiconductor stacks, rectifiers, integrated circuits, and transistors. Applicability provisions for this proposed Subpart BBBBB rule of 40 CFR Part 63 are found at §63.7181 - §63.7182. Department-wide inventory information on hazardous air pollutants (HAP) collected by the Office of Environmental Policy and Guidance (EH-41) in the early 1990s indicated that several DOE sites were engaged in semiconductor manufacturing operations at that time. EPA has identified such operations as major sources of emissions of HAP such as hydrochloric acid (HCl), hydrofluoric acid (HF), glycol ethers, methanol, and xylene. These proposed NESHAP would require all semiconductor manufacturing facilities that are major sources of HAP (or that are located at, or are part of, a major source of HAP) to meet emission standards reflecting the application of the maximum achievable control technology.

Section 112 of the CAA requires EPA to list categories and subcategories of major sources and area sources of HAP and to establish NESHAP for the listed source categories and subcategories. The Semiconductor Manufacturing source category was listed on July 16, 1992 (57 FR 31576).

The EPA estimates nationwide HAP emissions from the semiconductor manufacturing industry to be 636 tpy. More than 90 percent of these emissions come from process vents at these facilities. Five chemicals comprise over 90 percent of the total HAP emissions: HCl, HF, glycol ethers, methanol, and xylene. The EPA estimates that these proposed standards would result in the reduction of all HAP emissions from major sources by 98 percent.

Please review the notice and submit any comments by June 20, 2002, to Mr. Emile Boulos of my staff at: emile.boulos@eh.doe.gov; fax: 202-586-0955. In developing comments, please indicate the specific page and section of the preamble of the Federal Register to which each comment pertains. Also, to assist us in our regulatory tracking activities, we ask that you notify Mr. Boulos if a DOE source under your responsibility is subject to these regulations. Questions or concerns regarding this memorandum should be directed to Mr. Boulos.

A handwritten signature in cursive script that reads "Andy Lawrence".

Andy Lawrence
Director
Office of Environmental Policy and Guidance