







Modifications to the 112(b) Hazardous Air Pollutants

Authority for modifications:

Section 112 of the Act contains a mandate for EPA to evaluate and control emissions of hazardous air pollutants. Section 112(b)(1) includes an initial list of hazardous air pollutants that is composed of specific chemical compounds and compound classes to be used to identify source categories for which the EPA will promulgate emissions standards. The listed categories are subject to emission standards subsequently developed under Section 112. The EPA must periodically review the list of hazardous air pollutants and, where appropriate, revise this list by rule. In addition, any person may petition EPA under Section 112(b)(3) to modify the list by adding or deleting one or more substances. A petitioner seeking to delete a substance must demonstrate that there are adequate data on the health and environmental effects of the substance to determine that emissions, ambient concentrations, bioaccumulation, or deposition of the substance may not reasonably be anticipated to cause any adverse effects to human health or the environment. To demonstrate the burden of proof, a petitioner must provide a detailed evaluation of the available data concerning the substance's potential adverse health and environmental effects, and estimate the potential exposures through inhalation or other routes resulting from emissions of the substance.

Federal Register Notices

<i>Info</i>	<i>Date</i>	<i>Action</i>	<i>Citation</i>	<i>Description</i>	<i>File Download</i>
	12/19/05	Final	70 FR 75047	List of Hazardous Air Pollutants, Petition Process, Lesser Quantity Designations, Source Category List-methyl ethyl ketone (MEK) (2-Butanone) (CAS No. 78-93-3)	 
	5/26/05	Notice of receipt of complete petition	70 FR 30407	Notice of receipt of complete petition to delist 4,4'-methylene diphenyl diisocyanate from the list of hazardous air pollutants. Request for Comments on or before June 27, 2005	 
	11/29/04	Final	69 FR 692988	List of Hazardous Air Pollutants, Petition Process, Lesser Quantity Designations, Source Category List;	 

				Petition To Delist of Ethylene Glycol Monobutyl Ether: Final Rule	
	11/21/03	Proposal	68 FR 65648	Proposal to Delist Ethylene Glycol Monobutyl Ether:Request for Comment	 
	05/30/03	Proposed Rule	68 FR 32605	Hazardous Air Pollutant list-Proposed Rule to Delist Methyl Ethyl Ketone(MEK)-Request for Comment	 
	08/02/00	Final	65 FR 47342	Redefinition of the Glycol Ethers Category Under Section 112(b)(1) of the Clean Air Act and Section 101 of the Comprehensive Environmental Response, Compensation, and Liability Act	 
	08/03/99	Notice	64 FR 42125	Notice of Receipt of Complete Petition for Ethylene Glycol Monobutyl Ether	 
	06/23/99	Notice	64 FR 33453	Notice:Hazardous Air Pollutant list-Methyl Ethyl Ketone(MEK); receipt of a complete petition to delist	 

Modifications

Methyl Ethyl Ketone

On December 19, 2005 the Environmental Protection Agency removed methyl ethyl ketone (MEK) from the list of toxic air pollutants. The total number of listed air toxics is now 187.

After extensive technical review and consideration of public comments, EPA concluded that potential exposures to MEK emitted from industrial processes may not reasonably be anticipated to cause human health or environmental problems.

MEK is used as a solvent in the surface coatings industry, specifically in manufacturing vinyl lacquers, some lacquers and acrylics. Industries also use MEK for producing adhesives, magnetic tapes, printing

inks, degreasing and cleaning fluids, as a dewaxing agent for lubricating oils and as an intermediate in the production of antioxidants and perfumes.

Emissions of MEK will continue to be regulated as a volatile organic compound because of its contribution to the formation of ground-level ozone.

Glycol Ethers

On November 21, 2003 (68FR65648), the EPA proposed to remove the compound ethylene glycol monobutyl ether (EGBE) (2-Butoxyethanol) (Chemical Abstract Service (CAS) No. 111-76-2) from the group of glycol ethers. On November 29, 2004 (69FR69320) this proposal was made final.

On January 12, 1999 (64FR1780), the EPA proposed to modify the definition of glycol ethers to exclude surfactant alcohol ethoxylates and their derivatives (SAED). On August 2, 2000 ([65FR47342](#)), the EPA published the final action. This action deletes each individual compound in a group called the surfactant alcohol ethoxylates and their derivatives (SAED) from the glycol ethers category in the list of hazardous air pollutants (HAP) established by section 112(b)(1) of the Clean Air Act (CAA). Under section 112(b)(3)(D) of the CAA, EPA may delete specific substances from certain listed categories, including glycol ethers. To implement this action, EPA is revising the definition of glycol ethers to exclude the deleted compounds. This action is also making conforming changes with respect to designation of hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). These final rules are being issued by EPA in response to an analysis of potential exposure and hazards of SAED that was prepared by the Soap and Detergent Association (SDA) and submitted to EPA. Based on this information, EPA has made a final determination that there are adequate data on the health and environmental effects of these substances to determine that emissions, ambient concentrations, bioaccumulation, or deposition of these substances may not reasonably be anticipated to cause adverse human health or environmental effects. All information associated with this rule making is available at EPA's Air and Radiation Docket and Information Docket, Room M1500, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460. The docket is an organized and complete file of all the information considered by the EPA in the development of this rulemaking. The docketing system is intended to allow members of the public and industries involved to readily identify and locate documents so that they can effectively participate in the rulemaking process. Along with the proposed and promulgated standards and their preambles, the contents of the docket will serve as the record in the case of judicial review. (See section 307(d)(7)(A) of the CAA.) An index for each docket, as well as individual items contained within the dockets, may be obtained by calling (202) 260-7548 or (202) 260-7549. Alternatively, docket indexes are available by facsimile, as described on the Office of Air and Radiation, Docket and Information Center Website at <http://www.epa.gov/oar/docket>. A reasonable fee may be charged for copying docket materials. A useful reference for the glycol ether category is linked below.

Toxics Release Inventory: List of Toxic Chemicals Within the Glycol Ethers Category (December 2000)EPA-745-R-00-004;



Caprolactam

On July 19, 1993, EPA received a petition from AlliedSignal, Inc., BASF Corporation, and DSM Chemicals North America, Inc. to delete caprolactam (CAS No. 105-60-2) from the hazardous air pollutant list in Section 112(b)(1), 42 U.S.C., Section 7412(b)(1). A Notice of Receipt was published (58FR45081, August 26, 1993) noting that the data filed were adequate to support decision making. After a comprehensive review of the data submitted, the EPA published a proposal to delist caprolactam (60FR48081, September 18, 1995). In order to help address public concern, on March 13, 1995, EPA executed two detailed agreements with AlliedSignal concerning the Irmo, South Carolina manufacturing

facility and another facility located in Chesterfield, Virginia, copies of which are included in the public docket for this rulemaking. AlliedSignal agreed that, if caprolactam was delisted pursuant to the proposal, AlliedSignal would install emissions controls which EPA believed would be equivalent to the controls which would have been required had EPA issued a standard to control these sources under Section 112. The agreed emissions controls are incorporated in federally enforceable operating permits for the affected facilities, and will be in place years earlier than controls would have otherwise been required. In addition, AlliedSignal has agreed to establish a citizen advisory panel concerning the Irmo facility in order to improve communications with the community and to assure that citizens have an ongoing role in implementation of the agreed emission reductions. The public requesting a public hearing. On November 28, 1995, the EPA published a notice of public hearing and an extension of the comment period (60FR58589). After considering all public comments, the EPA published a final rule delisting caprolactam (61FR30816, June 18, 1996).

All information associated with this rule making is located in Docket Number A-94-33 at the Central Docket Section (A-130), Environmental Protection Agency, 401 M St. SW., Washington, D.C. 20460. phone 202-260-7548, fax 202-260-4400, email a-and-r-docket@epamail.epa.gov. The docket includes complete index to all papers filed in this docket, a copy of the original petition, comments submitted, and additional materials supporting the rule. A reasonable fee may be charged for copying. The docket may be inspected in person between 8:00 a.m. and 4:30 p.m. on weekdays at EPA's Central Docket Section, West Tower Lobby, Gallery 1, Waterside Mall, 401 M St., SW, Washington, D.C. 20460.

Hydrogen Sulfide

A clerical error led to the inadvertent addition of hydrogen sulfide to the Section 112(b) list of Hazardous Air Pollutants. However, a Joint Resolution to remove hydrogen sulfide from the Section 112(b)(1) list was passed by the Senate on August 1, 1991 (Congressional Record page S11799), and the House of Representatives on November 25, 1991 (Congressional Record pages H11217-H11219). The Joint Resolution was approved by the President on December 4, 1991. Hydrogen Sulfide is included in Section 112(r) and is subject to the accidental release provisions. A study ([see citation below](#)) was required under [Section 112\(n\)\(5\)](#).

Hydrogen Sulfide Air Emissions Associated with the Extraction of Oil and Natural Gas,
EPA-453/R-93-045,
NTIS (publication # is PB94-131224, \$36.50 hard copy, \$17.50 microfiche).

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