

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 1. Short Title. This Act may be referred to as the
5 Matt Haller Act.

6 Section 5. The Environmental Protection Act is amended by
7 adding Section 9.16 as follows:

8 (415 ILCS 5/9.16 new)

9 Sec. 9.16. Control of ethylene oxide sterilization
10 sources.

11 (a) As used in this Section:

12 "Ethylene oxide sterilization operations" means the
13 process of using ethylene oxide at an ethylene oxide
14 sterilization source to make one or more items free from
15 microorganisms, pathogens, or both microorganisms and
16 pathogens.

17 "Ethylene oxide sterilization source" means any stationary
18 source with ethylene oxide usage that would subject it to the
19 emissions standards in 40 CFR 63.362. "Ethylene oxide
20 sterilization source" does not include beehive fumigators,
21 research or laboratory facilities, hospitals, doctors'
22 offices, clinics, or other stationary sources for which the

1 primary purpose is to provide medical services to humans or
2 animals.

3 "Exhaust point" means any point through which ethylene
4 oxide-laden air exits an ethylene oxide sterilization source.

5 "Stationary source" has the meaning set forth in subsection
6 1 of Section 39.5.

7 (b) Beginning 180 days after the effective date of this
8 amendatory Act of the 101st General Assembly, no person shall
9 conduct ethylene oxide sterilization operations, unless the
10 ethylene oxide sterilization source captures, and demonstrates
11 that it captures, 100% of all ethylene oxide emissions and
12 reduces ethylene oxide emissions to the atmosphere from each
13 exhaust point at the ethylene oxide sterilization source by at
14 least 99.9% or to 0.2 parts per million.

15 (1) Within 180 days after the effective date of this
16 amendatory Act of the 101st General Assembly for any
17 existing ethylene oxide sterilization source, or prior to
18 any ethylene oxide sterilization operation for any source
19 that first becomes subject to regulation after the
20 effective date of this amendatory Act of the 101st General
21 Assembly as an ethylene oxide sterilization source under
22 this Section, the owner or operator of the ethylene oxide
23 sterilization source shall conduct an initial emissions
24 test in accordance with all of the requirements set forth
25 in this paragraph (1) to verify that ethylene oxide
26 emissions to the atmosphere from each exhaust point at the

1 ethylene oxide sterilization source have been reduced by at
2 least 99.9% or to 0.2 parts per million:

3 (A) At least 30 days prior to the scheduled
4 emissions test date, the owner or operator of the
5 ethylene oxide sterilization source shall submit a
6 notification of the scheduled emissions test date and a
7 copy of the proposed emissions test protocol to the
8 Agency for review and written approval. Emissions test
9 protocols submitted to the Agency shall address the
10 manner in which testing will be conducted, including,
11 but not limited to:

12 (i) the name of the independent third party
13 company that will be performing sampling and
14 analysis and the company's experience with similar
15 emissions tests;

16 (ii) the methodologies to be used;

17 (iii) the conditions under which emissions
18 tests will be performed, including a discussion of
19 why these conditions will be representative of
20 maximum emissions from each of the 3 cycles of
21 operation (chamber evacuation, back vent, and
22 aeration) and the means by which the operating
23 parameters for the emission unit and any control
24 equipment will be determined;

25 (iv) the specific determinations of emissions
26 and operations that are intended to be made,

1 including sampling and monitoring locations; and
2 (v) any changes to the test method or methods
3 proposed to accommodate the specific circumstances
4 of testing, with justification.

5 (B) The owner or operator of the ethylene oxide
6 sterilization source shall perform emissions testing
7 in accordance with an Agency-approved test protocol
8 and at representative conditions to verify that
9 ethylene oxide emissions to the atmosphere from each
10 exhaust point at the ethylene oxide sterilization
11 source have been reduced by at least 99.9% or to 0.2
12 parts per million. The duration of the test must
13 incorporate all 3 cycles of operation for
14 determination of the emission reduction efficiency.

15 (C) Upon Agency approval of the test protocol, any
16 source that first becomes subject to regulation after
17 the effective date of this amendatory Act of the 101st
18 General Assembly as an ethylene oxide sterilization
19 source under this Section may undertake ethylene oxide
20 sterilization operations in accordance with the
21 Agency-approved test protocol for the sole purpose of
22 demonstrating compliance with this subsection (b).

23 (D) The owner or operator of the ethylene oxide
24 sterilization source shall submit to the Agency the
25 results of any and all emissions testing conducted
26 after the effective date of this amendatory Act of the

1 101st General Assembly, until the Agency accepts
2 testing results under subparagraph (E) of paragraph
3 (1) of this subsection (b), for any existing source or
4 prior to any ethylene oxide sterilization operation
5 for any source that first becomes subject to regulation
6 after the effective date of this amendatory Act of the
7 101st General Assembly as an ethylene oxide
8 sterilization source under this Section. The results
9 documentation shall include at a minimum:

10 (i) a summary of results;

11 (ii) a description of test method or methods,
12 including description of sample points, sampling
13 train, analysis equipment, and test schedule;

14 (iii) a detailed description of test
15 conditions, including process information and
16 control equipment information; and

17 (iv) data and calculations, including copies
18 of all raw data sheets, opacity observation
19 records and records of laboratory analyses, sample
20 calculations, and equipment calibration.

21 (E) Within 30 days of receipt, the Agency shall
22 accept, accept with conditions, or decline to accept a
23 stack testing protocol and the testing results
24 submitted to demonstrate compliance with paragraph (1)
25 of this subsection (b). If the Agency accepts with
26 conditions or declines to accept the results

1 submitted, the owner or operator of the ethylene oxide
2 sterilization source shall submit revised results of
3 the emissions testing or conduct emissions testing
4 again. If the owner or operator revises the results,
5 the revised results shall be submitted within 15 days
6 after the owner or operator of the ethylene oxide
7 sterilization source receives written notice of the
8 Agency's conditional acceptance or rejection of the
9 emissions testing results. If the owner or operator
10 conducts emissions testing again, such new emissions
11 testing shall conform to the requirements of this
12 subsection (b).

13 (2) The owner or operator of the ethylene oxide
14 sterilization source shall conduct emissions testing on
15 all exhaust points at the ethylene oxide sterilization
16 source at least once each calendar year to demonstrate
17 compliance with the requirements of this Section and any
18 applicable requirements concerning ethylene oxide that are
19 set forth in either United States Environmental Protection
20 Agency rules or Board rules. Annual emissions tests
21 required under this paragraph (2) shall take place at least
22 6 months apart. An initial emissions test conducted under
23 paragraph (1) of this subsection (b) satisfies the testing
24 requirement of this paragraph (2) for the calendar year in
25 which the initial emissions test is conducted.

26 (3) At least 30 days before conducting the annual

1 emissions test required under paragraph (2) of this
2 subsection (b), the owner or operator shall submit a
3 notification of the scheduled emissions test date and a
4 copy of the proposed emissions test protocol to the Agency
5 for review and written approval. Emissions test protocols
6 submitted to the Agency under this paragraph (3) must
7 address each item listed in subparagraph (A) of paragraph
8 (1) of this subsection (b). Emissions testing shall be
9 performed in accordance with an Agency-approved test
10 protocol and at representative conditions. In addition, as
11 soon as practicable, but no later than 30 days after the
12 emissions test date, the owner or operator shall submit to
13 the Agency the results of the emissions testing required
14 under paragraph (2) of this subsection (b). Such results
15 must include each item listed in subparagraph (D) of
16 paragraph (1) of this subsection (b).

17 (4) If the owner or operator of an ethylene oxide
18 sterilization source conducts any emissions testing in
19 addition to tests required by this amendatory Act of the
20 101st General Assembly, the owner or operator shall submit
21 to the Agency the results of such emissions testing within
22 30 days after the emissions test date.

23 (5) The Agency shall accept, accept with conditions, or
24 decline to accept testing results submitted to demonstrate
25 compliance with paragraph (2) of this subsection (b). If
26 the Agency accepts with conditions or declines to accept

1 the results submitted, the owner or operator of the
2 ethylene oxide sterilization source shall submit revised
3 results of the emissions testing or conduct emissions
4 testing again. If the owner or operator revises the
5 results, the revised results shall be submitted within 15
6 days after the owner or operator of the ethylene oxide
7 sterilization source receives written notice of the
8 Agency's conditional acceptance or rejection of the
9 emissions testing results. If the owner or operator
10 conducts emissions testing again, such new emissions
11 testing shall conform to the requirements of this
12 subsection (b).

13 (c) If any emissions test conducted more than 180 days
14 after the effective date of this amendatory Act of the 101st
15 General Assembly fails to demonstrate that ethylene oxide
16 emissions to the atmosphere from each exhaust point at the
17 ethylene oxide sterilization source have been reduced by at
18 least 99.9% or to 0.2 parts per million, the owner or operator
19 of the ethylene oxide sterilization source shall immediately
20 cease ethylene oxide sterilization operations and notify the
21 Agency within 24 hours of becoming aware of the failed
22 emissions test. Within 60 days after the date of the test, the
23 owner or operator of the ethylene oxide sterilization source
24 shall:

25 (1) complete an analysis to determine the root cause of
26 the failed emissions test;

1 (2) take any actions necessary to address that root
2 cause;

3 (3) submit a report to the Agency describing the
4 findings of the root cause analysis, any work undertaken to
5 address findings of the root cause analysis, and
6 identifying any feasible best management practices to
7 enhance capture and further reduce ethylene oxide levels
8 within the ethylene oxide sterilization source, including
9 a schedule for implementing such practices; and

10 (4) upon approval by the Agency of the report required
11 by paragraph (3) of this subsection, restart ethylene oxide
12 sterilization operations only to the extent necessary to
13 conduct additional emissions test or tests. The ethylene
14 oxide sterilization source shall conduct such emissions
15 test or tests under the same requirements as the annual
16 test described in paragraphs (2) and (3) of subsection (b).
17 The ethylene oxide sterilization source may restart
18 operations once an emissions test successfully
19 demonstrates that ethylene oxide emissions to the
20 atmosphere from each exhaust point at the ethylene oxide
21 sterilization source have been reduced by at least 99.9% or
22 to 0.2 parts per million, the source has submitted the
23 results of all emissions testing conducted under this
24 subsection to the Agency, and the Agency has approved the
25 results demonstrating compliance.

26 (d) Beginning 180 days after the effective date of this

1 amendatory Act of the 101st General Assembly for any existing
2 source or prior to any ethylene oxide sterilization operation
3 for any source that first becomes subject to regulation after
4 the effective date of this amendatory Act of the 101st General
5 Assembly as an ethylene oxide sterilization source under this
6 Section, no person shall conduct ethylene oxide sterilization
7 operations unless the owner or operator of the ethylene oxide
8 sterilization source submits for review and approval by the
9 Agency a plan describing how the owner or operator will
10 continuously collect emissions information at the ethylene
11 oxide sterilization source. This plan must also specify
12 locations at the ethylene oxide sterilization source from which
13 emissions will be collected and identify equipment used for
14 collection and analysis, including the individual system
15 components.

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

22 (2) Upon the Agency's approval of the plan, the owner
23 or operator of the ethylene oxide sterilization source
24 shall implement the plan in accordance with its approved
25 terms.

26 (e) Beginning 180 days after the effective date of this

1 amendatory Act of the 101st General Assembly for any existing
2 source or prior to any ethylene oxide sterilization operation
3 for any source that first becomes subject to regulation after
4 the effective date of this amendatory Act of the 101st General
5 Assembly as an ethylene oxide sterilization source under this
6 Section, no person shall conduct ethylene oxide sterilization
7 operations unless the owner or operator of the ethylene oxide
8 sterilization source submits for review and approval by the
9 Agency an Ambient Air Monitoring Plan.

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

12 (A) Detailed plans to collect and analyze air
13 samples for ethylene oxide on at least a quarterly
14 basis near the property boundaries of the ethylene
15 oxide sterilization source and at community locations
16 with the highest modeled impact pursuant to the
17 modeling conducted under subsection (f). Each
18 quarterly sampling under this subsection shall be
19 conducted over a multiple-day sampling period.

20 (B) A schedule for implementation.

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

24 (2) The owner or operator of the ethylene oxide
25 sterilization source must provide a notice of acceptance of
26 any conditions added by the Agency to the Ambient Air

1 Monitoring Plan, or correct any deficiencies identified by
2 the Agency in the Ambient Air Monitoring Plan, within 3
3 business days after receiving the Agency's conditional
4 acceptance or denial of the plan.

5 (3) Upon the Agency's approval of the plan, the owner
6 or operator of the ethylene oxide sterilization source
7 shall implement the Ambient Air Monitoring Plan in
8 accordance with its approved terms.

9 (f) Beginning 180 days after the effective date of this
10 amendatory Act of the 101st General Assembly for any existing
11 source or prior to any ethylene oxide sterilization operation
12 for any source that first becomes subject to regulation after
13 the effective date of this amendatory Act of the 101st General
14 Assembly as an ethylene oxide sterilization source under this
15 Section, no person shall conduct ethylene oxide sterilization
16 operations unless the owner or operator of the ethylene oxide
17 sterilization source has performed dispersion modeling and the
18 Agency approves such modeling.

19 (1) Dispersion modeling must:

20 (A) be conducted using accepted United States
21 Environmental Protection Agency methodologies,
22 including 40 CFR Part 51, Appendix W, except that no
23 background ambient levels of ethylene oxide shall be
24 used;

25 (B) use emissions and stack parameter data from the
26 emissions test conducted in accordance with paragraph

1 (1) of subsection (b), and use 5 years of hourly
2 meteorological data that is representative of the
3 source's location; and

4 (C) use a receptor grid that extends to at least
5 one kilometer around the source and ensure the modeling
6 domain includes the area of maximum impact, with
7 receptor spacing no greater than every 50 meters
8 starting from the building walls of the source
9 extending out to a distance of at least one-half
10 kilometer, then every 100 meters extending out to a
11 distance of at least one kilometer.

12 (2) The owner or operator of the ethylene oxide
13 sterilization source shall submit revised results of all
14 modeling if the Agency accepts with conditions or declines
15 to accept the results submitted.

16 (g) A facility permitted to emit ethylene oxide that has
17 been subject to a seal order under Section 34 is prohibited
18 from using ethylene oxide for sterilization or fumigation
19 purposes, unless (i) the facility can provide a certification
20 to the Agency by the supplier of a product to be sterilized or
21 fumigated that ethylene oxide sterilization or fumigation is
22 the only available method to completely sterilize or fumigate
23 the product and (ii) the Agency has certified that the
24 facility's emission control system uses technology that
25 produces the greatest reduction in ethylene oxide emissions
26 currently available. The certification shall be made by a

1 company representative with knowledge of the sterilization
2 requirements of the product. The certification requirements of
3 this Section shall apply to any group of products packaged
4 together and sterilized as a single product if sterilization or
5 fumigation is the only available method to completely sterilize
6 or fumigate more than half of the individual products contained
7 in the package.

8 A facility is not subject to the requirements of this
9 subsection if the supporting findings of the seal order under
10 Section 34 are found to be without merit by a court of
11 competent jurisdiction.

12 (h) If an entity, or any parent or subsidiary of an entity,
13 that owns or operates a facility permitted by the Agency to
14 emit ethylene oxide acquires by purchase, license, or any other
15 method of acquisition any intellectual property right in a
16 sterilization technology that does not involve the use of
17 ethylene oxide, or by purchase, merger, or any other method of
18 acquisition of any entity that holds an intellectual property
19 right in a sterilization technology that does not involve the
20 use of ethylene oxide, that entity, parent, or subsidiary shall
21 notify the Agency of the acquisition within 30 days of
22 acquiring it. If that entity, parent, or subsidiary has not
23 used the sterilization technology within 3 years of its
24 acquisition, the entity shall notify the Agency within 30 days
25 of the 3-year period elapsing.

26 An entity, or any parent or subsidiary of an entity, that

1 owns or operates a facility permitted by the Agency to emit
2 ethylene oxide that has any intellectual property right in any
3 sterilization technology that does not involve the use of
4 ethylene oxide shall notify the Agency of any offers that it
5 makes to license or otherwise allow the technology to be used
6 by third parties within 30 days of making the offer.

7 An entity, or any parent or subsidiary of an entity, that
8 owns or operates a facility permitted by the Agency to emit
9 ethylene oxide shall provide the Agency with a list of all U.S.
10 patent registrations for sterilization technology that the
11 entity, parent, or subsidiary has any property right in. The
12 list shall include the following:

13 (1) The patent number assigned by the United States
14 Patent and Trademark Office for each patent.

15 (2) The date each patent was filed.

16 (3) The names and addresses of all owners or assignees
17 of each patent.

18 (4) The names and addresses of all inventors of each
19 patent.

20 (i) If a CAAPP permit applicant applies to use ethylene
21 oxide as a sterilant or fumigant at a facility not in existence
22 prior to January 1, 2020, the Agency shall issue a CAAPP permit
23 for emission of ethylene oxide only if:

24 (1) the nearest school or park is at least 10 miles
25 from the permit applicant in counties with populations
26 greater than 50,000;

1 (2) the nearest school or park is at least 15 miles
2 from the permit applicant in counties with populations less
3 than or equal to 50,000; and

4 (3) within 7 days after the application for a CAAPP
5 permit, the permit applicant has published its permit
6 request on its website, published notice in a local
7 newspaper of general circulation, and provided notice to:

8 (A) the State Representative for the
9 representative district in which the facility is
10 located;

11 (B) the State Senator for the legislative district
12 in which the facility is located;

13 (C) the members of the county board for the county
14 in which the facility is located; and

15 (D) the local municipal board members and
16 executives.

17 (j) The owner or operator of an ethylene oxide
18 sterilization source must apply for and obtain a construction
19 permit from the Agency for any modifications made to the source
20 to comply with the requirements of this amendatory Act of the
21 101st General Assembly, including, but not limited to,
22 installation of a permanent total enclosure, modification of
23 airflow to create negative pressure within the source, and
24 addition of one or more control devices. Additionally, the
25 owner or operator of the ethylene oxide sterilization source
26 must apply for and obtain from the Agency a modification of the

1 source's operating permit to incorporate such modifications
2 made to the source. Both the construction permit and operating
3 permit must include a limit on ethylene oxide usage at the
4 source.

5 (k) Nothing in this Section shall be interpreted to excuse
6 the ethylene oxide sterilization source from complying with any
7 applicable local requirements.

8 (l) The owner or operator of an ethylene oxide
9 sterilization source must notify the Agency within 5 days after
10 discovering any deviation from any of the requirements in this
11 Section or deviations from any applicable requirements
12 concerning ethylene oxide that are set forth in this Act,
13 United States Environmental Protection Agency rules, or Board
14 rules. As soon as practicable, but no later than 5 business
15 days, after the Agency receives such notification, the Agency
16 must post a notice on its website and notify the members of the
17 General Assembly from the Legislative and Representative
18 Districts in which the source in question is located, the
19 county board members of the county in which the source in
20 question is located, the corporate authorities of the
21 municipality in which the source in question is located, and
22 the Illinois Department of Public Health.

23 (m) The Agency must conduct at least one unannounced
24 inspection of all ethylene oxide sterilization sources subject
25 to this Section per year. Nothing in this Section shall limit
26 the Agency's authority under other provisions of this Act to

1 conduct inspections of ethylene oxide sterilization sources.

2 (n) The Agency shall conduct air testing to determine the
3 ambient levels of ethylene oxide throughout the State. The
4 Agency shall, within 180 days after the effective date of this
5 amendatory Act of the 101st General Assembly, submit rules for
6 ambient air testing of ethylene oxide to the Board.

7 Section 99. Effective date. This Act takes effect upon
8 becoming law.