

GENERAL ASSEMBLY OF NORTH CAROLINA  
SESSION 2019

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SENATE BILL DRS45421-MH-174

Short Title: Ban Use of Methyl Bromide in Log Fumigation. (Public)

Sponsors: Senator Peterson (Primary Sponsor).

Referred to:

1 A BILL TO BE ENTITLED  
2 AN ACT TO BAN THE USE OF METHYL BROMIDE IN LOG FUMIGATION  
3 OPERATIONS IN ORDER TO PROTECT THE ENVIRONMENT AND THE PUBLIC'S  
4 HEALTH AND SAFETY.

5 Whereas, methyl bromide is a hazardous air pollutant and ozone-depleting substance  
6 used in log fumigation operations; and

7 Whereas, methyl bromide has proven to be an extremely toxic airborne gas that can  
8 cause severe respiratory and neurological damage in humans; and

9 Whereas, due to its ozone-depleting properties, most uses of methyl bromide were  
10 banned by the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer and  
11 production and import of it was phased out on January 1, 2005; and

12 Whereas, the Environmental Protection Agency exempted the use of methyl bromide  
13 for quarantine and preshipment treatment of commodities such as whole logs from the Montreal  
14 Protocol ban based on a finding that this was an "essential use"; and

15 Whereas, the current process for log fumigation with methyl bromide emits to the  
16 atmosphere all the fumigant from the containers or enclosures where fumigation occurs; and

17 Whereas, workers operating the fumigation chambers or sites have a significant risk  
18 of both acute and chronic inhalation-related health impacts; and

19 Whereas, these emissions are also known to travel long distances from fumigation  
20 sites to neighboring residential and commercial areas and expose the public to significant  
21 negative health effects; and

22 Whereas, because methyl bromide is a colorless, odorless gas, significant exposure  
23 and a delayed onset of adverse effects can occur in exposed populations beyond the boundary of  
24 log fumigation facilities; and

25 Whereas, there have been over 1000 documented poisoning incidents caused by  
26 methyl bromide, ranging from skin and eye irritation to death; and

27 Whereas, most fatalities and injuries have occurred when the chemical was used as a  
28 fumigant; and

29 Whereas, there are no federal or State air quality regulations to protect the public from  
30 acute and chronic inhalation exposure to methyl bromide from log fumigation operations; and

31 Whereas, the American Conference of Governmental Industrial Hygienists has  
32 recommended a threshold limit value-time weighted average (TLV-TWA) of 5 ppm averaged  
33 over an eight-hour workday as a standard for prevention of adverse health effects in occupational  
34 exposure; and

35 Whereas, the Environmental Management Commission decided in January 2020 to  
36 proceed to public hearing on an Acceptable Ambient Level (AAL) that sets limits on emissions



1 of methyl bromide beyond the fumigation facility boundary of 0.078 mg/m<sup>3</sup> with a 24-hour  
2 averaging time as an acute standard, and 0.005 mg/m<sup>3</sup> with an annual averaging time as a chronic  
3 standard; and

4 Whereas, the Environmental Management Commission will finalize these AAL  
5 standards later this year; and

6 Whereas, exporters of whole logs have alternative options such as debarking and  
7 fumigation with less toxic substances to prepare logs for export; Now, therefore,  
8 The General Assembly of North Carolina enacts:

9 **SECTION 1.** G.S. 143-443(a) is amended by adding a new subdivision to read:

10 "(7) Use methyl bromide as a fumigant for whole logs; provided that the Board  
11 may grant to any person, upon request, a temporary permit authorizing the  
12 person, until November 30, 2023, to use methyl bromide as a fumigant for  
13 whole logs."

14 **SECTION 2.** The Pesticide Board shall adopt emergency rules pursuant to  
15 G.S. 150B-21.1A to impose a standard of 5 ppm for average airborne exposure in any eight-hour  
16 period for employees of any log fumigation operation issued a temporary permit under  
17 G.S. 143-443(a)(7), as enacted by Section 1 of this act. The temporary permit shall also include  
18 all of the following:

- 19 (1) Provisions requiring compliance with the acute and chronic Acceptable  
20 Ambient Level standards for control of emissions from log fumigation  
21 operations adopted by the Environmental Management Commission.
- 22 (2) Monitoring of ambient emissions at the facility boundary by the permittee  
23 with at least monthly frequency. Monitoring results shall be reported both to  
24 the Board and the Division of Air Quality of the Department of Environmental  
25 Quality and, to the extent allowed by applicable law, shall be made available  
26 to the public by the Board.

27 **SECTION 3.** The sum of fifty thousand dollars (\$50,000) in nonrecurring funds for  
28 the 2020-2021 fiscal year is appropriated to the Department of Agriculture and Consumer  
29 Services for implementation of this act.

30 **SECTION 4.** Section 1 of this act becomes effective December 1, 2020. Section 3  
31 of this act becomes effective July 1, 2020. The remainder of this act is effective when it becomes  
32 law.