

**15A NCAC 02D .1104 TOXIC AIR POLLUTANT GUIDELINES**

A facility shall not emit any of the following toxic air pollutants in such quantities that may cause or contribute beyond the facility's premises to any significant ambient air concentration that may adversely affect human health, except as allowed pursuant to 15A NCAC 02Q .0700. In determining these significant ambient air concentrations, the Division shall be governed by the following list of acceptable ambient levels in milligrams per cubic meter at 77° F (25° C) and 29.92 inches (760 mm) of mercury pressure, except for asbestos:

Acceptable Ambient Levels (AAL) in Milligrams per Cubic Meter (mg/m <sup>3</sup> ) Except Where Noted				
Pollutant (CAS Number)	Annual (Carcinogens)	24-hour (Chronic Toxicants)	1-hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
acetaldehyde (75-07-0)				27
acetic acid (64-19-7)				3.7
acrolein (107-02-8)				0.08
acrylonitrile (107-13-1)		0.03	1	
ammonia (7664-41-7)				2.7
aniline (62-53-3)			1	
arsenic and inorganic arsenic compounds	2.1 x 10 <sup>-6</sup>			
asbestos (1332-21-4)	2.8 x 10 <sup>-6</sup> fibers/ml			
aziridine (151-56-4)		0.006		
benzene (71-43-2)	1.2 x 10 <sup>-4</sup>			
benzidine and salts (92-87-5)	1.5 x 10 <sup>-8</sup>			
benzo(a)pyrene (50-32-8)	3.3 x 10 <sup>-5</sup>			
benzyl chloride (100-44-7)			0.5	
beryllium (7440-41-7)	4.1 x 10 <sup>-6</sup>			
beryllium chloride (7787-47-5)	4.1 x 10 <sup>-6</sup>			
beryllium fluoride (7787-49-7)	4.1 x 10 <sup>-6</sup>			
beryllium nitrate (13597-99-4)	4.1 x 10 <sup>-6</sup>			
bioavailable chromate pigments, as chromium (VI) equivalent	8.3 x 10 <sup>-8</sup>			
bis-chloromethyl ether (542-88-1)	3.7 x 10 <sup>-7</sup>			
bromine (7726-95-6)				0.2
1,3-butadiene (106-99-0)	4.4 x 10 <sup>-4</sup>			
cadmium (7440-43-9)	5.5 x 10 <sup>-6</sup>			
cadmium acetate (543-90-8)	5.5 x 10 <sup>-6</sup>			
cadmium bromide (7789-42-6)	5.5 x 10 <sup>-6</sup>			
carbon disulfide (75-15-0)		0.186		
carbon tetrachloride (56-23-5)	6.7 x 10 <sup>-3</sup>			
chlorine (7782-50-5)		0.0375		0.9
chlorobenzene (108-90-7)		2.2		
chloroform (67-66-3)	4.3 x 10 <sup>-3</sup>			
chloroprene (126-99-8)		0.44	3.5	
cresol (1319-77-3)			2.2	
p-dichlorobenzene (106-46-7)				66
di(2-ethylhexyl)phthalate (117-81-7)		0.03		
dimethyl sulfate (77-78-1)		0.003		
1,4-dioxane (123-91-1)		0.56		
epichlorohydrin (106-89-8)	8.3 x 10 <sup>-2</sup>			
ethyl acetate (141-78-6)			140	

Acceptable Ambient Levels (AAL) in Milligrams per Cubic Meter (mg/m <sup>3</sup> ) Except Where Noted				
Pollutant (CAS Number)	Annual (Carcinogens)	24-hour (Chronic Toxicants)	1-hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
ethylenediamine (107-15-3)		0.3	2.5	
ethylene dibromide (106-93-4)	4.0 x 10 <sup>-4</sup>			
ethylene dichloride (107-06-2)	3.8 x 10 <sup>-3</sup>			
ethylene glycol monoethyl ether (110-80-5)		0.12	1.9	
ethylene oxide (75-21-8)	2.7 x 10 <sup>-5</sup>			
ethyl mercaptan (75-08-1)			0.1	
fluorides		0.016	0.25	
formaldehyde (50-00-0)				0.15
hexachlorocyclopentadiene (77-47-4)		0.0006	0.01	
hexachlorodibenzo-p-dioxin (57653-85-7)	7.6 x 10 <sup>-8</sup>			
n-hexane (110-54-3)		1.1		
hexane isomers except n-hexane				360
hydrazine (302-01-2)		0.0006		
hydrogen chloride (7647-01-0)				0.7
hydrogen cyanide (74-90-8)		0.14	1.1	
hydrogen fluoride (7664-39-3)		0.03		0.25
hydrogen sulfide (7783-06-4)		0.12		
maleic anhydride (108-31-6)		0.012	0.1	
manganese and compounds		0.031		
manganese cyclopentadienyl tricarbonyl (12079-65-1)		0.0006		
manganese tetroxide (1317-35-7)		0.0062		
mercury, alkyl		0.00006		
mercury, aryl and inorganic compounds		0.0006		
mercury, vapor (7439-97-6)		0.0006		
methyl bromide (74-83-9)	0.005 <sup>a</sup>	1.0		
methyl chloroform (71-55-6)		12		245
methylene chloride (75-09-2)	2.4 x 10 <sup>-2</sup>		1.7	
methyl ethyl ketone (78-93-3)		3.7		88.5
methyl isobutyl ketone (108-10-1)		2.56		30
methyl mercaptan (74-93-1)			0.05	
nickel carbonyl (13463-39-3)		0.0006		
nickel metal (7440-02-0)		0.006		
nickel, soluble compounds, as nickel		0.0006		
nickel subsulfide (12035-72-2)	2.1 x 10 <sup>-6</sup>			
nitric acid (7697-37-2)				1
nitrobenzene (98-95-3)		0.06	0.5	
n-nitrosodimethylamine (62-75-9)	5.0 x 10 <sup>-5</sup>			
non-specific chromium (VI) compounds, as chromium (VI) equivalent	8.3 x 10 <sup>-8</sup>			
pentachlorophenol (87-86-5)		0.003	0.025	
perchloroethylene (127-18-4)	1.9 x 10 <sup>-1</sup>			
phenol (108-95-2)			0.95	

Acceptable Ambient Levels (AAL) in Milligrams per Cubic Meter (mg/m <sup>3</sup> ) Except Where Noted				
Pollutant (CAS Number)	Annual (Carcinogens)	24-hour (Chronic Toxicants)	1-hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
phosgene (75-44-5)		0.0025		
phosphine (7803-51-2)				0.13
polychlorinated biphenyls (1336-36-3)	8.3 x 10 <sup>-5</sup>			
soluble chromate compounds, as chromium (VI) equivalent		6.2 x 10 <sup>-4</sup>		
styrene (100-42-5)			10.6	
sulfuric acid (7664-93-9)		0.012	0.1	
tetrachlorodibenzo-p-dioxin (1746-01-6)	3.0 x 10 <sup>-9</sup>			
1,1,2,2-tetrachloroethane (79-34-5)	6.3 x 10 <sup>-3</sup>			
toluene (108-88-3)		4.7		56
toluene diisocyanate, 2,4- (584-84-9) and 2,6- (91-08-7) isomers		0.0002		
trichloroethylene (79-01-6)	5.9 x 10 <sup>-2</sup>			
vinyl chloride (75-01-4)	3.8 x 10 <sup>-4</sup>			
vinylidene chloride (75-35-4)		0.12		
xylene (1330-20-7)		2.7		65

<sup>a</sup> This compound has not been defined as a carcinogen.

*History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3); 143-215.107(a)(4); 143-215.107(a)(5); 143B-282;  
 Eff. May 1, 1990;  
 Amended Eff. September 1, 1992; March 1, 1992;  
 Temporary Amendment Eff. July 20, 1997;  
 Amended Eff. July 7, 2014; May 1, 2014; March 1, 2010; June 1, 2008; April 1, 2005; April 1, 2001;  
 July 1, 1998;  
 Readopted Eff. July 1, 2018;  
 Amended Eff. November 1, 2020.