

Upcoming MACT standard targets POTW

Background

Section 112 of the Clean Air Act (CAA) requires that EPA list source categories emitting hazardous air pollutants (HAP) and develop National Emission Standards for Hazardous Air Pollutants (NESHAP) for these source categories.

Publicly owned treatment works (POTW) are one such source. NESHAP development includes defining the maximum achievable control technology (MACT) standard for the industry.

On Aug. 8, 1995, EPA released the presumptive MACT standard for POTW. This presumptive MACT is a preview of the upcoming proposed MACT standard.

This is not a regulation, but is intended to be a source of guidance and information.

EPA has identified POTW headworks, clarifiers, aeration basins, and solids handling operations as potential emission points of as many as 76 of the 189 listed HAP.

The Association of Metropolitan Sewerage Agencies (AMSA) has provided data and rationale that may shorten the list from 76 to 29 compounds (see compound list on reverse side). EPA may allow state or local agencies to shorten the list of 76 compounds on a site-by-site basis if they demonstrate that certain HAP are not released at a POTW.

What facilities are affected?

Under the CAA, a major source emits 10 tons or more per year of any single HAP or 25 tons or more per year of any combination of HAP. A POTW that is a major source must control air emissions if its influent exceeds any two of the three following threshold criteria:

- Dry weather flow is greater than 50 million gallons per day;
- Volatile organic HAP concentration is greater than five parts per million by weight on an annual average basis; or
- Industrial flow is greater than 30 percent by volume.

What action is required?

POTW that exceed two of these three threshold criteria must:

- Develop a control approach (source control, engineering control, or some combination of these) to reduce HAP emissions below the 10/25-ton major source threshold; or
- Use pretreatment or process modifications so that the facility does not meet two of the three threshold criteria; or
- Cover the units preceding biological treatment to capture HAP emissions.

As a result, POTW may require that industries reduce total volume flow and HAP concentration of their effluent.

Future Action

EPA plans to publish the proposed MACT standard in February 1996. After a public comment period and agency review, EPA will publish the final standard (projected for March 1997). Compliance with the final standard is typically required within two years for existing facilities and immediately for new facilities.

For a copy of the presumptive MACT, see EPA's electronic bulletin board at tnbbs.rtpnc.epa.gov or via modem at (919) 541-5742.

For further assistance call Kansas SBEAP at 800-578-8898.



AMSA's proposed target compound list

The Association of Metropolitan Sewerage Agencies (AMSA) proposes that EPA regulate the following 29 hazardous air pollutants under the proposed MACT standard:

Acetaldehyde	Ethylene dichloride (1,2-dichloroethane)	Toluene
Benzene (including benzene from gasoline)	Ethylene glycol dimethyl ether	Trichlorobenzene, 1,2,4-
Butadiene, 1,3-	Methylene chloride (chloromethane)	Trichloroethylene
Carbon disulfide	Methyl chloroform (1,1,1-trichloroethane)	Vinyl acetate
Carbon tetrachloride	Methyl ethyl ketone (2-butanone)	Vinylidene chloride (1,1-dichloroethylene)
Chloroform	Methyl isobutyl ketone (hexone)	Xylenes (isomers and mixture)
Chloroprene	Methyl tert butyl ether	Xylenes (-m)
Cumene	Methyl chloride (dichloromethane)	Xylenes (-o)
Dichlorobenzene(p), 1,4-	Styrene	Xylenes (-p)
Ethyl benzene	Tetrachloroethylene (perchloroethylene)	

EPA's list: The EPA's list of hazardous air pollutants of concern includes the compounds above as well as those below:

Acetonitrile	Ethylene dibromide (dibromoethane)	Napthalene
Acrolein	Ethylene imine (aziridine)	Nitropropane, 2-
Acrylonitrile	Ethylene glycol monobutyl ether	PCB 1221 (monochlorobiphenyl)
Allyl chloride	Ethylene glycol monopropyl ether	PCB 1232 (dichlorobiphenyl)
Benzyl chloride	Ethylene glycol monophenyl ether	PCB 1242 (trichlorobiphenyl)
Biphenyl	Ethylene glycol monoethyl ether	PCB 1248 (quatrochlorobiphenyl)
Bromoform	Ethylene glycol monoethyl ether (cello)	PCB 1254 (pentachlorobiphenyl)
Carbonyl sulfide	Ethylene oxide	Phosgene
Chlorobenzene	Ethylidene dichloride (1,1-dichloroethane)	Propionaldehyde
DDE	Heptachlor	Propylene oxide
Diazomethane	Hexane	Propylene dichloride (1,2-dichloropropane)
Dibenzofurans	Hexachlorobenzene	Styrene oxide
Dichloropropene, 1,3-	Hexachlorobutadiene	Tetrachloroethylene, 1,1,2,2-
Dimethoxybenzidine, 3,3-	Hexachlorocyclopentadiene	Toxaphene (chlorinated catophene)
N,N-Dimethylaniline	Hexachloroethane	Trichlorethane, 1,1,2-
Epichlorohydrin (1-chloro 2,3 epoxypropane)	Hexane	Triethylamine
Epoxybutane, 1,2-	Methyl bromide (bromomethane)	Trimethylpentane, 2,2,4-
Ethyl acrylate	Methyl iodide (Iodomethane)	Vinyl bromide
Ethyl chloride	Methyl methacrylate	Vinyl chloride



SBEAP's mission is to help Kansas small businesses comply with clean air regulations. SBEAP operates through a consortium of The University of Kansas, Kansas State University and Wichita State University. This fact sheet was published by KSU's Pollution Prevention Institute. For more information, call 800-578-8898 or e-mail SBEAP@ksuvm.ksu.edu. The University of Kansas, Kansas State University and Wichita State University are EEO/AA providers. (10/95)

