

Calendar No. 1054

110TH CONGRESS
2D SESSION

S. 24

[Report No. 110-483]

To amend the Safe Drinking Water Act to require a health advisory and monitoring of drinking water for perchlorate.

IN THE SENATE OF THE UNITED STATES

JANUARY 4, 2007

Mrs. BOXER (for herself, Mrs. FEINSTEIN, Mr. LAUTENBERG, Mr. CARDIN, and Ms. KLOBUCHAR) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

SEPTEMBER 24 (legislative day, SEPTEMBER 17), 2008

Reported by Mrs. BOXER, with an amendment

[Strike out all after the enacting clause and insert the part printed in italic]

A BILL

To amend the Safe Drinking Water Act to require a health advisory and monitoring of drinking water for perchlorate.

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 “Perchlorate Monitoring*

5 *and Right-to-Know Act of 2008”.*

1 **SEC. 2. FINDINGS AND PURPOSE.**

2 (a) FINDINGS.—Congress finds that—

3 (1) perchlorate—

4 (A) is a chemical used as the primary in-
5 gredient of solid rocket propellant; and6 (B) is also used in fireworks, road flares,
7 and other applications.8 (2) waste from the manufacture and improper
9 disposal of chemicals containing perchlorate is in-
10 creasingly being discovered in soil and water;11 (3) according to the Government Accountability
12 Office, perchlorate contamination has been detected
13 in water and soil at almost 400 sites in the United
14 States, with concentration levels ranging from 4
15 parts per billion to millions of parts per billion;16 (4) the Government Accountability Office has
17 determined that the Environmental Protection Agen-
18 cy does not centrally track or monitor perchlorate
19 detections or the status of perchlorate cleanup, so a
20 greater number of contaminated sites may already
21 exist;22 (5) according to the Government Accountability
23 Office, limited Environmental Protection Agency
24 data show that perchlorate has been found in 35
25 States and the District of Columbia and is known to

1 have contaminated 153 public water systems in 26
2 States;

3 (6) those data are likely underestimates of total
4 drinking water exposure, as illustrated by the find-
5 ing of the California Department of Health Services
6 that perchlorate contamination sites have affected
7 approximately 276 drinking water sources and 77
8 drinking water systems in the State of California
9 alone;

10 (7) Food and Drug Administration scientists
11 and other scientific researchers have detected per-
12 chlorate in the United States food supply, including
13 in lettuce, milk, cucumbers, tomatoes, carrots, canta-
14 loupe, wheat, and spinach, and in human breast
15 milk;

16 (8)(A) perchlorate can harm human health, es-
17 pecially in pregnant women and children, by inter-
18 fering with uptake of iodide by the thyroid gland,
19 which is necessary to produce important hormones
20 that help control human health and development;

21 (B) in adults, the thyroid helps to regulate me-
22 tabolism;

23 (C) in children, the thyroid helps to ensure
24 proper mental and physical development; and

1 (D) impairment of thyroid function in expectant
2 mothers or infants may result in effects including
3 delayed development and decreased learning capa-
4 bility;

5 (9)(A) in October 2006, researchers from the
6 Centers for Disease Control and Prevention pub-
7 lished the largest, most comprehensive study to date
8 on the effects of low levels of perchlorate exposure
9 in women, finding that—

(i) significant changes existed in thyroid hormones in women with low iodine levels who were exposed to perchlorate; and

13 (ii) even low-level perchlorate exposure may
14 affect the production of hormones by the thy-
15 roid in iodine-deficient women; and

16 (B) in the United States, about 36 percent of
17 women have iodine levels equivalent to or below the
18 levels of the women in the study described in sub-
19 paragraph (A);

20 (10) the Environmental Protection Agency has
21 not established a health advisory or national primary
22 drinking water regulation for perchlorate, but in-
23 stead established a "Drinking Water Equivalent
24 Level" of 24.5 parts per billion for perchlorate,
25 which—

(A) does not take into consideration all routes of exposure to perchlorate;

(B) has been criticized by experts as failing to sufficiently consider the body weight, unique exposure, and vulnerabilities of certain pregnant women and fetuses, infants, and children; and

(C) is based primarily on a small study and does not take into account new, larger studies of the Centers for Disease Control and Prevention or other data indicating potential effects at lower perchlorate levels than previously found;

14 (11) on August 22, 2005 (70 Fed. Reg.
15 49094), the Administrator proposed to extend the
16 requirement that perchlorate be monitored in drink-
17 ing water under the final rule entitled “Unregulated
18 Contaminant Monitoring Regulation (UCMR) for
19 Public Water Systems Revisions” promulgated pur-
20 suant to section 1445(a)(2) of the Safe Drinking
21 Water Act (42 U.S.C. 300j-4(a)(2)), and

22 (12) on December 20, 2006, the Administrator
23 signed a final rule removing perchlorate from the list
24 of contaminants for which monitoring is required
25 under the final rule entitled "Unregulated Contami-

1 nant Monitoring Regulation (UCMR) for Public
2 Water Systems Revisions" (72 Fed. Reg. 368 (Janu-
3 ary 4, 2007)).

4 (b) PURPOSE.—The purpose of this Act is to require
5 the Administrator of the Environmental Protection Agen-
6 cy—

7 (1) to establish, not later than 90 days after
8 the date of enactment of this Act, a health advisory
9 that—

(A) is fully protective of, and considers, the body weight and exposure patterns of pregnant women, fetuses, newborns, and children;

13 (B) provides an adequate margin of safety;
14 and

15 (C) takes into account all routes of expo-
16 sure to perchlorate;

1 **SEC. 3. MONITORING AND HEALTH ADVISORY FOR PER-**2 **CHLORATE.**

3 Section 1412(b)(12) of the Safe Drinking Water Act
4 (~~42 U.S.C. 300g-1(b)(12)~~) is amended by adding at the
5 end the following:

6 **“(C) PERCHLORATE.—**

7 **“(i) HEALTH ADVISORY.—** Not later
8 than 90 days after the date of enactment
9 of this subparagraph, the Administrator
10 shall publish a health advisory for per-
11 chlorate that fully protects, with an ade-
12 quate margin of safety, the health of vul-
13 nerable persons (including pregnant
14 women, fetuses, newborns, and children),
15 considering body weight and exposure pat-
16 terns and all routes of exposure.

17 **“(ii) MONITORING REGULATIONS.—**

18 **“(I) IN GENERAL.—** The Admin-
19 istrator shall propose (not later than
20 60 days after the date of enactment of
21 this subparagraph) and promulgate
22 (not later than 120 days after the
23 date of enactment of this subpara-
24 graph) a final regulation requiring—

25 **“(aa) each public water sys-
26 tem serving more than 10,000 in-**

dividuals to monitor for perchlorate beginning not later than October 31, 2007; and

“(bb) the collection of a representative sample of public water systems serving 10,000 individuals or fewer to monitor for perchlorate in accordance with section 1445(a)(2).

“(H) DURATION.—The regulation shall be in effect unless and until monitoring for perchlorate is required under a national primary drinking water regulation for perchlorate.

“(iii) CONSUMER CONFIDENCE REPORTS.—Each consumer confidence report issued under section 1414(e)(4) shall disclose the presence of any perchlorate in drinking water, and the potential health risks of exposure to perchlorate in drinking water, consistent with guidance issued by the Administrator.”

23 SECTION 1. SHORT TITLE.

24 *This Act may be cited as the “Perchlorate Monitoring*
25 *and Right-to-Know Act of 2008”.*

1 **SEC. 2. FINDINGS AND PURPOSE.**2 (a) *FINDINGS.*—Congress finds that—3 (1) *perchlorate*—4 (A) *is a chemical used as the primary in-*
5 *gredient of solid rocket propellant; and*6 (B) *is also used in fireworks, road flares,*
7 *and other applications.*8 (2) *waste from the manufacture and improper*
9 *disposal of chemicals containing perchlorate is in-*
10 *creasingly being discovered in soil and water;*11 (3) *according to the Government Accountability*
12 *Office, perchlorate contamination has been detected in*
13 *water and soil at almost 400 sites in the United*
14 *States, with concentration levels ranging from 4 parts*
15 *per billion to millions of parts per billion;*16 (4) *the Government Accountability Office has de-*
17 *termined that the Environmental Protection Agency*
18 *does not centrally track or monitor perchlorate detec-*
19 *tions or the status of perchlorate cleanup, so a greater*
20 *number of contaminated sites may already exist;*21 (5) *according to the Government Accountability*
22 *Office, limited Environmental Protection Agency data*
23 *show that perchlorate has been found in 35 States*
24 *and the District of Columbia and is known to have*
25 *contaminated 153 public water systems in 26 States;*

1 (6) those data are likely underestimates of total
2 drinking water exposure, as illustrated by the finding
3 of the California Department of Health Services that
4 perchlorate contamination sites have affected approxi-
5 mately 274 drinking water sources and 82 drinking
6 water systems in the State of California alone;

7 (7) Food and Drug Administration scientists
8 and other scientific researchers have detected per-
9 chlorate in the United States food supply, including
10 in lettuce, milk, cucumbers, tomatoes, carrots, canta-
11 loupe, wheat, and spinach, and in human breast
12 milk;

13 (8)(A) perchlorate can harm human health, espe-
14 cially in pregnant women and children, by inter-
15 fering with uptake of iodide by the thyroid gland,
16 which is necessary to produce important hormones
17 that help control human health and development;

18 (B) in adults, the thyroid helps to regulate me-
19 tabolism;

20 (C) in children, the thyroid helps to ensure prop-
21 er mental and physical development; and

22 (D) impairment of thyroid function in expectant
23 mothers or infants may result in effects including de-
24 layed development and decreased learning capability;

(i) significant changes existed in thyroid hormones in women with low iodine levels who were exposed to perchlorate; and

(A) does not take into consideration all routes of exposure to perchlorate;

(B) has been criticized by experts as failing to sufficiently consider the body weight, unique

1 *exposure, and vulnerabilities of certain pregnant*
2 *women and fetuses, infants, and children; and*

3 *(C) is based primarily on a small study*
4 *and does not take into account new, larger stud-*
5 *ies of the Centers for Disease Control and Pre-*
6 *vention or other data indicating potential effects*
7 *at lower perchlorate levels than previously found;*

8 *(11) on August 22, 2005 (70 Fed. Reg. 49094),*
9 *the Administrator proposed to extend the requirement*
10 *that perchlorate be monitored in drinking water*
11 *under the final rule entitled “Unregulated Contami-*
12 *nant Monitoring Regulation (UCMR) for Public*
13 *Water Systems Revisions” promulgated pursuant to*
14 *section 1445(a)(2) of the Safe Drinking Water Act (42*
15 *U.S.C. 300j-4(a)(2)); and*

16 *(12) on December 20, 2006, the Administrator*
17 *signed a final rule removing perchlorate from the list*
18 *of contaminants for which monitoring is required*
19 *under the final rule entitled “Unregulated Contami-*
20 *nant Monitoring Regulation (UCMR) for Public*
21 *Water Systems Revisions” (72 Fed. Reg. 368 (Janu-*
22 *ary 4, 2007)).*

23 *(b) PURPOSE.—The purpose of this Act is to require*
24 *the Administrator of the Environmental Protection Agen-*
25 *cy—*

1 (1) to establish, not later than 90 days after the
2 date of enactment of this Act, a health advisory
3 that—

4 (A) is fully protective of, and considers, the
5 body weight and exposure patterns of pregnant
6 women, infants, and children;

7 (B) provides an adequate margin of safety;
8 and

9 (C) takes into account all routes of exposure
10 to perchlorate;

11 (2) to promulgate, not later than 120 days after
12 the date of enactment of this Act, a final regulation
13 requiring monitoring for perchlorate in drinking
14 water; and

15 (3) to ensure the right of the public to know
16 about perchlorate in drinking water by requiring that
17 consumer confidence reports disclose the presence and
18 potential health effects of perchlorate in drinking
19 water.

20 **SEC. 3. MONITORING AND HEALTH ADVISORY FOR PER-**
21 **CHLORATE.**

22 Section 1412(b)(12) of the Safe Drinking Water Act
23 (42 U.S.C. 300g-1(b)(12)) is amended by adding at the end
24 the following:

25 “(C) PERCHLORATE.—

1 “(i) *HEALTH ADVISORY.*—Notwith-
2 *standing any other provision of this section,*
3 *not later than 90 days after the date of en-*
4 *actment of this subparagraph, the Adminis-*
5 *trator shall publish a health advisory for*
6 *perchlorate that is fully protective, with an*
7 *adequate margin of safety, of the health of*
8 *vulnerable persons (including pregnant*
9 *women, infants, and children), taking into*
10 *consideration body weight, exposure pat-*
11 *terns, and all routes of exposure.*

12 “(ii) *MONITORING REGULATIONS.*—

13 “(I) *IN GENERAL.*—The Adminis-
14 *trator shall propose (not later than 60*
15 *days after the date of enactment of this*
16 *subparagraph) and promulgate (not*
17 *later than 120 days after the date of*
18 *enactment of this subparagraph) a*
19 *final regulation pursuant to section*
20 *1445(a)(2) requiring—*

21 “(aa) *each public water sys-*
22 *tem serving more than 10,000 in-*
23 *dividuals to monitor for per-*
24 *chlorate beginning not later than*

1 *180 days after the date of enact-*
2 *ment of this subparagraph; and*

3 “(bb) *the collection of a rep-*
4 *resentative sample of public water*
5 *systems serving 10,000 individ-*
6 *uals or fewer to monitor for per-*
7 *chlorate in accordance with sec-*
8 *tion 1445(a)(2).*

9 “(II) *DURATION.*—*The regulation*
10 *shall be in effect until monitoring for*
11 *perchlorate is required under a na-*
12 *tional primary drinking water regula-*
13 *tion for perchlorate.*

14 “(iii) *CONSUMER CONFIDENCE RE-*
15 *PORTS.*—

16 “(I) *IN GENERAL.*—*Subject to*
17 *subclause (II), by regulation promul-*
18 *gated simultaneously with the promul-*
19 *gation of the final regulation under*
20 *clause (ii), the Administrator shall re-*
21 *quire that each consumer confidence re-*
22 *port issued under section 1414(c)(4)*
23 *shall disclose the presence of any per-*
24 *chlorate in drinking water, and the po-*
25 *tential health risks of exposure to per-*

1 *chlorate in drinking water to vulner-*
2 *able persons (including pregnant*
3 *women, infants, and children), consist-*
4 *ent with regulations promulgated*
5 *by the Administrator.*

6 “(II) *EXCEPTION.—Notwith-*
7 *standing subclause (I), perchlorate*
8 *shall not be considered to be 1 of the 3*
9 *regulated contaminants described in*
10 *the matter following clause (vi) of sec-*
11 *tion 1414(c)(4)(B).”.*

Calendar No. 1054

110TH CONGRESS
2D SESSION

S. 24

[Report No. 110-483]

A BILL

To amend the Safe Drinking Water Act to require a health advisory and monitoring of drinking water for perchlorate.

SEPTEMBER 24 (legislative day, SEPTEMBER 17), 2008

Reported with an amendment