



## 101ST GENERAL ASSEMBLY

### State of Illinois

2019 and 2020

HB3888

Introduced 10/17/2019, by Rep. Rita Mayfield - Joyce Mason - Sam Yingling - Anne Stava-Murray - David McSweeney, et al.

#### SYNOPSIS AS INTRODUCED:

415 ILCS 5/9.18 new

Amends the Environmental Protection Act. Provides requirements for the prohibition of the conduct of ethylene oxide sterilization operations or other activities that emit ethylene oxide (and, for ethylene oxide sterilization sources, propylene oxide). Requires entities to submit a plan to the Environmental Protection Agency describing how they will continuously collect emissions information. Provides requirements for emissions monitoring and testing. Requires specified hospitals to submit a plan to the Agency describing how the hospital will phase out the emissions of ethylene oxide by an established deadline. Provides that when issuing permits to ethylene oxide sterilization sources, hospitals, and ethylene oxide emissions sources, the Agency shall include limitations on the amount of ethylene oxide that may be stored on-site to protect public health, public safety, and the environment. Requires storage of ethylene oxide in excess of 100 pounds to be underground. Provides that the unit of local government in which an ethylene oxide sterilization source, hospital, or ethylene oxide emissions source is located may regulate the storage and location of ethylene oxide in a manner that is more restrictive or matches the standards established by the Agency. Requires the Agency to set annual emissions limitations on ethylene oxide for all ethylene oxide emissions sources. Provides that, on and after January 1, 2022, the maximum cumulative emissions from any sum of ethylene oxide emissions sources located within 3 and one half miles of each other shall not exceed 35 pounds annually. Requires the Agency to conduct a comprehensive review of ethylene oxide use and emissions within the State and to submit its findings in a report to the General Assembly. Effective immediately.

LRB101 14210 CPF 63238 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 adding Section 9.18 as follows:

6 (415 ILCS 5/9.18 new)

7 Sec. 9.18. Ethylene oxide phase-out.

8 (a) In this Section:

9 "Densely populated region" means any 5 mile radius,  
10 centered around an ethylene oxide emissions source, with a  
11 population density of at least 10 residents per square mile.

12 "Ethylene oxide emissions source" means a source that  
13 currently, or at any point in the previous 15 years, emits,  
14 emitted, or has the potential to emit ethylene oxide into the  
15 atmosphere, regardless of its emissions source. "Ethylene  
16 oxide emissions source" does not include ethylene oxide  
17 sterilization sources, nor hospitals licensed under the  
18 Hospital Licensing Act or operated under the University of  
19 Illinois Hospital Act.

20 "Ethylene oxide sterilization operations" means the  
21 process of using ethylene oxide to make one or more items free  
22 from microorganisms, pathogens, or both microorganisms and  
23 pathogens.

1       "Ethylene oxide sterilization source" means a source where  
2       operations include ethylene oxide sterilization operations and  
3       that currently, or at any point in the previous 15 years,  
4       emits, emitted, or has the potential to emit ethylene oxide  
5       into the atmosphere, regardless of its emissions source.

6       "Hospital" means a hospital licensed under the Hospital  
7       Licensing Act or operated under the University of Illinois  
8       Hospital Act.

9       (b) Ethylene oxide sterilization sources are subject to the  
10       following requirements:

11           (1) On and after January 1, 2021, no ethylene oxide  
12           sterilization source shall conduct ethylene oxide  
13           sterilization operations or other activities that emit  
14           ethylene oxide or propylene oxide within a densely  
15           populated region or within 5 miles of a school or daycare  
16           in existence on or before August 1, 2019.

17           (2) Within 90 days after the effective date of this  
18           amendatory Act of the 101st General Assembly, each ethylene  
19           oxide sterilization source shall submit for review and  
20           approval by the Agency a plan describing how the owner or  
21           operator of the ethylene oxide sterilization source will  
22           phase out the emissions of ethylene oxide by January 1,  
23           2021. Upon approval by the Agency the plan shall be made  
24           publicly available on the Agency's website.

25           (A) The owner or operator of the ethylene oxide  
26           sterilization source must provide a notice of

1           acceptance of any conditions added by the Agency to the  
2           plan, or correct any deficiencies identified by the  
3           Agency in the plan, within 3 business days after  
4           receiving the Agency's conditional acceptance or  
5           denial of the plan.

6           (B) Upon the Agency's approval of the plan, the  
7           owner or operator of the ethylene oxide sterilization  
8           source shall implement the plan in accordance with its  
9           approved terms.

10          (3) No ethylene oxide sterilization source shall  
11          conduct ethylene oxide sterilization operations or other  
12          activities that cause ethylene oxide or propylene oxide  
13          emissions unless the owner or operator of the ethylene  
14          oxide sterilization source submits for review and approval  
15          by the Agency a plan describing how the owner or operator  
16          will continuously collect emissions information. The plan  
17          must also specify locations at the source from which  
18          emissions will be collected and identify equipment used for  
19          their collection and analysis, including the equipment's  
20          individual system components. Emissions monitoring  
21          equipment must be tested and validated at least once in any  
22          12-month period and the results forwarded to the Agency.

23          (4) On and after January 1, 2021, no ethylene oxide  
24          sterilization source outside of a densely populated area or  
25          further than 5 miles from a school or daycare in existence  
26          on or before August 1, 2019 shall emit more than 30 pounds

1 of ethylene oxide or 30 pounds of propylene oxide annually.

2 (5) In issuing the applicable permits to ethylene oxide  
3 sterilization sources, the Agency shall include  
4 limitations on the amount of ethylene oxide that may be  
5 stored on-site to protect public health, public safety, and  
6 the environment. Storage of ethylene oxide in excess of 100  
7 pounds shall only be permitted underground. The unit of  
8 local government in which the ethylene oxide sterilization  
9 source is located may regulate the storage and location of  
10 ethylene oxide in a manner that is more restrictive or  
11 matches the standards established by the Agency.

12 (c) Hospitals are subject to the following requirements:

13 (1) On and after January 1, 2025, any hospital  
14 designated as a critical access hospital by the Centers for  
15 Medicare and Medicaid Services under the federal Balanced  
16 Budget Act of 1997 shall not conduct ethylene oxide  
17 sterilization operations or other activities that cause  
18 ethylene oxide emissions within a densely populated region  
19 or within 5 miles of a school or daycare in existence on or  
20 before August 1, 2019.

21 (2) On and after January 1, 2022, any hospital not  
22 designated as a critical access hospital by the Centers for  
23 Medicare and Medicaid Services shall not conduct ethylene  
24 oxide sterilization operations or other activities that  
25 cause ethylene oxide emissions within a densely populated  
26 region or within 5 miles of a school or daycare in

1 existence on or before August 1, 2019.

2 (3) Within 90 days after the effective date of this  
3 amendatory Act of the 101st General Assembly, any hospital  
4 conducting ethylene oxide sterilization operations shall  
5 submit for review and approval by the Agency a plan  
6 describing how the hospital will phase out the emissions of  
7 ethylene oxide by the deadline established in this  
8 subsection. Upon approval by the Agency the plan shall be  
9 made publicly available on the Agency's website.

10 (A) The hospital must provide a notice of  
11 acceptance of any conditions added by the Agency to the  
12 plan, or correct any deficiencies identified by the  
13 Agency in the plan, within 3 business days after  
14 receiving the Agency's conditional acceptance or  
15 denial of the plan.

16 (B) Upon the Agency's approval of the plan, the  
17 hospital shall implement the plan in accordance with  
18 its approved terms.

19 (4) No hospital shall conduct ethylene oxide  
20 sterilization operations or other activities that cause  
21 ethylene oxide emissions unless the hospital submits for  
22 review and approval by the Agency a plan describing how the  
23 hospital will continuously collect emissions information.  
24 The plan must also specify locations at the source from  
25 which emissions will be collected and identify equipment  
26 used for their collection and analysis, including the

1 equipment's individual system components.

2 (5) On and after January 1, 2022, no hospital outside  
3 of a densely populated area or further than 5 miles from a  
4 school or daycare in existence on or before August 1, 2019  
5 shall emit more than 30 pounds of ethylene oxide annually.

6 (6) In issuing the applicable permits to hospitals, the  
7 Agency shall include limitations on the amount of ethylene  
8 oxide that may be stored on-site to protect public health,  
9 public safety, and the environment. Storage of ethylene  
10 oxide in excess of 100 pounds shall only be permitted  
11 underground. The unit of local government in which the  
12 hospital is located may regulate the storage and location  
13 of ethylene oxide in a manner that is more restrictive or  
14 matches the standards established by the Agency.

15 (d) Ethylene oxide emissions sources are subject to the  
16 following requirements:

17 (1) On and after January 1, 2021, no ethylene oxide  
18 emissions source shall conduct operations or other  
19 activities that emit ethylene oxide in excess of 30 pounds  
20 annually within a densely populated region or within 5  
21 miles of a school or daycare in existence on or before  
22 August 1, 2019.

23 (2) Beginning 90 days after the effective date of this  
24 amendatory Act of the 101st General Assembly, no ethylene  
25 oxide emissions source shall conduct activities that cause  
26 ethylene oxide emissions unless the owner or operator of

1 the ethylene oxide emissions source submits for review and  
2 approval by the Agency a plan describing how the owner or  
3 operator of the ethylene oxide emissions source will  
4 continuously collect emissions information. The owner or  
5 operator of each ethylene oxide emissions source must  
6 specify in his or her plan all locations at which ethylene  
7 oxide may enter the atmosphere at each emissions source and  
8 shall install proper monitoring equipment. The equipment  
9 for monitoring and collecting emissions must be installed  
10 and the owner or operator of the ethylene oxide emissions  
11 source must begin reporting the results to the Agency  
12 within 120 days of the effective date of this amendatory  
13 Act of the 101st General Assembly. The plan must also  
14 specify locations at the source from which emissions will  
15 be collected and identify equipment used for collection and  
16 analysis, including the equipment's individual system  
17 components. The emissions monitoring equipment must be  
18 tested and validated at least once in any 12-month period  
19 and the results forwarded to the Agency.

20 (A) The owner or operator of an ethylene oxide  
21 emissions source must provide a notice of acceptance of  
22 any conditions added by the Agency to the plan, or  
23 correct any deficiencies identified by the Agency in  
24 the plan, within 3 business days after receiving the  
25 Agency's conditional acceptance or denial of the plan.

26 (B) Upon the Agency's approval of the plan, the



1           owner or operator of the ethylene oxide emissions  
2           source shall implement the plan in accordance with its  
3           approved terms.

4           (3) An ethylene oxide emissions source shall report to  
5           the Agency the amount of ethylene oxide used and the  
6           ethylene oxide emissions created at the ethylene oxide  
7           emissions source annually. All reports submitted to the  
8           Agency shall include documentation necessary to verify the  
9           quantity used and purchased by the ethylene oxide emissions  
10          source.

11          (4) In issuing the applicable permits to ethylene oxide  
12          emissions sources, the Agency shall include limitations on  
13          the amount of ethylene oxide that may be stored on-site to  
14          protect public health, public safety, and the environment.  
15          Storage of ethylene oxide in excess of 100 pounds shall  
16          only be permitted underground. The unit of local government  
17          in which the ethylene oxide emissions source is located may  
18          regulate the storage and location of ethylene oxide in a  
19          manner that is more restrictive or matches the standards  
20          established by the Agency.

21          (5) The Agency shall set annual emissions limitations  
22          on ethylene oxide for all ethylene oxide emissions sources.  
23          The limitations shall be set to provide maximum protection  
24          for public health without consideration of cost.

25          (e) On and after January 1, 2022, the maximum cumulative  
26          emissions from any sum of ethylene oxide emissions sources

1 located within 3 and one half miles of each other shall not  
2 exceed 35 pounds annually, inclusive of any emissions not  
3 emanating from any stack. The Agency shall set emissions  
4 limitations for individual ethylene oxide emissions sources to  
5 comply with this requirement.

6 (f) Within 180 days after the effective date of this  
7 amendatory Act of the 101st General Assembly, the Agency shall  
8 conduct a comprehensive review of ethylene oxide use and  
9 emissions within the State of Illinois. The Agency shall submit  
10 its findings in a report to the General Assembly and make the  
11 report publicly available on the Agency's website. At a  
12 minimum, the report shall include the following:

13 (1) A comprehensive list of all locations where  
14 ethylene oxide is used at levels that may cause measurable  
15 emissions.

16 (2) The Agency's recommendations for future regulation  
17 or legislation of ethylene oxide use, designed to provide  
18 maximum protection to public health.

19 (3) The Agency's assessment of the risk to human health  
20 and environmental damage that can be caused by exposure to  
21 ethylene oxide.

22 (g) No person or entity shall dispose of ethylene oxide or  
23 cause the emission of ethylene oxide through methods not  
24 explicitly authorized in an applicable permit issued by the  
25 Agency.

1           Section 97. Severability. The provisions of this Act are  
2           severable under Section 1.31 of the Statute on Statutes.

3           Section 99. Effective date. This Act takes effect upon  
4           becoming law.