

112TH CONGRESS
1ST SESSION

S. 78

To amend the Safe Drinking Water Act to protect the health of pregnant women, fetuses, infants, and children by requiring a health advisory and drinking water standard for perchlorate.

IN THE SENATE OF THE UNITED STATES

JANUARY 25 (legislative day, JANUARY 5), 2011

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

A BILL

To amend the Safe Drinking Water Act to protect the health of pregnant women, fetuses, infants, and children by requiring a health advisory and drinking water standard 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 “Protecting Pregnant
5 Women and Children From Perchlorate Act of 2011”.

6 **SEC. 2. FINDINGS AND PURPOSES.**

7 (a) FINDINGS.—Congress finds that—

8 (1) perchlorate—

1 (A) is a chemical used as the primary in-
2 gredient of solid rocket propellant; and

3 (B) is also used in fireworks, road flares,
4 and other applications;

5 (2) waste from the manufacture and improper
6 disposal of chemicals containing perchlorate is in-
7 creasingly being discovered in soil and water;

8 (3) according to the Government Accountability
9 Office, perchlorate contamination has been detected
10 in water and soil at almost 400 sites in the United
11 States, with concentration levels ranging from 4
12 parts per billion to millions of parts per billion;

13 (4) the Government Accountability Office has
14 determined that the Environmental Protection Agen-
15 cy does not centrally track or monitor perchlorate
16 detections or the status of perchlorate cleanup, so a
17 greater number of contaminated sites may already
18 exist;

19 (5) according to the Government Accountability
20 Office, limited Environmental Protection Agency
21 data show that perchlorate has been found in 35
22 States and the District of Columbia and is known to
23 have contaminated 153 public water systems in 26
24 States;

1 (6) those data are likely underestimates of total
2 drinking water exposure, as illustrated by the find-
3 ing of the California Department of Health Services
4 that perchlorate contamination sites have affected
5 approximately 273 drinking water sources and 86
6 drinking water systems in the State of California
7 alone;

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

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

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

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

23 (D) impairment of thyroid function in expectant
24 mothers or infants may result in effects including

1 delayed development and decreased learning capa-
2 bility;

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

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

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

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

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

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

1 (B) has been criticized by experts as fail-
2 ing to sufficiently consider the body weight,
3 unique exposure, and vulnerabilities of certain
4 pregnant women and fetuses, infants, and chil-
5 dren; and

6 (C) is based primarily on a small study
7 and does not take into account new, larger
8 studies of the Centers for Disease Control and
9 Prevention or other data indicating potential ef-
10 fects at lower perchlorate levels than previously
11 found.

12 (b) PURPOSES.—The purposes of this Act are—

13 (1) to require the Administrator of the Environ-
14 mental Protection Agency to establish, by not later
15 than 90 days after the date of enactment of this
16 Act, a health advisory for perchlorate in drinking
17 water that—

18 (A) is fully protective of, and considers,
19 the body weight and exposure patterns of preg-
20 nant women, infants, and children;

21 (B) provides an adequate margin of safety;
22 and

23 (C) takes into account all routes of expo-
24 sure to perchlorate;

1 (2) to require the Administrator of the Environ-
2 mental Protection Agency to establish not later than
3 1 year after the date of enactment of this Act a na-
4 tional primary drinking water regulation for per-
5 chlorate that fully protects pregnant women, infants,
6 and children, taking into consideration body weight,
7 exposure patterns, and all routes of exposure to per-
8 chlorate.

9 **SEC. 3. HEALTH ADVISORY AND NATIONAL PRIMARY**
10 **DRINKING WATER REGULATION FOR PER-**
11 **CHLORATE.**

12 Section 1412(b)(12) of the Safe Drinking Water Act
13 (42 U.S.C. 300g-1(b)(12)) is amended by adding at the
14 end the following:

15 “(C) PERCHLORATE.—

16 “(i) HEALTH ADVISORY.—Notwith-
17 standing any other provision of this sec-
18 tion, not later than 90 days after the date
19 of enactment of this subparagraph, the Ad-
20 ministrators shall publish a health advisory
21 for perchlorate that is fully protective, with
22 an adequate margin of safety, of the health
23 of vulnerable persons (including pregnant
24 women, infants, and children), taking into

1 consideration body weight, exposure pat-
2 terns, and all routes of exposure.

3 “(ii) PROPOSED REGULATIONS.—Not-
4 withstanding any other provision of this
5 section, the Administrator shall propose
6 (not later than 180 days after the date of
7 enactment of this subparagraph) and shall
8 finalize (not later than 1 year after the
9 date of enactment of this subparagraph) a
10 national primary drinking water regulation
11 for perchlorate—

12 “(I) that based on the factors in
13 clause (i) and other relevant data, is
14 protective, with an adequate margin
15 of safety, of vulnerable persons (in-
16 cluding pregnant women, infants, and
17 children); and

18 “(II) the maximum contaminant
19 level of which is as close to the max-
20 imum contaminant level goal for per-
21 chlorate, and as protective of vulner-
22 able persons, as is feasible.”.

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