

110TH CONGRESS  
1ST SESSION

# S. 1818

To amend the Toxic Substances Control Act to phase out the use of mercury in the manufacture of chlorine and caustic soda, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

JULY 19, 2007

Mr. OBAMA introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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## A BILL

To amend the Toxic Substances Control Act to phase out the use of mercury in the manufacture of chlorine and caustic soda, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Missing Mercury in  
5 Manufacturing Monitoring and Mitigation Act”.

6 **SEC. 2. FINDINGS.**

7 Congress finds that—

8 (1) mercury and mercury compounds are highly  
9 toxic to humans, ecosystems, and wildlife;

1           (2) as many as 10 percent of women in the  
2           United States of childbearing age have mercury in  
3           their bloodstreams at a level that could pose risks to  
4           their unborn babies, and as many as 630,000 chil-  
5           dren born annually in the United States are at risk  
6           of neurological problems relating to mercury expo-  
7           sure in utero;

8           (3) the most significant source of mercury expo-  
9           sure to people in the United States is ingestion of  
10          mercury-contaminated fish;

11          (4) the long-term solution to mercury pollution  
12          is to minimize global mercury use and releases of  
13          mercury to eventually achieve reduced contamination  
14          levels in the environment, rather than reducing fish  
15          consumption, since uncontaminated fish represents a  
16          critical and healthy source of nutrition for people  
17          worldwide;

18          (5) an estimated additional 24,000 to 30,000  
19          tons of mercury are used at mercury cell chlor-alkali  
20          plants worldwide;

21          (6) mercury pollution is a transboundary pollut-  
22          ant that—

23                  (A) is deposited locally, regionally, and  
24                  globally; and

1 (B) affects bodies of water near industrial  
2 areas, such as the Great Lakes, as well as bod-  
3 ies of water in remote areas, such as the Arctic  
4 Circle;

5 (7) of the approximately 30 plants in the  
6 United States that produce chlorine, only 8 use the  
7 obsolete “mercury cell” chlor-alkali process, and 5  
8 have not yet committed to phasing out mercury use;

9 (8)(A) only about 10 percent of the total quan-  
10 tity of chlorine and caustic soda produced in the  
11 United States comes from the chlor-alkali plants de-  
12 scribed in paragraph (7) that use the mercury cell  
13 chlor-alkali process;

14 (B) cost-effective alternatives are available and  
15 in use in the remaining 90 percent of chlorine and  
16 caustic soda production; and

17 (C) other countries, including Japan, have al-  
18 ready banned the mercury cell chlor-alkali process;

19 (9) the chlor-alkali industry acknowledges  
20 that—

21 (A) mercury can contaminate products  
22 manufactured at mercury cell facilities; and

23 (B) the use of some of those products re-  
24 sults in the direct and indirect release of mer-  
25 cury;

1           (10) despite those quantities of mercury known  
2           to have been used or to be in use, neither the chlor-  
3           alkali industry nor the Environmental Protection  
4           Agency is able—

5                   (A) to adequately account for the disposi-  
6                   tion of the mercury used at those facilities; or

7                   (B) to accurately estimate current mercury  
8                   emissions; and

9           (11) it is critically important that the United  
10          States work aggressively toward the minimization of  
11          supply, demand, and releases of mercury, both do-  
12          mestically and internationally.

13 **SEC. 3. STATEMENT OF POLICY.**

14          Congress declares that the United States should de-  
15          velop policies and programs that will—

16                   (1) reduce mercury use and emissions within  
17                   the United States;

18                   (2) reduce mercury releases from the reservoir  
19                   of mercury currently in use or circulation within the  
20                   United States; and

21                   (3) reduce exposures to mercury, particularly  
22                   exposures of women of childbearing age and young  
23                   children.

1 **SEC. 4. USE OF MERCURY IN CHLORINE AND CAUSTIC**  
2 **SODA MANUFACTURING.**

3 (a) IN GENERAL.—Title I of the Toxic Substances  
4 Control Act (15 U.S.C. 2601 et seq.) is amended by in-  
5 serting after section 6 the following:

6 **“SEC. 6A. USE OF MERCURY IN CHLORINE AND CAUSTIC**  
7 **SODA MANUFACTURING.**

8 “(a) DEFINITIONS.—In this section:

9 “(1) CHLOR-ALKALI FACILITY.—The term  
10 ‘chlor-alkali facility’ means a facility used for the  
11 manufacture of chlorine or caustic soda using a mer-  
12 cury cell process.

13 “(2) HAZARDOUS WASTE; SOLID WASTE.—The  
14 terms ‘hazardous waste’ and ‘solid waste’ have the  
15 meanings given those terms in section 1004 of the  
16 Solid Waste Disposal Act (42 U.S.C. 6903).

17 “(b) PROHIBITION.—Effective beginning January 1,  
18 2012, the manufacture of chlorine or caustic soda using  
19 mercury cells is prohibited in the United States.

20 “(c) REPORTING.—

21 “(1) IN GENERAL.—Not later than April 1,  
22 2008, and annually thereafter through April 1,  
23 2012, the owner or operator of each chlor-alkali fa-  
24 cility shall submit to the Administrator and the  
25 State in which the chlor-alkali facility is located a  
26 report that identifies—

1           “(A) each type and quantity of mercury-  
2 containing hazardous waste and nonhazardous  
3 solid waste generated by the chlor-alkali facility  
4 during the preceding calendar year;

5           “(B) the mercury content of the wastes;

6           “(C) the manner in which each waste was  
7 managed, including the location of each offsite  
8 location to which the waste was transported for  
9 subsequent handling or management;

10           “(D) the volume of mercury released, in-  
11 tentively or unintentionally, into the air or  
12 water by the chlor-alkali facility, including mer-  
13 cury released from emissions or vaporization;

14           “(E) the volume of mercury estimated to  
15 have accumulated in pipes and plant equipment  
16 of the chlor-alkali facility, including a descrip-  
17 tion of—

18                   “(i) the applicable volume for each  
19 type of equipment; and

20                   “(ii) methods of accumulation; and

21           “(F) the quantity and forms of mercury  
22 found in all products produced for sale by the  
23 chlor-alkali facility.

24           “(2) AVOIDANCE OF DUPLICATION.—To avoid  
25 duplication, the Administrator may permit the owner

1 or operator of a facility described in paragraph (1)  
2 to combine and submit the report required under  
3 this subsection with any report required to be sub-  
4 mitted by the owner or operator under subtitle C of  
5 the Solid Waste Disposal Act (42 U.S.C. 6921 et  
6 seq.).

7 “(d) INVENTORY.—

8 “(1) IN GENERAL.—For each chlor-alkali facil-  
9 ity that ceases operations on or after July 1, 2008,  
10 not later than 1 year after the date of cessation of  
11 operations, the Administrator, in consultation with  
12 the State in which the facility is located, shall con-  
13 duct a comprehensive mercury inventory covering  
14 the life and closure of the chlor-alkali facility, taking  
15 into account—

16 “(A) the total quantity of mercury pur-  
17 chased to start and operate the chlor-alkali fa-  
18 cility;

19 “(B) the total quantity of mercury remain-  
20 ing in mercury cells and other equipment at the  
21 time of closure of the chlor-alkali facility;

22 “(C) the estimated quantity of mercury in  
23 hazardous waste, nonhazardous solid waste, and  
24 products generated at the chlor-alkali facility

1 during the operational life of the chlor-alkali fa-  
2 cility; and

3 “(D) the estimated aggregate mercury re-  
4 leases from the chlor-alkali facility into air and  
5 other environmental media.

6 “(2) RECORDS AND INFORMATION.—In car-  
7 rying out paragraph (1), the Administrator shall ob-  
8 tain mercury purchase records and such other infor-  
9 mation from each chlor-alkali facility as are nec-  
10 essary to determine, as accurately as practicable  
11 from available information, the magnitude and na-  
12 ture of mercury releases from the chlor-alkali facility  
13 into air and other environmental media.

14 “(e) MERCURY STORAGE ADVISORY COMMITTEE.—

15 “(1) ESTABLISHMENT.—There is established an  
16 advisory committee, to be known as the ‘Mercury  
17 Storage Advisory Committee’ (referred to in this  
18 subsection as the ‘Committee’).

19 “(2) MEMBERSHIP.—

20 “(A) IN GENERAL.—The Committee shall  
21 be composed of 9 members, of whom—

22 “(i) 2 members shall be jointly ap-  
23 pointed by the Speaker of the House of  
24 Representatives and the majority leader of  
25 the Senate—

1                   “(I) 1 of whom shall be des-  
2                   ignated to serve as Chairperson of the  
3                   Committee; and

4                   “(II) 1 of whom shall be des-  
5                   ignated to serve as Vice-Chairperson  
6                   of the Committee;

7                   “(ii) 1 member shall be the Adminis-  
8                   trator;

9                   “(iii) 1 member shall be the Secretary  
10                  of Defense;

11                  “(iv) 1 member shall be a representa-  
12                  tive of State environmental agencies;

13                  “(v) 1 member shall be a representa-  
14                  tive of State attorneys general;

15                  “(vi) 1 member shall be a representa-  
16                  tive of the chlorine industry;

17                  “(vii) 1 member shall be a representa-  
18                  tive of the mercury waste treatment indus-  
19                  try; and

20                  “(viii) 1 member shall be a represent-  
21                  ative of a nonprofit environmental organi-  
22                  zation.

23                  “(B) APPOINTMENTS.—Not later than 45  
24                  days after the date of enactment of this section,  
25                  the Administrator, in consultation with the ap-

1           appropriate congressional committees, shall ap-  
2           point the members of the Committee described  
3           in clauses (iv) through (viii) of subparagraph  
4           (A).

5           “(3) INITIAL MEETING.—Not later than 30  
6           days after the date on which all members of the  
7           Committee have been appointed, the Committee shall  
8           hold the initial meeting of the Committee.

9           “(4) MEETINGS.—The Committee shall meet at  
10          the call of the Chairperson.

11          “(5) QUORUM.—A majority of the members of  
12          the Committee shall constitute a quorum.

13          “(6) REPORT.—Not later than 1 year after the  
14          date of enactment of this section, the Committee  
15          shall submit to Congress a report describing the  
16          findings and recommendations of the Committee, if  
17          any, relating to—

18                 “(A) the environmental, health, and safety  
19                 requirements necessary to prevent—

20                         “(i) the release of elemental mercury  
21                         into the environment; and

22                         “(ii) worker exposure from the storage  
23                         of elemental mercury;

1           “(B) the estimated annual cost of storing  
2 elemental mercury on a per-pound or per-ton  
3 basis;

4           “(C) for the 40-year period beginning on  
5 the date of submission of the report, the opti-  
6 mal size, number, and other characteristics of  
7 Federal facilities required to store elemental  
8 mercury under current and anticipated jurisdic-  
9 tions of each Federal agency;

10           “(D) the estimated quantity of—

11           “(i) elemental mercury that will result  
12 from the discontinuance of mercury cells at  
13 chlor-alkali facilities in the United States  
14 required under this section; and

15           “(ii) any other supplies that may re-  
16 quire storage to carry out this section;

17           “(E) for the 40-year period beginning on  
18 the date of submission of the report, the esti-  
19 mated quantity of elemental mercury generated  
20 from the recycling of unwanted products and  
21 other wastes that will require storage to comply  
22 with any export prohibitions of elemental mer-  
23 cury;

24           “(F) any legal, technical, economic, or  
25 other barrier that may prevent the private sec-

1 tor from storing elemental mercury produced by  
2 the private sector during the 40-year period be-  
3 ginning on the date of submission of the report,  
4 including a description of measures to address  
5 the barriers;

6 “(G) the advantages and disadvantages of  
7 consolidating the storage of mercury produced  
8 by public and private sources under the man-  
9 agement of the public or private sector;

10 “(H) the optimal plan of the Committee  
11 for storing excess mercury produced by public  
12 and private sources; and

13 “(I) additional research, if any, required to  
14 determine a long-term disposal option for the  
15 storage of excess mercury.

16 “(7) COMPENSATION OF MEMBERS.—

17 “(A) IN GENERAL.—

18 “(i) NON-FEDERAL EMPLOYEES.—A  
19 member of the Committee who is not an  
20 officer or employee of the Federal Govern-  
21 ment shall be compensated at a rate equal  
22 to the daily equivalent of the annual rate  
23 of basic pay prescribed for level V of the  
24 Executive Schedule under section 5316 of  
25 title 5, United States Code, for each day

1 (including travel time) during which the  
2 member is engaged in the performance of  
3 the duties of the Committee.

4 “(ii) FEDERAL EMPLOYEES.—A mem-  
5 ber of the Committee who is an officer or  
6 employee of the Federal Government shall  
7 serve without compensation in addition to  
8 the compensation received for the services  
9 of the member as an officer or employee of  
10 the Federal Government.

11 “(B) TRAVEL EXPENSES.—A member of  
12 the Committee shall be allowed travel expenses,  
13 including per diem in lieu of subsistence, at  
14 rates authorized for an employee of an agency  
15 under subchapter I of chapter 57 of title 5,  
16 United States Code, while away from the home  
17 or regular place of business of the member in  
18 the performance of the duties of the Committee.

19 “(8) STAFF AND FUNDING.—The Administrator  
20 shall provide to the Committee such funding and ad-  
21 ditional personnel as are necessary to enable the  
22 Committee to perform the duties of the Committee.

23 “(9) TERMINATION.—The Committee shall ter-  
24minate 180 days after the date on which the Com-

1       mittee submits the report of the Committee under  
2       paragraph (6).

3       “(f) TRANSFER TO STORAGE.—

4               “(1) REGULATIONS.—Not later than July 1,  
5       2008, the Administrator shall promulgate regula-  
6       tions establishing the terms and conditions necessary  
7       to facilitate the transfer and storage of mercury lo-  
8       cated at closed or closing chlor-alkali facilities, in-  
9       cluding the allocation of costs and potential liabil-  
10      ities of that transfer and storage.

11              “(2) DEADLINE FOR TRANSFER.—Beginning on  
12      July 1, 2008, elemental mercury located at a closed  
13      or closing chlor-alkali facility that has ceased oper-  
14      ations shall be transferred to a storage facility estab-  
15      lished by the Administrator in accordance with the  
16      regulations promulgated under paragraph (1).

17      “(g) HEALTH ASSESSMENT.—Not later than July 1,  
18      2009, for each chlor-alkali facility that continues to oper-  
19      ate as of July 1, 2008, the Administrator, in coordination  
20      with the Administrator of the Agency for Toxic Sub-  
21      stances and Disease Registry, shall conduct a health as-  
22      sessment of employees at the chlor-alkali facility.

23      “(h) REGULATIONS.—In addition to regulations de-  
24      scribed in subsection (f)(1), the Administrator may pro-  
25      mulgate such regulations, including the establishment of

1 a reporting form for use in accordance with subsection (c),  
2 as are necessary to carry out this section.”.

3 (b) CONFORMING AMENDMENT.—The table of con-  
4 tents of the Toxic Substances Control Act (15 U.S.C.  
5 2601 note) is amended by inserting after the item relating  
6 to section 6 the following:

“Sec. 6A. Use of mercury in chlorine and caustic soda manufacturing.”.

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