

1 15A NCAC 02D .0546 is adopted with changes as published in 34:15 NCR 1336 as follows:

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3 **15A NCAC 02D .0546 CONTROL OF EMISSIONS FROM LOG FUMIGATION OPERATIONS**

4 (a) Purpose. The purpose of this Rule is to establish emission control requirements for hazardous air pollutants and
5 toxic air pollutants from log fumigation operations.

6 (b) Definitions. For the purpose of this Rule, the following definitions and definitions in this Subchapter or 15A
7 NCAC 02Q apply:

8 (1) "Bulk or tarpaulin log fumigation" means the fumigation of logs that are placed in piles on an
9 impermeable surface and covered with a weighted-down tarpaulin.

10 (2) "Chamber log fumigation" means the fumigation of logs inside a sealed building or structure that
11 is specifically used for fumigation. Chambers used for fumigation may be either atmospheric or
12 vacuum type.

13 (3) "Container log fumigation" means the fumigation of logs inside a container ~~and~~ where the doors
14 of the container are closed and sealed.

15 (4) "Fumigant" means the hazardous air pollutant or toxic air pollutant that is used to eliminate the
16 pests within the logs.

17 (5) "Fumigation operation" means the period of time that the fumigant is injected and retained in the
18 ~~container or chamber~~ container, chamber, or bulk piles for the purposes of treating the logs for
19 insects and other pests to prevent the transfer of exotic organisms.

20 (6) "Hazardous air pollutant" means any pollutant listed under Section 112(b) of the federal Clean Air
21 ~~Act.~~ Act in 42 U.S.C. 7412(b).

22 (7) "Public right-of-way" means an access area where people can reasonably be expected to be
23 present for any or all parts of a 24-hour period.

24 (8) "Toxic air pollutant" means any of the carcinogens, chronic toxicants, acute systemic toxicants, or
25 acute irritants that are listed in 15A NCAC 02D .1104.

26 (c) Applicability. This Rule applies to new, existing, and modified bulk, chamber, and container log fumigation
27 operations that use a hazardous air pollutant or toxic air pollutant as a fumigant.

28 (d) Emission Control Requirements. The owner or operator of a log fumigation operation shall comply with the
29 Toxic Air Pollutant Guidelines specified in 15A NCAC 02D .1104 and follow the procedures specified in 15A
30 NCAC 02D .1106, 15A NCAC 02Q .0709, and .0710.

31 (e) The owner or operator shall post signs notifying the public of fumigation operations. The signs shall be visible
32 and legible to the public at the fence or property line closest to any public right-of-way. The signs shall remain in
33 place at all times and shall conform to the format for placards mandated by the federally approved fumigant label.

34 (f) Monitoring, Recordkeeping and Reporting. The owner or operator of a bulk, chamber, or container log fumigation
35 operation shall comply with the requirements pursuant to 15A NCAC 02D-~~0600~~, .0600:

36 (1) The owner or operator shall send an initial notification of commencement of operations to the
37 appropriate Division of Air Quality regional office within 15 days of initial fumigation start-up.

1 (2) The owner or operator shall submit a quarterly summary report, with the original signature of the
2 ~~Permittee~~ permittee or the authorized responsible official, of the monitoring and recordkeeping
3 activities postmarked no later than 30 days after the end of each calendar year quarter. The report
4 shall contain the following:

5 (A) the company name, address, and facility ID number;

6 (B) the calendar year quarter represented by the report;

7 (C) the daily and total fumigant usage in pounds for each quarter;

8 (D) a summary of the monitoring data required by the permit that was collected during the
9 quarter; and

10 (E) a summary of exceedances from the levels established in the permit that occurred during
11 the quarter of any monitoring parameters.

12 (g) Compliance Schedule. The owner or operator of an existing log fumigation operation subject to this Rule shall
13 achieve compliance within 60 days after the Rule is effective or in accordance with an alternate compliance schedule
14 approved by the Director. In establishing an alternate compliance schedule, the Director shall consider whether the
15 compliance approach chosen by the facility involves the purchase and installation of a control device. New and
16 modified facilities shall achieve compliance with this Rule upon start-up.

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18 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4); 143-215.107(a)(5);
19 Eff. November 1, 2020.

1 15A NCAC 02D .1104 is amended with changes as published in 34:15 NCR 1337 as follows:

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3 **15A NCAC 02D .1104 TOXIC AIR POLLUTANT GUIDELINES**

4 A facility shall not emit any of the following toxic air pollutants in such quantities that may cause or contribute beyond
5 the facility's premises to any significant ambient air concentration that may adversely affect human health, except as
6 allowed pursuant to 15A NCAC 02Q .0700. In determining these significant ambient air concentrations, the Division
7 shall be governed by the following list of acceptable ambient levels in milligrams per cubic meter at 77° F (25° C)
8 and 29.92 inches (760 mm) of mercury pressure, except for asbestos:
9

Acceptable Ambient Levels (AAL) in Milligrams per Cubic Meter (mg/m ³) 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 ⁻⁶			
asbestos (1332-21-4)	2.8 x 10 ⁻⁶ fibers/ml			
aziridine (151-56-4)		0.006		
benzene (71-43-2)	1.2 x 10 ⁻⁴			
benzidine and salts (92-87-5)	1.5 x 10 ⁻⁸			
benzo(a)pyrene (50-32-8)	3.3 x 10 ⁻⁵			
benzyl chloride (100-44-7)			0.5	
beryllium (7440-41-7)	4.1 x 10 ⁻⁶			
beryllium chloride (7787-47-5)	4.1 x 10 ⁻⁶			
beryllium fluoride (7787-49-7)	4.1 x 10 ⁻⁶			
beryllium nitrate (13597-99-4)	4.1 x 10 ⁻⁶			
bioavailable chromate pigments, as chromium (VI) equivalent	8.3 x 10 ⁻⁸			

Acceptable Ambient Levels (AAL) in Milligrams per Cubic Meter (mg/m ³) Except Where Noted				
Pollutant (CAS Number)	Annual (Carcinogens)	24-hour (Chronic Toxicants)	1-hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
bis-chloromethyl ether (542-88-1)	3.7×10^{-7}			
bromine (7726-95-6)				0.2
1,3-butadiene (106-99-0)	4.4×10^{-4}			
cadmium (7440-43-9)	5.5×10^{-6}			
cadmium acetate (543-90-8)	5.5×10^{-6}			
cadmium bromide (7789-42-6)	5.5×10^{-6}			
carbon disulfide (75-15-0)		0.186		
carbon tetrachloride (56-23-5)	6.7×10^{-3}			
chlorine (7782-50-5)		0.0375		0.9
chlorobenzene (108-90-7)		2.2		
chloroform (67-66-3)	4.3×10^{-3}			
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)	8.3×10^{-2}			
ethyl acetate (141-78-6)			140	
ethylenediamine (107-15-3)		0.3	2.5	
ethylene dibromide (106-93-4)	4.0×10^{-4}			
ethylene dichloride (107-06-2)	3.8×10^{-3}			
ethylene glycol monoethyl ether (110-80-5)		0.12	1.9	
ethylene oxide (75-21-8)	2.7×10^{-5}			
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	7.6×10^{-8}			

Acceptable Ambient Levels (AAL) in Milligrams per Cubic Meter (mg/m ³) Except Where Noted				
Pollutant (CAS Number)	Annual (Carcinogens)	24-hour (Chronic Toxicants)	1-hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
(57653-85-7)				
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		
<u>methyl bromide (74-83-9)</u> [Option 1] [Option 2] [Option 3]	<u>0.005^a</u>	<u>[0.005]</u> <u>[0.078]</u> <u>[0.078] 1.0</u>		
methyl chloroform (71-55-6)		12		245
methylene chloride (75-09-2)	2.4 x 10 ⁻²		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 ⁻⁶			

Acceptable Ambient Levels (AAL) in Milligrams per Cubic Meter (mg/m ³) Except Where Noted				
Pollutant (CAS Number)	Annual (Carcinogens)	24-hour (Chronic Toxicants)	1-hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
nitric acid (7697-37-2)				1
nitrobenzene (98-95-3)		0.06	0.5	
n-nitrosodimethylamine (62-75-9)	5.0 x 10 ⁻⁵			
non-specific chromium (VI) compounds, as chromium (VI) equivalent	8.3 x 10 ⁻⁸			
pentachlorophenol (87-86-5)		0.003	0.025	
perchloroethylene (127-18-4)	1.9 x 10 ⁻¹			
phenol (108-95-2)			0.95	
phosgene (75-44-5)		0.0025		
phosphine (7803-51-2)				0.13
polychlorinated biphenyls (1336-36-3)	8.3 x 10 ⁻⁵			
soluble chromate compounds, as chromium (VI) equivalent		6.2 x 10 ⁻⁴		
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 ⁻⁹			
1,1,2,2-tetrachloroethane (79-34-5)	6.3 x 10 ⁻³			
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 ⁻²			
vinyl chloride (75-01-4)	3.8 x 10 ⁻⁴			
vinylidene chloride (75-35-4)		0.12		
xylene (1330-20-7)		2.7		65

^a This compound has not been defined as a carcinogen.

1 *History Note:* Authority G.S. 143-215.3(a)(1); ~~143-215.107(a)(3),(4),(5); 143-215.107(a)(3); 143-215.107(a)(4);~~
2 ~~143-215.107(a)(5);~~ 143B-282;
3 *Eff. May 1, 1990;*
4 *Amended Eff. September 1, 1992; March 1, 1992;*
5 *Temporary Amendment Eff. July 20, 1997;*
6 *Amended Eff. July 7, 2014; May 1, 2014; March 1, 2010; June 1, 2008; April 1, 2005; April 1, 2001;*
7 *July 1, 1998;*
8 *Readopted Eff. July 1, ~~2018-2018;~~*
9 *Amended Eff. November 1, 2020.*
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