



Rep. Jim Durkin

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LRB101 09550 CPF 61063 a

1 AMENDMENT TO SENATE BILL 1852

2 AMENDMENT NO. _____. Amend Senate Bill 1852 by replacing
3 everything after the enacting clause with the following:

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

1 pathogens.

2 "Ethylene oxide sterilization source" means any stationary
3 source with ethylene oxide usage that would subject it to the
4 emissions standards in 40 CFR 63.362. "Ethylene oxide
5 sterilization source" does not include beehive fumigators,
6 research or laboratory facilities, hospitals, doctors'
7 offices, clinics, or other stationary sources for which the
8 primary purpose is to provide medical services to humans or
9 animals.

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

12 "Stationary source" has the meaning set forth in subsection
13 1 of Section 39.5.

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

22 (1) Within 180 days after the effective date of this
23 amendatory Act of the 101st General Assembly for any
24 existing ethylene oxide sterilization source, or prior to
25 any ethylene oxide sterilization operation for any source
26 that first becomes subject to regulation after the

1 effective date of this amendatory Act of the 101st General
2 Assembly as an ethylene oxide sterilization source under
3 this Section, the owner or operator of the ethylene oxide
4 sterilization source shall conduct an initial emissions
5 test in accordance with all of the requirements set forth
6 in this paragraph (1) to verify that ethylene oxide
7 emissions to the atmosphere from each exhaust point at the
8 ethylene oxide sterilization source have been reduced by at
9 least 99.9% or to 0.2 parts per million:

10 (A) At least 30 days prior to the scheduled
11 emissions test date, the owner or operator of the
12 ethylene oxide sterilization source shall submit a
13 notification of the scheduled emissions test date and a
14 copy of the proposed emissions test protocol to the
15 Agency for review and written approval. Emissions test
16 protocols submitted to the Agency shall address the
17 manner in which testing will be conducted, including,
18 but not limited to:

19 (i) the name of the independent third party
20 company that will be performing sampling and
21 analysis and the company's experience with similar
22 emissions tests;

23 (ii) the methodologies to be used;

24 (iii) the conditions under which emissions
25 tests will be performed, including a discussion of
26 why these conditions will be representative of

1 maximum emissions from each of the 3 cycles of
2 operation (chamber evacuation, back vent, and
3 aeration) and the means by which the operating
4 parameters for the emission unit and any control
5 equipment will be determined;

6 (iv) the specific determinations of emissions
7 and operations that are intended to be made,
8 including sampling and monitoring locations; and

9 (v) any changes to the test method or methods
10 proposed to accommodate the specific circumstances
11 of testing, with justification.

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

22 (C) Upon Agency approval of the test protocol, any
23 source that first becomes subject to regulation after
24 the effective date of this amendatory Act of the 101st
25 General Assembly as an ethylene oxide sterilization
26 source under this Section may undertake ethylene oxide

1 sterilization operations in accordance with the
2 Agency-approved test protocol for the sole purpose of
3 demonstrating compliance with this subsection (b).

4 (D) The owner or operator of the ethylene oxide
5 sterilization source shall submit to the Agency the
6 results of any and all emissions testing conducted
7 after the effective date of this amendatory Act of the
8 101st General Assembly, until the Agency accepts
9 testing results under subparagraph (E) of paragraph
10 (1) of this subsection (b), for any existing source or
11 prior to any ethylene oxide sterilization operation
12 for any source that first becomes subject to regulation
13 after the effective date of this amendatory Act of the
14 101st General Assembly as an ethylene oxide
15 sterilization source under this Section. The results
16 documentation shall include at a minimum:

17 (i) a summary of results;

18 (ii) a description of test method or methods,
19 including description of sample points, sampling
20 train, analysis equipment, and test schedule;

21 (iii) a detailed description of test
22 conditions, including process information and
23 control equipment information; and

24 (iv) data and calculations, including copies
25 of all raw data sheets, opacity observation
26 records and records of laboratory analyses, sample

1 calculations, and equipment calibration.

2 (E) Within 30 days of receipt, the Agency shall
3 accept, accept with conditions, or decline to accept a
4 stack testing protocol and the testing results
5 submitted to demonstrate compliance with paragraph (1)
6 of this subsection (b). If the Agency accepts with
7 conditions or declines to accept the results
8 submitted, the owner or operator of the ethylene oxide
9 sterilization source shall submit revised results of
10 the emissions testing or conduct emissions testing
11 again. If the owner or operator revises the results,
12 the revised results shall be submitted within 15 days
13 after the owner or operator of the ethylene oxide
14 sterilization source receives written notice of the
15 Agency's conditional acceptance or rejection of the
16 emissions testing results. If the owner or operator
17 conducts emissions testing again, such new emissions
18 testing shall conform to the requirements of this
19 subsection (b).

20 (2) The owner or operator of the ethylene oxide
21 sterilization source shall conduct emissions testing on
22 all exhaust points at the ethylene oxide sterilization
23 source at least once each calendar year to demonstrate
24 compliance with the requirements of this Section and any
25 applicable requirements concerning ethylene oxide that are
26 set forth in either United States Environmental Protection

1 Agency rules or Board rules. Annual emissions tests
2 required under this paragraph (2) shall take place at least
3 6 months apart. An initial emissions test conducted under
4 paragraph (1) of this subsection (b) satisfies the testing
5 requirement of this paragraph (2) for the calendar year in
6 which the initial emissions test is conducted.

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

24 (4) If the owner or operator of an ethylene oxide
25 sterilization source conducts any emissions testing in
26 addition to tests required by this amendatory Act of the

1 101st General Assembly, the owner or operator shall submit
2 to the Agency the results of such emissions testing within
3 30 days after the emissions test date.

4 (5) The Agency shall accept, accept with conditions, or
5 decline to accept testing results submitted to demonstrate
6 compliance with paragraph (2) of this subsection (b). If
7 the Agency accepts with conditions or declines to accept
8 the results submitted, the owner or operator of the
9 ethylene oxide sterilization source shall submit revised
10 results of the emissions testing or conduct emissions
11 testing again. If the owner or operator revises the
12 results, the revised results shall be submitted within 15
13 days after the owner or operator of the ethylene oxide
14 sterilization source receives written notice of the
15 Agency's conditional acceptance or rejection of the
16 emissions testing results. If the owner or operator
17 conducts emissions testing again, such new emissions
18 testing shall conform to the requirements of this
19 subsection (b).

20 (c) If any emissions test conducted more than 180 days
21 after the effective date of this amendatory Act of the 101st
22 General Assembly fails to demonstrate that ethylene oxide
23 emissions to the atmosphere from each exhaust point at the
24 ethylene oxide sterilization source have been reduced by at
25 least 99.9% or to 0.2 parts per million, the owner or operator
26 of the ethylene oxide sterilization source shall immediately

1 cease ethylene oxide sterilization operations and notify the
2 Agency within 24 hours of becoming aware of the failed
3 emissions test. Within 60 days after the date of the test, the
4 owner or operator of the ethylene oxide sterilization source
5 shall:

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

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

10 (3) submit a report to the Agency describing the
11 findings of the root cause analysis, any work undertaken to
12 address findings of the root cause analysis, and
13 identifying any feasible best management practices to
14 enhance capture and further reduce ethylene oxide levels
15 within the ethylene oxide sterilization source, including
16 a schedule for implementing such practices; and

17 (4) upon approval by the Agency of the report required
18 by paragraph (3) of this subsection, restart ethylene oxide
19 sterilization operations only to the extent necessary to
20 conduct additional emissions test or tests. The ethylene
21 oxide sterilization source shall conduct such emissions
22 test or tests under the same requirements as the annual
23 test described in paragraphs (2) and (3) of subsection (b).
24 The ethylene oxide sterilization source may restart
25 operations once an emissions test successfully
26 demonstrates that ethylene oxide emissions to the

1 atmosphere from each exhaust point at the ethylene oxide
2 sterilization source have been reduced by at least 99.9% or
3 to 0.2 parts per million, the source has submitted the
4 results of all emissions testing conducted under this
5 subsection to the Agency, and the Agency has approved the
6 results demonstrating compliance.

7 (d) Beginning 180 days after the effective date of this
8 amendatory Act of the 101st General Assembly for any existing
9 source or prior to any ethylene oxide sterilization operation
10 for any source that first becomes subject to regulation after
11 the effective date of this amendatory Act of the 101st General
12 Assembly as an ethylene oxide sterilization source under this
13 Section, no person shall conduct ethylene oxide sterilization
14 operations unless the owner or operator of the ethylene oxide
15 sterilization source submits for review and approval by the
16 Agency a plan describing how the owner or operator will
17 continuously collect emissions information at the ethylene
18 oxide sterilization source. This plan must also specify
19 locations at the ethylene oxide sterilization source from which
20 emissions will be collected and identify equipment used for
21 collection and analysis, including the individual system
22 components.

23 (1) The owner or operator of the ethylene oxide
24 sterilization source must provide a notice of acceptance of
25 any conditions added by the Agency to the plan, or correct
26 any deficiencies identified by the Agency in the plan,

1 within 3 business days after receiving the Agency's
2 conditional acceptance or denial of the plan.

3 (2) Upon the Agency's approval of the plan, the owner
4 or operator of the ethylene oxide sterilization source
5 shall implement the plan in accordance with its approved
6 terms.

7 (e) Beginning 180 days after the effective date of this
8 amendatory Act of the 101st General Assembly for any existing
9 source or prior to any ethylene oxide sterilization operation
10 for any source that first becomes subject to regulation after
11 the effective date of this amendatory Act of the 101st General
12 Assembly as an ethylene oxide sterilization source under this
13 Section, no person shall conduct ethylene oxide sterilization
14 operations unless the owner or operator of the ethylene oxide
15 sterilization source submits for review and approval by the
16 Agency an Ambient Air Monitoring Plan.

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

19 (A) Detailed plans to collect and analyze air
20 samples for ethylene oxide on at least a quarterly
21 basis near the property boundaries of the ethylene
22 oxide sterilization source and at community locations
23 with the highest modeled impact pursuant to the
24 modeling conducted under subsection (f). Each
25 quarterly sampling under this subsection shall be
26 conducted over a multiple-day sampling period.

1 (B) A schedule for implementation.

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

5 (2) The owner or operator of the ethylene oxide
6 sterilization source must provide a notice of acceptance of
7 any conditions added by the Agency to the Ambient Air
8 Monitoring Plan, or correct any deficiencies identified by
9 the Agency in the Ambient Air Monitoring Plan, within 3
10 business days after receiving the Agency's conditional
11 acceptance or denial of the plan.

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

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

26 (1) Dispersion modeling must:

1 (A) be conducted using accepted United States
2 Environmental Protection Agency methodologies,
3 including 40 CFR Part 51, Appendix W, except that no
4 background ambient levels of ethylene oxide shall be
5 used;

6 (B) use emissions and stack parameter data from the
7 emissions test conducted in accordance with paragraph
8 (1) of subsection (b), and use 5 years of hourly
9 meteorological data that is representative of the
10 source's location; and

11 (C) use a receptor grid that extends to at least
12 one kilometer around the source and ensure the modeling
13 domain includes the area of maximum impact, with
14 receptor spacing no greater than every 50 meters
15 starting from the building walls of the source
16 extending out to a distance of at least one-half
17 kilometer, then every 100 meters extending out to a
18 distance of at least one kilometer.

19 (2) The owner or operator of the ethylene oxide
20 sterilization source shall submit revised results of all
21 modeling if the Agency accepts with conditions or declines
22 to accept the results submitted.

23 (g) A facility permitted to emit ethylene oxide that has
24 been subject to a seal order under Section 34 is prohibited
25 from using ethylene oxide for sterilization or fumigation
26 purposes, unless (i) the facility can provide a certification

1 to the Agency by the supplier of a product to be sterilized or
2 fumigated that ethylene oxide sterilization or fumigation is
3 the only available method to completely sterilize or fumigate
4 the product and (ii) the Agency has certified that the
5 facility's emission control system uses technology that
6 produces the greatest reduction in ethylene oxide emissions
7 currently available. The certification shall be made by a
8 company representative with knowledge of the sterilization
9 requirements of the product. The certification requirements of
10 this Section shall apply to any group of products packaged
11 together and sterilized as a single product if sterilization or
12 fumigation is the only available method to completely sterilize
13 or fumigate more than half of the individual products contained
14 in the package.

15 A facility is not subject to the requirements of this
16 subsection if the supporting findings of the seal order under
17 Section 34 are found to be without merit by a court of
18 competent jurisdiction.

19 (h) If an entity, or any parent or subsidiary of an entity,
20 that owns or operates a facility permitted by the Agency to
21 emit ethylene oxide acquires by purchase, license, or any other
22 method of acquisition any intellectual property right in a
23 sterilization technology that does not involve the use of
24 ethylene oxide, or by purchase, merger, or any other method of
25 acquisition of any entity that holds an intellectual property
26 right in a sterilization technology that does not involve the

1 use of ethylene oxide, that entity, parent, or subsidiary shall
2 notify the Agency of the acquisition within 30 days of
3 acquiring it. If that entity, parent, or subsidiary has not
4 used the sterilization technology within 3 years of its
5 acquisition, the entity shall notify the Agency within 30 days
6 of the 3-year period elapsing.

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 that has any intellectual property right in any
10 sterilization technology that does not involve the use of
11 ethylene oxide shall notify the Agency of any offers that it
12 makes to license or otherwise allow the technology to be used
13 by third parties within 30 days of making the offer.

14 An entity, or any parent or subsidiary of an entity, that
15 owns or operates a facility permitted by the Agency to emit
16 ethylene oxide shall provide the Agency with a list of all U.S.
17 patent registrations for sterilization technology that the
18 entity, parent, or subsidiary has any property right in. The
19 list shall include the following:

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

22 (2) The date each patent was filed.

23 (3) The names and addresses of all owners or assignees
24 of each patent.

25 (4) The names and addresses of all inventors of each
26 patent.

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

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

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

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

15 (A) the State Representative for the
16 representative district in which the facility is
17 located;

18 (B) the State Senator for the legislative district
19 in which the facility is located;

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

22 (D) the local municipal board members and
23 executives.

24 (j) The owner or operator of an ethylene oxide
25 sterilization source must apply for and obtain a construction
26 permit from the Agency for any modifications made to the source

1 to comply with the requirements of this amendatory Act of the
2 101st General Assembly, including, but not limited to,
3 installation of a permanent total enclosure, modification of
4 airflow to create negative pressure within the source, and
5 addition of one or more control devices. Additionally, the
6 owner or operator of the ethylene oxide sterilization source
7 must apply for and obtain from the Agency a modification of the
8 source's operating permit to incorporate such modifications
9 made to the source. Both the construction permit and operating
10 permit must include a limit on ethylene oxide usage at the
11 source.

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

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

1 question is located, the corporate authorities of the
2 municipality in which the source in question is located, and
3 the Illinois Department of Public Health.

4 (m) The Agency must conduct at least one unannounced
5 inspection of all ethylene oxide sterilization sources subject
6 to this Section per year. Nothing in this Section shall limit
7 the Agency's authority under other provisions of this Act to
8 conduct inspections of ethylene oxide sterilization sources.

9 (n) The Agency shall conduct air testing to determine the
10 ambient levels of ethylene oxide throughout the State. The
11 Agency shall, within 180 days after the effective date of this
12 amendatory Act of the 101st General Assembly, submit rules for
13 ambient air testing of ethylene oxide to the Board.

14 Section 99. Effective date. This Act takes effect upon
15 becoming law.".