



## 104TH GENERAL ASSEMBLY

### State of Illinois

2025 and 2026

HB3505

Introduced 2/18/2025, by Rep. Rita Mayfield

#### SYNOPSIS AS INTRODUCED:

415 ILCS 5/9.17

Amends the Environmental Protection Act. In provisions regarding ethylene oxide emissions from nonnegligible ethylene oxide emissions sources, adds requirements for an Ambient Air Monitoring Plan that substantially mirror requirements in provisions regarding ethylene oxide emissions from ethylene oxide sterilization sources. Changes the definition of "nonnegligible ethylene oxide emissions source" to any ethylene oxide emissions source permitted by the Agency that currently emits more than 30 pounds of ethylene oxide, with certain other requirements (rather than an ethylene oxide emissions source permitted by the Agency that currently emits more than 150 pounds of ethylene oxide, with certain other requirements). Removes a provision in that definition that excludes facilities that are ethylene oxide sterilization sources or hospitals that are licensed under the Hospital Licensing Act or operated under the University of Illinois Hospital Act.

LRB104 12091 BDA 22189 b

1 AN ACT concerning safety.

2 **Be it enacted by the People of the State of Illinois,**  
3 **represented in the General Assembly:**

4 Section 5. The Environmental Protection Act is amended by  
5 changing Section 9.17 as follows:

6 (415 ILCS 5/9.17)

7 Sec. 9.17. Nonnegligible ethylene oxide emissions sources.

8 (a) In this Section, "nonnegligible ethylene oxide  
9 emissions source" means any ~~an~~ ethylene oxide emissions source  
10 permitted by the Agency that currently emits more than 30 ~~150~~  
11 pounds of ethylene oxide as reported on the source's 2017  
12 Toxic Release Inventory and is located in a county with a  
13 population of at least 700,000 based on 2010 census data.  
14 ~~"Nonnegligible ethylene oxide emissions source" does not~~  
15 ~~include facilities that are ethylene oxide sterilization~~  
16 ~~sources or hospitals that are licensed under the Hospital~~  
17 ~~Licensing Act or operated under the University of Illinois~~  
18 ~~Hospital Act.~~

19 (b) Beginning 180 days after June 21, 2019 (the effective  
20 date of Public Act 101-23), no nonnegligible ethylene oxide  
21 emissions source shall conduct activities that cause ethylene  
22 oxide emissions unless the owner or operator of the  
23 nonnegligible ethylene oxide emissions source submits for

1 review and approval of the Agency a plan describing how the  
2 owner or operator will continuously collect emissions  
3 information. The plan must specify locations at the  
4 nonnegligible ethylene oxide emissions source from which  
5 emissions will be collected and identify equipment used for  
6 collection and analysis, including the individual system  
7 components.

8 (1) The owner or operator of the nonnegligible  
9 ethylene oxide emissions source must provide a notice of  
10 acceptance of any conditions added by the Agency to the  
11 plan or correct any deficiencies identified by the Agency  
12 in the plan within 3 business days after receiving the  
13 Agency's conditional acceptance or denial of the plan.

14 (2) Upon the Agency's approval of the plan the owner  
15 or operator of the nonnegligible ethylene oxide emissions  
16 source shall implement the plan in accordance with its  
17 approved terms.

18 (b-5) Beginning 180 days after the effective date of this  
19 amendatory Act of the 104th General Assembly, no nonnegligible  
20 ethylene oxide emissions source shall conduct activities that  
21 cause ethylene oxide emissions unless the owner or operator of  
22 the nonnegligible ethylene oxide emissions source submits for  
23 review and approval by the Agency an Ambient Air Monitoring  
24 Plan.

25 (1) The Ambient Air Monitoring Plan shall include, at  
26 a minimum, the following:

1           (A) Detailed plans to collect and analyze air  
2           samples for ethylene oxide, pursuant to the United  
3           States Environmental Protection Agency Methods 325A  
4           and 325B, on at least a quarterly basis near the  
5           property boundaries of the nonnegligible ethylene  
6           oxide emissions source and at community locations with  
7           the highest modeled impact pursuant to the modeling  
8           conducted under subsection (c). Each quarterly  
9           sampling under this subsection shall be conducted over  
10          a multiple-day sampling period.

11          (B) A schedule for implementation.

12          (C) The name of the independent third party  
13          company that will be performing sampling and analysis  
14          and the company's experience with similar testing.

15          (2) The owner or operator of the nonnegligible  
16          ethylene oxide emissions source must provide a notice of  
17          acceptance of any conditions added by the Agency to the  
18          Ambient Air Monitoring Plan, or correct any deficiencies  
19          identified by the Agency in the Ambient Air Monitoring  
20          Plan, within 3 business days after receiving the Agency's  
21          conditional acceptance or denial of the plan.

22          (3) Upon the Agency's approval of the plan, the owner  
23          or operator of the nonnegligible ethylene oxide emissions  
24          source shall implement the Ambient Air Monitoring Plan in  
25          accordance with its approved terms.

26          (c) Beginning 180 days after June 21, 2019 (the effective

1 date of Public Act 101-23), no nonnegligible ethylene oxide  
2 emissions source shall conduct activities that cause ethylene  
3 oxide emissions unless the owner or operator of the  
4 nonnegligible ethylene oxide emissions source has performed  
5 dispersion modeling and the Agency approves the dispersion  
6 modeling.

7 (1) Dispersion modeling must:

8 (A) be conducted using accepted United States  
9 Environmental Protection Agency methodologies,  
10 including Appendix W to 40 CFR 51, except that no  
11 background ambient levels of ethylene oxide shall be  
12 used;

13 (B) use emissions and stack parameter data from  
14 any emissions test conducted and 5 years of hourly  
15 meteorological data that is representative of the  
16 nonnegligible ethylene oxide emissions source's  
17 location; and

18 (C) use a receptor grid that extends to at least  
19 one kilometer around the nonnegligible ethylene oxide  
20 emissions source and ensures the modeling domain  
21 includes the area of maximum impact, with receptor  
22 spacing no greater than every 50 meters starting from  
23 the building walls of the nonnegligible ethylene oxide  
24 emissions source extending out to a distance of at  
25 least 1/2 kilometer, then every 100 meters extending  
26 out to a distance of at least one kilometer.

1           (2) The owner or operator of the nonnegligible  
2 ethylene oxide emissions source shall submit revised  
3 results of all modeling if the Agency accepts with  
4 conditions or declines to accept the results submitted.

5           (d) Beginning 180 days after June 21, 2019 (the effective  
6 date of Public Act 101-23), no nonnegligible ethylene oxide  
7 emissions source shall conduct activities that cause ethylene  
8 oxide emissions unless the owner or operator of the  
9 nonnegligible ethylene oxide emissions source obtains a permit  
10 consistent with the requirements in this Section from the  
11 Agency to conduct activities that may result in the emission  
12 of ethylene oxide.

13           (e) The Agency in issuing the applicable permits to a  
14 nonnegligible ethylene oxide emissions source shall:

15               (1) impose a site-specific annual cap on ethylene  
16 oxide emissions set to protect the public health; and

17               (2) include permit conditions granting the Agency the  
18 authority to reopen the permit if the Agency determines  
19 that the emissions of ethylene oxide from the permitted  
20 nonnegligible ethylene oxide emissions source pose a risk  
21 to the public health as defined by the Agency.

22           (Source: P.A. 101-23, eff. 6-21-19; 102-558, eff. 8-20-21.)