



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

JUN 20 1996

OFFICE OF
PREVENTION, PESTICIDES, AND
TOXIC SUBSTANCES

Juanita M. Bursley
Environmental Manager
UCAR Carbon Company Inc.
12900 Snow Road
Parma, Ohio 44130

Dear Ms. Bursley:

I am writing in response to your letter dated May 10, 1996 in which you requested clarification concerning the *de minimis* requirements under section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA). Specifically, you requested a determination as to whether you have correctly concluded that the *de minimis* concentration for benzo(a)phenanthrene (CAS No. 218-01-9; also known as chrysene) should be 1.0%. As you correctly stated, only those chemicals designated by the Occupational Safety and Health Administration (OSHA) as carcinogens (i.e., OSHA carcinogens) have the lower *de minimis* of 0.1%. Chemicals are considered to be OSHA carcinogens if they are identified as carcinogens under any of the following references:

- National Toxicology Program (NTP), "Annual Report on Carcinogens" (Latest Edition);
- International Agency for Research on Cancer (IARC) "Monographs" (Latest Edition); or
- 29 CFR 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration

Our review of the data indicates that benzo(a)phenanthrene is not identified as a carcinogen by either NTP or IARC. Although 29 CFR 1910 Subpart Z includes chrysene as part of the listing for coal tar pitch volatiles in table Z-1 and at section 1910.1002, neither chrysene nor coal tar pitch volatiles are currently identified as carcinogens under these sections. Therefore, benzo(a)phenanthrene (chrysene) is not considered to be an OSHA carcinogen and is subject to the 1.0% *de minimis* under EPCRA section 313. Future lists of the EPCRA section 313 chemicals and the guidance document for the polycyclic aromatic compounds category will be updated to reflect this determination.

Q&A On *de minimis* calculations for categories containing members with different *de minimis* levels

Question:

When determining the *de minimis* level for members of an EPCRA section 313 category, the total weight of all the members of the category in the mixture must be counted and compared to the applicable *de minimis* level. How would a facility determine the *de minimis* level for a mixture containing members of a category, such as the polycyclic aromatic compounds category, where one or more of the members has a different *de minimis* level than the others?

Answer:

For delimited categories in which one or more members have a lower *de minimis* level than the other members, two calculations are done. First, the weight of all members of the category in the mixture that have a 0.1% *de minimis* is determined and compared to the 0.1% *de minimis* level. Second, the weight of all members of the category in the mixture (both those with 0.1% and 1.0% *de minimis*) is determined and compared to the 1.0% *de minimis*. If only the first *de minimis* calculation is exceeded then only those chemicals with the 0.1% *de minimis* must be included in threshold and release determinations. Therefore, category members with the 1.0% *de minimis* would be excluded from threshold and release determinations if only the first *de minimis* calculation is exceeded. If the second *de minimis* calculation is exceeded then all of the category members in the mixture must be included in threshold and release determinations.

Dibenzo(a,h)pyrene (CAS No. 000189-64-0)	2B
Dibenzo(a,l)pyrene (CAS No. 000191-30-0)	2B
7H-Dibenzo(c,g)carbazole (CAS No. 000194-59-2)	2B
7,12-dimethylbenz(a)anthracene (CAS No. 000057-97-6)	2B
Indeno(1,2,3-cd)pyrene (CAS No. 000193-39-5)	2B
5-Methylchrysene (CAS No. 003697-24-3)	2B
1-Nitropyrene (CAS No. 005522-43-0)	2B
Potassium bromate (CAS No. 007758-01-2)	2B
Sodium o-phenylphenoxide (CAS No. 000132-27-4)	2B

Category Name

IARC

NTP

Polychlorinated alkanes (C₁₀-C₁₃)
(Only those members of the category that
have an average chain length of C₁₂
and an average chlorine content of 60%)

2B

X

3,3'-Dimethoxybenzidine hydrochloride (o-dianisidine hydrochloride) (CAS No. 111984-09-9)	2B	
3,3'-Dimethylbenzidine dihydrochloride (o-tolidine dihydrochloride) (CAS No. 000612-82-8)		X
3,3'-Dimethylbenzidine dihydrofluoride (o-tolidine dihydrofluoride) (CAS No. 041766-75-0)		X
2,4-D isopropyl ester (CAS No. 000094-11-1)	2B	
2,4-DP (dichlorprop) (CAS No. 000120-36-5)	2B	
2,4-D propylene glycol butyl ether ester (CAS No. 001320-18-9)	2B	
2,4-D sodium salt (CAS No. 002702-72-9)	2B	
Mecoprop (CAS No. 000093-65-2)	2B	
Methoxone ((4-Chloro-2-methylphenoxy) acetic acid) (MCPA) (CAS No. 000094-74-6)	2B	
Methoxone sodium salt (4-chloro-2-methylphenoxy) acetate sodium salt) (CAS No. 003653-48-3)	2B	
Phenytoin (CAS No. 000057-41-0)	2B	X
Benz(a)anthracene (CAS No. 000056-55-3)	2A	
Benzo(a)pyrene (CAS No. 000050-32-8)	2A	
Benzo(b)fluoranthene (CAS No. 000205-99-2)	2B	
Benzo(j)fluoranthene (CAS No. 000205-82-3)	2B	
Benzo(k)fluoranthene (CAS No. 000207-08-9)	2B	
Benzo(rst)pentaphene (CAS No. 000189-55-9)	2B	
Dibenz(a,h)acridine (CAS No. 000226-36-8)	2A	
Dibenz(a,j)acridine (CAS No. 000224-42-0)	2B	
Dibenzo(a,h)anthracene (CAS No. 000053-70-3)	2B	
Dibenzo(a,e)pyrene (CAS No. 000192-65-4)	2B	

New Chemicals with 0.1% De Minimis

<u>Chemical Name</u>	<u>IARC</u>	<u>NTP</u>
Atrazine (6-chloro-N-ethyl-N'-(1-methylethyl)-1,3,5,-triazine-2,4-diamine) (CAS No. 001912-24-9)	2B	
Chlorendic acid (CAS No. 000115-28-6)	2B	X
3-Chloro-2-methyl-1-propene (CAS No. 000563-47-3)		X
p-Chloro-o-toluidine (CAS No. 000095-69-2)	2B	X
C.I. Acid Red 114 (CAS No. 006459-94-5)		X
C.I. Direct Blue 218 (CAS No. 028407-37-6)		X
2,4-D butoxyethyl ester (CAS No. 001929-73-3)	2B	
2,4-D butyl ester (CAS No. 000094-80-4)	2B	
2,4-D chlorocrotyl ester (CAS No. 002971-38-2)	2B	
2,4-D 2-ethylhexyl ester (CAS No. 001928-43-4)	2B	
2,4-D 2-ethyl-4-methylpentyl ester (CAS No. 053404-37-8)	2B	
3,3'-Dichlorobenzidine dihydrochloride (CAS No. 000612-83-9)	2B	X
3,3'-Dichlorobenzidine sulfate (CAS No. 064969-34-2)	2B	
trans-1,3-Dichloropropene (CAS No. 010061-02-6)	2B	
Diglycidyl resorcinol ether (CAS No. 000101-90-6)	2B	X
3,3'-Dimethoxybenzidine dihydrochloride (o-Dianisidine dihydrochloride) (CAS No. 020325-40-0)	2B	

In addition to addressing your specific question, I have also attached an updated list of those recently added chemicals that are subject to the 0.1% *de minimis*. The new list includes some chemicals that were not included on the original list that was provided to you by the EPCRA Hotline. I have also included a recent response to a question concerning how to determine thresholds for categories that contain chemicals with both the 1.0 and 0.1% *de minimis*.

I hope that this information is helpful. If you have any further questions concerning the EPCRA section 313 chemical list, please contact Dr. Daniel R. Bushman at 202-260-3882.

Sincerely,

for Maria J. Doa
Maria J. Doa, Ph.D.
Acting Chief
Toxics Release Inventory Branch

attachments (2)