



## 97TH GENERAL ASSEMBLY

### State of Illinois

2011 and 2012

SB1213

Introduced 2/8/2011, by Sen. Heather A. Steans

#### SYNOPSIS AS INTRODUCED:

415 ILCS 5/3.284  
415 ILCS 5/22.23b  
415 ILCS 5/22.23d new  
415 ILCS 97/15  
410 ILCS 46/27

Amends the Environmental Protection Act. Redefines "mercury switch" to include a mercury-containing product or device that makes, breaks, or changes a connection in an electrical circuit. Provides that, beginning in 2015, dental amalgam may not be added, removed, or modified in the course of treating patients at a dental office unless the dental office has an amalgam separator system installed that removes dental amalgam from the dental office's wastewater before it is discharged into a sewer or septic system and unless other related requirements are met. Requires dental schools and vocational dental education programs to instruct students on the use of certain practices to minimize the presence of elemental mercury, unused amalgam, and waste amalgam in discharged wastewater and solid waste. Amends the Mercury Switch Removal Act. Requires vehicle recyclers, vehicle crushers, and scrap metal recyclers to remove all mercury switches from each end-of-life vehicle within a specified time. Amends the Mercury-Added Product Prohibition Act. Prohibits, except under certain circumstances, mercury-containing pressure transducers from being sold, offered for sale, or distributed in the State. Also makes technical changes. Effective immediately.

LRB097 02727 JDS 42748 b

CORRECTIONAL  
BUDGET AND  
IMPACT NOTE ACT  
MAY APPLY

FISCAL NOTE ACT  
MAY APPLY

A BILL FOR

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 Sections 3.284 and 22.23b and by adding Section 22.23d  
6 as follows:

7 (415 ILCS 5/3.284)

8 Sec. 3.284. Mercury switch. "Mercury switch" means a  
9 product or device, containing mercury added during its  
10 manufacture, that opens or closes an electrical circuit or gas  
11 valve, or makes, breaks, or changes the connection in an  
12 electrical circuit, including, but not limited to, mercury  
13 float switches actuated by rising or falling liquid levels,  
14 mercury tilt switches actuated by a change in the switch  
15 position, mercury pressure switches actuated by a change in  
16 pressure, mercury temperature switches actuated by a change in  
17 temperature, and mercury flame sensors.

18 (Source: P.A. 93-964, eff. 8-20-04.)

19 (415 ILCS 5/22.23b)

20 Sec. 22.23b. Mercury and mercury-added products.

21 (a) Beginning July 1, 2005, no person shall purchase or  
22 accept, for use in a primary or secondary school classroom,

1 bulk elemental mercury, chemicals containing mercury  
2 compounds, or instructional equipment or materials containing  
3 mercury added during their manufacture. This subsection (a)  
4 does not apply to: (i) other products containing mercury added  
5 during their manufacture that are used in schools and (ii)  
6 measuring devices used as teaching aids, including, but not  
7 limited to, barometers, manometers, and thermometers, if no  
8 adequate mercury-free substitute exists.

9 (b) Beginning July 1, 2007, no person shall sell, offer to  
10 sell, distribute, or offer to distribute in this State a  
11 mercury switch or mercury relay individually or as a product  
12 component. For a product that contains one or more mercury  
13 switches or mercury relays as a component, this subsection (b)  
14 is applicable to each component part or parts and not the  
15 entire product. This subsection (b) does not apply to the  
16 following:

17 (1) Mercury switches and mercury relays used in medical  
18 diagnostic equipment regulated under the federal Food,  
19 Drug, and Cosmetic Act.

20 (2) Mercury switches and mercury relays used at  
21 electric generating facilities.

22 (3) Mercury switches in thermostats used to sense and  
23 control room temperature.

24 (4) Mercury switches and mercury relays required to be  
25 used under federal law or federal contract specifications.

26 (5) A mercury switch or mercury relay used to replace a

1 mercury switch or mercury relay that is a component in a  
2 larger product in use before ~~prior to~~ July 1, 2007, and one  
3 of the following applies:

4 (A) The larger product is used in manufacturing; or

5 (B) The mercury switch or mercury relay is  
6 integrated and not physically separate from other  
7 components of the larger product.

8 (c) The manufacturer of a mercury switch or mercury relay,  
9 or a scientific instrument or piece of instructional equipment  
10 containing mercury added during its manufacture, may apply to  
11 the Agency for an exemption from the provisions of subsection  
12 (a) or (b) of this Section for one or more specific uses of the  
13 switch, relay, instrument, or piece of equipment by filing a  
14 written petition with the Agency. The Agency may grant an  
15 exemption, with or without conditions, if the manufacturer  
16 demonstrates the following:

17 (1) A convenient and widely available system exists for  
18 the proper collection, transportation, and processing of  
19 the switch, relay, instrument, or piece of equipment at the  
20 end of its useful life; and

21 (2) The specific use or uses of the switch, relay,  
22 instrument, or piece of equipment provides a net benefit to  
23 the environment, public health, or public safety when  
24 compared to available nonmercury alternatives.

25 Before approving any exemption under this subsection (c)  
26 the Agency must consult with other states to promote

1 consistency in the regulation of products containing mercury  
2 added during their manufacture. Exemptions shall be granted for  
3 a period of 5 years. The manufacturer may request renewals of  
4 the exemption for additional 5-year periods by filing  
5 additional written petitions with the Agency. The Agency may  
6 renew an exemption if the manufacturer demonstrates that the  
7 criteria set forth in paragraphs (1) and (2) of this subsection  
8 (c) continue to be satisfied. All petitions for an exemption or  
9 exemption renewal shall be submitted on forms prescribed by the  
10 Agency.

11 The Agency must adopt rules for processing petitions  
12 submitted pursuant to this subsection (c). The rules shall  
13 include, but shall not be limited to, provisions allowing for  
14 the submission of written public comments on the petitions.

15 (d) No later than January 1, 2005, the Agency must submit  
16 to the Governor and the General Assembly a report that includes  
17 the following:

18 (1) An evaluation of programs to reduce and recycle  
19 mercury from mercury thermostats and mercury vehicle  
20 components; and

21 (2) Recommendations for altering the programs to make  
22 them more effective.

23 In preparing the report the Agency may seek information  
24 from and consult with, businesses, trade associations,  
25 environmental organizations, and other government agencies.

26 (e) Mercury switches and mercury relays, and scientific

1 instruments and instructional equipment containing mercury  
2 added during their manufacture, are hereby designated as  
3 categories of universal waste subject to the streamlined  
4 hazardous waste rules set forth in Title 35 of the Illinois  
5 Administrative Code, Subtitle G, Chapter I, Subchapter c, Part  
6 733 ("Part 733"). Within 60 days of the effective date of this  
7 amendatory Act of the 93rd General Assembly, the Agency shall  
8 propose, and within 180 days of receipt of the Agency's  
9 proposal the Board shall adopt, rules that reflect this  
10 designation and that prescribe procedures and standards for the  
11 management of such items as universal waste.

12 If the United States Environmental Protection Agency  
13 adopts streamlined hazardous waste regulations pertaining to  
14 the management of mercury switches or mercury relays, or  
15 scientific instruments or instructional equipment containing  
16 mercury added during their manufacture, or otherwise exempts  
17 such items from regulation as hazardous waste, the Board shall  
18 adopt equivalent rules in accordance with Section 7.2 of this  
19 Act within 180 days of adoption of the federal regulations. The  
20 equivalent Board rules may serve as an alternative to the rules  
21 adopted under subsection (1) of this subsection (e).

22 (f) Beginning July 1, 2008, no person shall install, sell,  
23 offer to sell, distribute, or offer to distribute a mercury  
24 thermostat in this State. For purposes of this subsection (f),  
25 "mercury thermostat" means a product or device that uses a  
26 mercury switch to sense and control room temperature through

1 communication with heating, ventilating, or air conditioning  
2 equipment. "Mercury thermostat" includes thermostats used to  
3 sense and control room temperature in residential, commercial,  
4 industrial, and other buildings, but does not include  
5 thermostats used to sense and control temperature as a part of  
6 a manufacturing or industrial process.

7 (Source: P.A. 95-452, eff. 8-27-07.)

8 (415 ILCS 5/22.23d new)

9 Sec. 22.23d. Mercury Dental Amalgam.

10 (a) For purposes of this Section:

11 "Amalgam separator system" means a device that (i)  
12 removes dental amalgam from wastewater before its  
13 discharge into a sewer or septic system and (ii) meets a  
14 minimum removal efficiency of 99% as determined through  
15 testing in accordance with the most recent standards  
16 contained in "ANSI/ADA Specification Number 108, Amalgam  
17 Separators" published by the American National Standards  
18 Institution.

19 "Dental amalgam" means an alloy containing mercury  
20 that is used in the practice of dentistry.

21 "Dental office" means any dental clinic, dental  
22 office, or dental practice, but does not include the  
23 practice of oral and maxillofacial surgery. Dental offices  
24 include, but are not limited to, hospitals, dental schools,  
25 and community health centers.

1       (b) Beginning January 1, 2015, no person shall add, remove,  
2       or modify dental amalgam in the course of treating patients at  
3       a dental office unless all of the following are met:

4           (1) The dental office must have an amalgam separator  
5           system installed that removes dental amalgam from the  
6           dental office's wastewater before its discharge into a  
7           sewer or septic system. The amalgam separator system must:

8                   (A) be tested by a testing laboratory that is  
9                   accredited by an accreditation body that is a signatory  
10                   to the International Laboratory Accreditation  
11                   Cooperation's Mutual Recognition Arrangement and that  
12                   includes in its scope of accreditation ANSI/ADA  
13                   Specification Number 108, Amalgam Separators;

14                   (B) be certified by a certification body that is  
15                   accredited by an accreditation body that is a signatory  
16                   to the International Accreditation Forum's  
17                   Multilateral Recognition Arrangement;

18                   (C) display a certification test mark from the  
19                   certification body;

20                   (D) display the overall arithmetic average removal  
21                   efficiency percentage as required and determined in  
22                   the corresponding maximum tested flow rate employed  
23                   during the test; and

24                   (E) be properly sized for the volume and flow of  
25                   the dental office's wastewater in accordance with the  
26                   manufacturer's specifications and recommendations. The



1 maximum allowable flow rate through the amalgam  
2 separator system may not exceed the maximum flow rate  
3 capacity that the separator was tested at and passed in  
4 meeting the ANSI/ADA Specification 108.

5 (2) All wastewater containing dental amalgam particles  
6 must pass through the amalgam separator system before the  
7 wastewater's discharge to a sewer or septic system.

8 (3) All dental amalgam collected by the amalgam  
9 separator system must be properly managed and recycled or  
10 disposed.

11 (4) The following records must be maintained at the  
12 dental office for a minimum of 3 years:

13 (A) the shipping records for all amalgam separator  
14 system replacement filters that have been sent  
15 off-site for recycling or disposal; and

16 (B) written documentation demonstrating that the  
17 amalgam separator system has been properly inspected  
18 and maintained. Installation, operation, and  
19 maintenance of the amalgam separator system in  
20 accordance with the manufacturer's specifications and  
21 recommendations shall fulfill the requirements of this  
22 subparagraph (B).

23 (c) Best management practices of the American Dental  
24 Association must be used in dental offices to minimize the  
25 presence of elemental mercury, unused amalgam, and waste  
26 amalgam in the dental offices' wastewater discharge and solid

1 waste.

2 (d) Dental schools and vocational dental education  
3 programs must instruct students on the use of best management  
4 practices of the American Dental Association to minimize the  
5 presence of elemental mercury, unused amalgam, and waste  
6 amalgam in their wastewater discharge and solid waste.

7 Section 10. The Mercury Switch Removal Act is amended by  
8 changing Section 15 as follows:

9 (415 ILCS 97/15)

10 (Section scheduled to be repealed on January 1, 2017)

11 Sec. 15. Mercury switch collection programs.

12 (a) Within 60 days of the effective date of this Act,  
13 manufacturers of vehicles in Illinois that contain mercury  
14 switches must begin to implement a mercury switch collection  
15 program that facilitates the removal of mercury switches from  
16 end-of-life vehicles before ~~prior to~~ the vehicles are ~~being~~  
17 flattened, crushed, shredded, or otherwise processed for  
18 recycling and to collect and properly manage mercury switches  
19 in accordance with the Environmental Protection Act and  
20 regulations adopted thereunder. In order to ensure that the  
21 mercury switches are removed and collected in a safe and  
22 consistent manner, manufacturers must, to the extent  
23 practicable, use the currently available end-of-life vehicle  
24 recycling infrastructure. The collection program must be

1 designed to achieve capture rates of not less than (i) 35% for  
2 the period of July 1, 2006, through June 30, 2007; (ii) 50% for  
3 the period of July 1, 2007, through June 30, 2008; and (iii)  
4 70% for the period of July 1, 2008, through June 30, 2009 and  
5 for each subsequent period of July 1 through June 30. At a  
6 minimum, the collection program must:

7 (1) Develop and provide educational materials that  
8 include guidance as to which vehicles may contain mercury  
9 switches and procedures for locating and removing mercury  
10 switches. The materials may include, but are not limited  
11 to, brochures, fact sheets, and videos.

12 (2) Conduct outreach activities to encourage vehicle  
13 recyclers and vehicle crushers to participate in the  
14 mercury switch collection program. The activities may  
15 include, but are not limited to, direct mailings,  
16 workshops, and site visits.

17 (3) Provide storage containers to participating  
18 vehicle recyclers and vehicle crushers for mercury  
19 switches removed under the program.

20 (4) Provide a collection and transportation system to  
21 periodically collect and replace filled storage containers  
22 from vehicle recyclers, vehicle crushers, and scrap metal  
23 recyclers, either upon notification that a storage  
24 container is full or on a schedule predetermined by the  
25 manufacturers.

26 (5) Establish an entity that will serve as a point of

1 contact for the collection program and that will establish,  
2 implement, and oversee the collection program on behalf of  
3 the manufacturers.

4 (6) Track participation in the collection program and  
5 the progress of mercury switch removals and collections.

6 (b) Within 90 days of the effective date of this Act,  
7 manufacturers of vehicles in Illinois that contain mercury  
8 switches must submit to the Agency an implementation plan that  
9 describes how the collection program under subsection (a) of  
10 this Section will be carried out for the duration of the  
11 program and how the program will achieve the capture rates set  
12 forth in subsection (a) of this Section. At a minimum, the  
13 implementation plan must:

14 (A) Identify the educational materials that will  
15 assist vehicle recyclers, vehicle crushers, and scrap  
16 metal processors in identifying, removing, and properly  
17 managing mercury switches removed from end-of-life  
18 vehicles.

19 (B) Describe the outreach program that will be  
20 undertaken to encourage vehicle recyclers and vehicle  
21 crushers to participate in the mercury switch collection  
22 program.

23 (C) Describe how the manufacturers will ensure that  
24 mercury switches removed from end-of-life vehicles are  
25 managed in accordance with the Illinois Environmental  
26 Protection Act and regulations adopted thereunder.

1           (D) Describe how the manufacturers will collect and  
2 document the information required in the quarterly reports  
3 submitted pursuant to subsection (e) of this Section.

4           (E) Describe how the collection program will be  
5 financed and implemented.

6           (F) Identify the manufacturer's address to which the  
7 Agency should send the notice required under subsection (f)  
8 of this Section.

9           The Agency shall review the collection program plans it  
10 receives for completeness and shall notify the manufacturer in  
11 writing if a plan is incomplete. Within 30 days after receiving  
12 a notification of incompleteness from the Agency the  
13 manufacturer shall submit to the Agency a plan that contains  
14 all of the required information.

15           (c) The Agency must provide assistance to manufacturers in  
16 their implementation of the collection program required under  
17 this Section. The assistance shall include providing  
18 manufacturers with information about businesses likely to be  
19 engaged in vehicle recycling or vehicle crushing, conducting  
20 site visits to promote participation in the collection program,  
21 and assisting with the scheduling, locating, and staffing of  
22 workshops conducted to encourage vehicle recyclers and vehicle  
23 crushers to participate in the collection program.

24           (d) Manufacturers subject to the collection program  
25 requirements of this Section shall provide, to the extent  
26 practicable, the opportunity for trade associations of vehicle

1 recyclers, vehicle crushers, and scrap metal recyclers to be  
2 involved in the delivery and dissemination of educational  
3 materials regarding the identification, removal, collection,  
4 and proper management of mercury switches in end-of-life  
5 vehicles.

6 (e) For the calendar quarter ending March 31, 2007, and for  
7 each calendar quarter thereafter, not later than 45 days  
8 following the close of the calendar quarter manufacturers  
9 subject to the collection program requirements of this Section  
10 must submit to the Agency a quarterly report that contains the  
11 following information: (i) the number of vehicle recyclers,  
12 vehicle crushers, and scrap metal recyclers participating in  
13 the manufacturer's collection program during the reported  
14 quarter, (ii) the number of mercury switches removed from  
15 end-of-life vehicles during the reported quarter by the vehicle  
16 recyclers, vehicle crushers, and scrap metal recyclers  
17 participating in the program, and (iii) the amount of mercury  
18 collected and recycled through the manufacturer's collection  
19 program during the reported calendar quarter.

20 (f) If the reports required under this Act indicate that  
21 the capture rates set forth in subsection (a) of this Section  
22 for the period of July 1, 2007, through June 30, 2008, or for  
23 any subsequent period have not been met the Agency shall  
24 provide notice that the capture rate was not met; provided,  
25 however, that the Agency is not required to provide notice if  
26 it determines that the capture rate was not met due to a force

1 majeure. The Agency shall provide the notice by posting a  
2 statement on its website and by sending a written notice via  
3 certified mail to the manufacturers subject to the collection  
4 program requirement of this Section at the addresses provided  
5 in the manufacturers' collection plans. Once the Agency  
6 provides notice pursuant to this subsection (f) it is not  
7 required to provide notice in subsequent periods in which the  
8 capture rate is not met.

9 (g) Beginning 30 days after the Agency first provides  
10 notice pursuant to subsection (f) of this Section, the  
11 following shall apply:

12 (1) Vehicle recyclers must remove all mercury switches  
13 from each end-of-life vehicle within 14 days after receipt  
14 of the vehicle, or before ~~vehicles prior to~~ delivering the  
15 vehicle ~~vehicles~~ to an on-site or off-site vehicle crusher  
16 or to a scrap metal recycler, whichever occurs first,  
17 provided that a vehicle recycler is not required to remove  
18 a mercury switch that is inaccessible due to significant  
19 damage to the vehicle in the area surrounding the mercury  
20 switch that occurred before ~~prior to~~ the vehicle recycler's  
21 receipt of the vehicle in which case the damage must be  
22 noted in the records the vehicle recycler is required to  
23 maintain under subsection (c) of Section 10 ~~Section 10(e)~~  
24 of this Act.

25 (1.5) Vehicle crushers and scrap metal recyclers must  
26 remove all mercury switches from each end-of-life vehicle

1       within 14 days after receipt of the vehicle, or before  
2       flattening, crushing, or otherwise processing the vehicle  
3       for recycling, whichever occurs first, provided that  
4       vehicle crushers and scrap metal recyclers are not required  
5       to remove a mercury switch that is inaccessible due to  
6       significant damage to the vehicle in the area surrounding  
7       the mercury switch that occurred before the vehicle  
8       crusher's or scrap metal recycler's receipt of the vehicle  
9       in which case the damage must be noted in the records the  
10       vehicle crusher or scrap metal recycler is required to  
11       maintain under subsection (c) of Section 10 of this Act.

12           (2) No vehicle recycler, vehicle crusher, or scrap  
13       metal recycler shall flatten, crush, or otherwise process  
14       an end-of-life vehicle for recycling unless all mercury  
15       switches have been removed from the vehicle, provided that  
16       a mercury switch that is inaccessible due to significant  
17       damage to the vehicle in the area surrounding the mercury  
18       switch that occurred before ~~prior to~~ the vehicle  
19       recycler's, ~~or the~~ vehicle crusher's, or scrap metal  
20       recycler's receipt of the vehicle is not required to be  
21       removed. The damage must be noted in the records the  
22       vehicle recycler or vehicle crusher is required to maintain  
23       under subsection (c) of Section 10 ~~Section 10(e)~~ of this  
24       Act.

25           (3) Notwithstanding paragraphs (1) through (2) of this  
26       subsection (g) ~~subsection (g)(1) of this Section~~, a scrap



1 metal recycler may agree to accept an end-of-life vehicle  
2 that contains one or more mercury switches and that has not  
3 been flattened, crushed, shredded, or otherwise processed  
4 for recycling provided the scrap metal recycler removes all  
5 mercury switches from the vehicle within 14 days after  
6 receipt of the vehicle, or before the vehicle is flattened,  
7 crushed, shredded, or otherwise processed for recycling,  
8 whichever occurs first. Scrap metal recyclers are not  
9 required to remove a mercury switch that is inaccessible  
10 due to significant damage to the vehicle in the area  
11 surrounding the mercury switch that occurred before ~~prior~~  
12 ~~to~~ the scrap metal recycler's receipt of the vehicle. The  
13 damage must be noted in the records the scrap metal  
14 recycler is required to maintain under subsection (c) of  
15 Section 10 ~~Section 10(c)~~ of this Act.

16 (4) Manufacturers subject to the collection program  
17 requirements of this Section must provide to vehicle  
18 recyclers, vehicle crushers, and scrap metal recyclers the  
19 following compensation for all mercury switches removed  
20 from end-of-life vehicles on or after the date of the  
21 notice: \$2.00 for each mercury switch removed by the  
22 vehicle recycler, vehicle crusher, or the scrap metal  
23 recycler, the costs of the containers in which the mercury  
24 switches are collected, and the costs of packaging and  
25 transporting the mercury switches off-site. Payment of  
26 this compensation must be provided in a prompt manner.

1 (h) In meeting the requirements of this Section  
2 manufacturers may work individually or as part of a group of 2  
3 or more manufacturers.

4 (Source: P.A. 94-732, eff. 4-24-06.)

5 Section 15. The Mercury-added Product Prohibition Act is  
6 amended by changing Section 27 as follows:

7 (410 ILCS 46/27)

8 Sec. 27. Sale and distribution of certain mercury-added  
9 products prohibited.

10 (a) On and after July 1, 2008, no person shall sell, offer  
11 to sell, or distribute the following mercury-added products in  
12 this State:

13 (1) barometers;

14 (2) esophageal dilators, bougie tubes, or  
15 gastrointestinal tubes;

16 (3) flow meters;

17 (4) hydrometers;

18 (5) hygrometers;

19 (6) manometers;

20 (7) pyrometers;

21 (8) sphygmomanometers;

22 (9) thermometers; ~~or~~

23 (10) psychrometers; or ~~or~~

24 (11) pressure transducers.

1 (b) This Section does not apply to the sale of a  
2 mercury-added product listed in paragraphs (1) through (11)  
3 ~~(10)~~ of subsection (a) if use of the product is a federal  
4 requirement or if the only mercury-added component in the  
5 product is a button cell battery.

6 (c) This Section does not apply to the sale of a  
7 mercury-added product listed in paragraphs (1) through (11)  
8 ~~(10)~~ of subsection (a) for which an exemption is obtained under  
9 this subsection (c). The manufacturer of the product may apply  
10 for an exemption for one or more uses of the product by filing  
11 a written petition with the Agency. The Agency may grant an  
12 exemption, with or without conditions, if the manufacturer  
13 demonstrates the following:

14 (1) a system exists for the proper collection,  
15 transportation, and processing of the product at the end of  
16 its useful life; and

17 (2) one of the following applies:

18 (i) use of the product provides a net benefit to  
19 the environment, public health, or public safety when  
20 compared to available nonmercury alternatives; or

21 (ii) technically feasible nonmercury alternatives  
22 are not available at comparable cost.

23 Before ~~Prior to~~ approving an exemption, the Agency may  
24 consult with other states to promote consistency in the  
25 regulation of the product for which the exemption is requested.  
26 The Agency may also publish notice of its receipt of petitions

1 for exemptions on its website and consider public comments  
2 submitted in response to the petitions. Exemptions shall be  
3 granted for a term of 5 years and may be renewed for additional  
4 5-year terms upon written application by the manufacturer if  
5 the manufacturer demonstrates that the criteria of this  
6 subsection (c) and the conditions of the product's original  
7 exemption approval continue to be met. All petitions for  
8 exemptions and exemption renewals shall be submitted on forms  
9 prescribed by the Agency.

10 (Source: P.A. 95-87, eff. 8-13-07.)

11 Section 99. Effective date. This Act takes effect upon  
12 becoming law.