

- **Board of Directors**  
**Communications and Legislation Committee**

May 8, 2007 Board Meeting

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8-7

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## **Subject**

Express support, if amended, for federal Perchlorate legislation

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## **Description**

Perchlorate is an inorganic compound used as an oxidizing agent in solid rocket fuel. There is the potential for perchlorate contamination if drinking water supplies are near aerospace, munitions and fireworks facilities. Perchlorate can interfere with the thyroid gland's ability to produce hormones necessary for normal growth and development. Perchlorate contaminated groundwater seeping into Lake Mead through the Las Vegas Wash area found its way into Metropolitan's Colorado River supplies. Levels as high as 18 parts per billion (ppb) were detected in untreated drinking water. Once the source of this contamination was identified, Metropolitan, along with the United States Environmental Protection Agency (US EPA) and regulatory agencies in Nevada, worked to isolate and treat the source of perchlorate loading into the Colorado River. Since that time, monitoring has indicated "non-detect" levels entering Metropolitan's distribution system. Also, of great importance, a number of areas have significant perchlorate contamination plumes in local groundwater basins in the Inland Empire and San Gabriel areas.

California has aggressively sought regulation of perchlorate since its detection in water supplies nearly a decade ago. The California State Legislature introduced, passed and saw the Governor sign into law several bills aimed at regulating perchlorate and its environmental impacts. One of these legislative efforts led to the establishment of a drinking water standard for perchlorate. A proposed 6 ppb maximum contaminant level (MCL) for perchlorate is awaiting public comment prior to its final adoption in California.

Some critics have argued California's proposed 6 ppb MCL is not protective enough for sensitive sub-populations (e.g., pregnant women, children and infants). However, the data for regulating perchlorate at a lower level is currently unavailable, and justification for a stricter standard relies on a number of assumptions and interpretations.

## **Analysis**

United States Senator Barbara Boxer (D-California) has introduced two bills regarding perchlorate. S. 24 ([Attachment 2](#)) would direct the US EPA to establish a health advisory, followed by a drinking water standard for perchlorate. This bill emphasizes the need to protect sensitive sub-populations, primarily pregnant women and children. The second of Senator Boxer's bills, S. 150 ([Attachment 3](#)), would direct the US EPA to continue monitoring for perchlorate throughout the nation and if detected, require public notification.

On March 28, United States Representative Hilda Solis (D-California) introduced H.R. 1747 ([Attachment 4](#)), the Safe Drinking Water for Healthy Communities Act of 2007, and its initial policy hearing took place on April 24, 2007 in the Environment and Hazardous Materials Subcommittee of the House Energy and Commerce Committee. Representative Solis' bill would: (1) require US EPA to publish a national drinking water standard in the Federal Register no later than 12 months after enactment of H.R. 1747; and (2) not later than 18 months after publication set a national primary drinking water regulation for perchlorate.

AB 1127 (Carter, D-Rialto) ([Attachment 5](#)), was introduced in the California Legislature and was amended to authorize the Department of Health Services to contract with the Santa Ana Watershed Project Authority to assess and treat drinking water for perchlorate contamination in and around the City of Rialto. Because of its geographic limitation, staff is not recommending any position on AB 1127 at this time.

**Attachment 1**, Summary of Pending Perchlorate Legislation for 2007/2008, outlines the federal legislation introduced in the 110<sup>th</sup> Congress and the single bill pending in the California State Legislature.

Drinking water trade association groups, particularly the American Water Works Association, the Association of California Water Agencies, and the Association of Metropolitan Water Agencies, have yet to adopt positions on the three federal measures. Water utilities have consistently called for the US EPA to make a regulatory determination on perchlorate, which is viewed as the first step toward establishing a national drinking water standard. Although California is scheduled to adopt its own MCL for perchlorate in the near-term, a national drinking water standard would assist in the clean up of hundreds of Department of Defense facilities in Southern California and around the country.

### **Potential Amendments**

Staff has consistently recommended that firm datelines for adopting drinking water regulations not be codified into either federal or state drinking water legislation. Potential amendments to this legislation should seek to remove firm deadlines for US EPA to promulgate a national drinking water standard for perchlorate and instead focus on accelerating the scientific analysis to lead towards development of a national drinking water standard. Staff believes that any changes to the law should preserve the process in the Safe Drinking Water Act Amendments of 1996 requiring regulations to be developed as necessary.

### **Policy**

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Drinking Water Quality, M.I. 46191- April 12, 2005

### **California Environmental Quality Act (CEQA)**

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CEQA determination for Options #1 and #2:

The proposed action is not a project under CEQA because the proposed action involves continuing administrative activities (Section 15378(b)(2) of the State CEQA Guidelines). In addition, where it can be seen with certainty that there is no possibility that the proposed action in question may have a significant effect on the environment, the proposed action is not subject to CEQA (Section 15061(b)(3) of the State CEQA Guidelines).

CEQA determination for Option #3:

None required

### **Board Options**

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#### **Option #1**

Adopt the CEQA determination and express support, if amended as described in this board letter, for S. 24, S. 150 and H.R. 1747.

**Fiscal Impact:** None

#### **Option #2**

Adopt the CEQA determination and express support for S. 24, S. 150 and H.R. 1747.

**Fiscal Impact:** None

#### **Option #3**

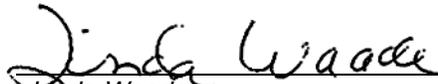
Take no action.

**Fiscal Impact:** None

**Staff Recommendation**

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Option #1

  
Linda Waade  
Deputy General Manager, External Affairs

5/2/2007  
Date

  
Jeffrey Kightlinger  
General Manager

5/2/2007  
Date

**Attachment 1 – Summary of Pending Perchlorate Legislation for 2007/2008**

**Attachment 2 – S. 24**

**Attachment 3 – S. 150**

**Attachment 4 – H.R. 1747**

**Attachment 5 – AB 1127**

BLA #5369

**Summary of Pending Perchlorate Legislation for 2007 - 2008**

Bill Number (Author)	Summary	Status	MWD Position Based on Board Adopted Policy Principles
<b>Federal Legislation</b>			
S 24 (Boxer)	Would amend the Safe Drinking Water Act by calling on the US EPA (1) to establish, not later than 90 days after the date of enactment of this Act, a drinking water health advisory for perchlorate; (2) to promulgate, not later than 120 days after the date of enactment of this Act, a final regulation requiring monitoring for perchlorate in drinking water; and (3) to ensure the right of the public to know about perchlorate in drinking water by requiring that consumer confidence reports disclose the presence and potential health effects of perchlorate in drinking water.	Referred to the Senate Committee on Environment and Public Works	Support if Amended
S 150 (Boxer)	Would require the US EPA to establish, not later than 90 days after the date of enactment, a health advisory for perchlorate and establish a national primary drinking water regulation for perchlorate that fully protects sensitive sub-populations (pregnant women, fetuses, infants and children)	Referred to the Senate Committee on Environment and Public Works	Support if Amended
HR 1747 (Solis)	Would amend the Safe Drinking Water Act to require a national primary drinking water regulation for perchlorate not later than 18 months after enactment.	Heard in the House Sub-committee on Environment and Hazardous Materials on April 25, 2007	Support if Amended
<b>California State Legislation</b>			
AB 1127 (Carter)	Would authorize the California Dept. Health Services to contract with the Santa Ana Watershed Project Authority for the purposes of assessing and treating drinking water for perchlorate contamination in and around the City of Rialto.	Re-referred to Assembly Committee on Environmental Safety and Toxic Materials (two-year bill)	Watch



1 (B) is also used in fireworks, road flares,  
2 and other applications.

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

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

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

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

23 (6) those data are likely underestimates of total  
24 drinking water exposure, as illustrated by the find-  
25 ing of the California Department of Health Services

1 that perchlorate contamination sites have affected  
2 approximately 276 drinking water sources and 77  
3 drinking water systems in the State of California  
4 alone;

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

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

16 (B) in adults, the thyroid helps to regulate me-  
17 tabolism;

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

20 (D) impairment of thyroid function in expectant  
21 mothers or infants may result in effects including  
22 delayed development and decreased learning capa-  
23 bility;

24 (9)(A) in October 2006, researchers from the  
25 Centers for Disease Control and Prevention pub-

1 lished the largest, most comprehensive study to date  
2 on the effects of low levels of perchlorate exposure  
3 in women, finding that—

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

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

10 (B) in the United States, about 36 percent of  
11 women have iodine levels equivalent to or below the  
12 levels of the women in the study described in sub-  
13 paragraph (A);

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

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

22 (B) has been criticized by experts as fail-  
23 ing to sufficiently consider the body weight,  
24 unique exposure, and vulnerabilities of certain

1 pregnant women and fetuses, infants, and chil-  
2 dren; and

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

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

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

1 (b) PURPOSE.—The purpose of this Act is to require  
2 the Administrator of the Environmental Protection Agen-  
3 cy—

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

7 (A) is fully protective of, and considers,  
8 the body weight and exposure patterns of preg-  
9 nant women, fetuses, newborns, and children;

10 (B) provides an adequate margin of safety;  
11 and

12 (C) takes into account all routes of expo-  
13 sure to perchlorate;

14 (2) to promulgate, not later than 120 days  
15 after the date of enactment of this Act, a final regu-  
16 lation requiring monitoring for perchlorate in drink-  
17 ing water; and

18 (3) to ensure the right of the public to know  
19 about perchlorate in drinking water by requiring  
20 that consumer confidence reports disclose the pres-  
21 ence and potential health effects of perchlorate in  
22 drinking water.

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-

1 individuals to monitor for per-  
2 chlorate beginning not later than  
3 October 31, 2007; and

4 “(bb) the collection of a rep-  
5 resentative sample of public  
6 water systems serving 10,000 in-  
7 dividuals or fewer to monitor for  
8 perchlorate in accordance with  
9 section 1445(a)(2).

10 “(II) DURATION.—The regula-  
11 tion shall be in effect unless and until  
12 monitoring for perchlorate is required  
13 under a national primary drinking  
14 water regulation for perchlorate.

15 “(iii) CONSUMER CONFIDENCE RE-  
16 PORTS.—Each consumer confidence report  
17 issued under section 1414(c)(4) shall dis-  
18 close the presence of any perchlorate in  
19 drinking water, and the potential health  
20 risks of exposure to perchlorate in drinking  
21 water, consistent with guidance issued by  
22 the Administrator.”.

○

II

110<sup>TH</sup> CONGRESS  
1<sup>ST</sup> SESSION

# S. 150

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.

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## IN THE SENATE OF THE UNITED STATES

JANUARY 4, 2007

Mrs. BOXER (for herself, Mrs. FEINSTEIN, and Mr. LAUTENBERG) 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 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 2007”.

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 276 drinking water sources and 77  
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 fully protects pregnant women, fetuses,  
18 infants, and children, taking into consideration body  
19 weight and exposure patterns and all routes of expo-  
20 sure to perchlorate; and

21 (2) to require the Administrator of the Environ-  
22 mental Protection Agency to establish promptly a  
23 national primary drinking water regulation for per-  
24 chlorate that fully protects pregnant women, fetuses,  
25 infants, and children, taking into consideration body

1 weight and exposure patterns and all routes of expo-  
2 sure to perchlorate.

3 **SEC. 3. HEALTH ADVISORY AND NATIONAL PRIMARY**  
4 **DRINKING WATER REGULATION FOR PER-**  
5 **CHLORATE.**

6 Section 1412(b)(12) of the Safe Drinking Water Act  
7 (42 U.S.C. 300g-1(b)(12)) is amended by adding at the  
8 end the following:

9 “(C) PERCHLORATE.—

10 “(i) SCHEDULE, HEALTH ADVISORY,  
11 AND STANDARD.—Notwithstanding any  
12 other provision of this section, the Admin-  
13 istrator shall publish a health advisory and  
14 promulgate a national primary drinking  
15 water regulation for perchlorate, in accord-  
16 ance with the schedule and provisions es-  
17 tablished by this subparagraph, that fully  
18 protect, with an adequate margin of safety,  
19 the health of vulnerable persons (including  
20 pregnant women, fetuses, infants, and chil-  
21 dren), taking into consideration body  
22 weight, exposure patterns, and all routes of  
23 exposure.

24 “(ii) HEALTH ADVISORY.—Not later  
25 than 90 days after the date of enactment

1 of this subparagraph, the Administrator  
2 shall publish a health advisory for per-  
3 chlorate in accordance with clause (i).

4 “(iii) PROPOSED REGULATIONS.—Not  
5 later than August 1, 2007, the Adminis-  
6 trator shall propose a national primary  
7 drinking water regulation for perchlorate  
8 in accordance with clause (i).

9 “(iv) FINAL REGULATIONS.—Not  
10 later than December 31, 2007, after pro-  
11 viding notice and an opportunity for public  
12 comment, the Administrator shall promul-  
13 gate a national primary drinking water  
14 regulation for perchlorate in accordance  
15 with clause (i).”.

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110TH CONGRESS  
1ST SESSION

# H. R. 1747

To amend the Safe Drinking Water Act to require a national primary drinking water regulation for perchlorate.

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## IN THE HOUSE OF REPRESENTATIVES

MARCH 28, 2007

Ms. SOLIS (for herself, Mr. MCNERNEY, Mr. GEORGE MILLER of California, Mr. BLUMENAUER, Mr. PALLONE, Mr. ALLEN, Mr. INSLEE, Mr. WEINER, Mrs. CAPPES, Mr. HINCHEY, Mr. STUPAK, Mr. WYNN, Ms. DEGETTE, and Ms. SCHAKOWSKY) introduced the following bill; which was referred to the Committee on Energy and Commerce

---

## A BILL

To amend the Safe Drinking Water Act to require a national primary drinking water regulation 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 “Safe Drinking Water  
5 for Healthy Communities Act of 2007”.

6 **SEC. 2. FINDINGS.**

7 Congress finds the following:

1           (1) Perchlorate is a chemical used as the pri-  
2           mary ingredient in solid propellant for rockets, mis-  
3           siles, and fireworks.

4           (2) Large-scale production of perchlorate-con-  
5           taining chemicals in the United States began in the  
6           mid-1940s and large volumes have been disposed of  
7           in various States since the 1950s.

8           (3) Perchlorate is an oxidizing anion that origi-  
9           nates as a contaminant in ground and surface wa-  
10          ters and is highly soluble and exceedingly mobile in  
11          aqueous systems, persisting for many decades under  
12          typical ground and surface water conditions.

13          (4) The most prevalent sources of perchlorate  
14          contamination in environmental media can be traced  
15          to the manufacture and improper disposal of wastes  
16          from blasting agents and military munitions and to  
17          a lesser extent fireworks.

18          (5) Ninety percent of perchlorate in the United  
19          States is produced for use by the Department of De-  
20          fense and the National Aeronautics and Space Ad-  
21          ministration.

22          (6) According to the Government Accountability  
23          Office, in May 2005, perchlorate contamination has  
24          been detected in water and soil at almost 400 sites  
25          in the United States. The Government Account-

1 ability Office concluded that because there is no  
2 standardized approach for reporting perchlorate data  
3 nationwide, a greater number of sites may exist.

4 (7) According to the Government Accountability  
5 Office, in May 2005, limited Environmental Protec-  
6 tion Agency data show that perchlorate has been  
7 found in 35 States and the District of Columbia and  
8 is known to have contaminated 153 public water sys-  
9 tems in 26 States. The Government Accountability  
10 Office reported that concentrations of perchlorate in  
11 drinking water ranged from 4 parts per billion to  
12 more than 420 parts per billion.

13 (8) Environmental Protection Agency data like-  
14 ly underestimates the total drinking water exposure,  
15 as illustrated by the findings of the California De-  
16 partment of Health Services that perchlorate has  
17 contaminated approximately 276 drinking water  
18 sources and 77 drinking water systems in the State  
19 of California.

20 (9) Food and Drug Administration scientists  
21 and other scientific researchers have detected per-  
22 chlorate in the United States food supply, including  
23 but not limited to lettuce, milk, cucumbers, toma-  
24 toes, carrots, cantaloupe, wheat, and spinach, and in  
25 human breast milk.

1           (10) The Centers for Disease Control and Pre-  
2           vention has concluded that perchlorate exposure ap-  
3           pears to be widespread in the United States popu-  
4           lations.

5           (11) The National Academy of Sciences re-  
6           leased a report on January 10, 2005, which rec-  
7           ommended a perchlorate reference dose of 0.0007  
8           milligrams per kilogram per day.

9           (12) The Environmental Protection Agency has  
10          not established a health advisory or national primary  
11          drinking water regulation for perchlorate, but in  
12          2005, established a “drinking water equivalent level”  
13          of 24.5 parts per billion for perchlorate. A drinking  
14          water level assumes the only exposure pathway is  
15          through drinking water and does not account for  
16          other non-drinking water exposure pathways, such  
17          as food and breast milk.

18          (13) On January 22, 2003, the Environmental  
19          Protection Agency issued interim assessment guid-  
20          ance for perchlorate applicable to all Office of Solid  
21          Waste and Emergency Response programs, recom-  
22          mending the use of the provisional cleanup levels for  
23          perchlorate in groundwater ranging from 4 to 18  
24          parts per billion with the added suggestion to care-  
25          fully consider the lower end of the provisional range.

1           (14) On January 26, 2006, the Environmental  
2           Protection Agency issued Office of Solid Waste and  
3           Emergency Response guidance increasing the Envi-  
4           ronmental Protection Agency's provisional cleanup  
5           levels for perchlorate in groundwater to 24.5 parts  
6           per billion.

7           (15) In March 2006, the Children's Health Pro-  
8           tection Advisory Committee advised the Environ-  
9           mental Protection Agency that the Agency's prelimi-  
10          nary remediation goal (PRG) for perchlorate is not  
11          protective of children's health, as it can result in a  
12          nursing infant exposure that is 5 to 10 times higher  
13          than the recommended dose (Rfd) of 24.5 parts per  
14          billion.

15          (16) Perchlorate inhibits the uptake of iodine  
16          by the thyroid gland (which is necessary to produce  
17          important hormones which help regulate normal  
18          human health and development), presenting a risk to  
19          human health in vulnerable populations, including  
20          pregnant women and children.

21          (17) In October 2006, the Centers for Disease  
22          Control and Prevention found significant changes in  
23          the level of thyroid hormones in humans exposed to  
24          perchlorate. For women with low iodine levels, per-  
25          chlorate exposure was associated with changes in the

1 production levels of hormones by the thyroid. About  
2 36 percent of women in the United States have  
3 lower iodine levels.

4 (18) Given the seriousness of the potential ad-  
5 verse effects associated with perchlorate and the fact  
6 that children were at risk, combined with the ab-  
7 sence of a Federal drinking water standard (MCL)  
8 for perchlorate, California proposed a drinking water  
9 standard of 6 parts per billion, and Massachusetts  
10 promulgated a drinking water standard of 2 parts  
11 per billion.

12 (19) Other States, including Nevada, Texas,  
13 New York, and Maryland, have issued some form of  
14 drinking water guidance for perchlorate, including a  
15 drinking water action level, health-based guidance,  
16 and a health based advisory level at ranges from 1  
17 part per billion to 18 parts per billion.

18 (20) Perchlorate has been detected in the soil,  
19 surface waters, and groundwater at 55 Department  
20 of Defense facilities across the country, with off-site  
21 migration occurring at some facilities.

22 (21) As of 2003, the Department of Defense  
23 policy on perchlorate requires sampling only where a  
24 perchlorate release due to Department activities is

1 suspected and a complete human exposure pathway  
2 is likely to exist.

3 (22) According to the Environmental Protection  
4 Agency, the Department of Defense is deferring all  
5 remedial action relating to perchlorate contamina-  
6 tion at or from its facilities until a Federal per-  
7 chlorate drinking water standard is adopted.

8 (23) The Environmental Protection Agency has  
9 historically failed to exercise its enforcement author-  
10 ity under the Comprehensive Environmental Re-  
11 sponse, Compensation, and Liability Act (CERCLA)  
12 to compel the Department of Defense to undertake  
13 remedial actions to address perchlorate contamina-  
14 tion at Department facilities that are listed on the  
15 Superfund National Priorities List.

16 (24) There are as many as 22 contaminants  
17 without Federal drinking water standards for which  
18 the Environmental Protection Agency has set site  
19 specific cleanup levels for the remediation of ground-  
20 water, making the lack of response actions for per-  
21 chlorate contamination at Department of Defense  
22 Superfund facilities a unique situation.

23 (25) The Environmental Protection Agency has  
24 failed to take enforcement action against the De-  
25 partment of Defense to cause the Department to

1 mitigate or remediate the perchlorate contamination  
2 emanating from its Aberdeen Proving Ground facil-  
3 ity that has adversely impacted the drinking water  
4 supply for the City of Aberdeen, Maryland.

5 (26) Since 2002, the Department of Defense  
6 actively sought to exempt the Department from  
7 State and Federal public health and environmental  
8 laws which protect drinking water supplies from  
9 chemical constituents of military munitions including  
10 perchlorate.

11 **SEC. 3. NATIONAL PRIMARY DRINKING WATER REGULA-**  
12 **TION FOR PERCHLORATE.**

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

16 “(C) PERCHLORATE.—

17 “(i) SCHEDULE AND STANDARD.—

18 Notwithstanding the deadlines set forth in  
19 paragraph (1), the Administrator shall  
20 promulgate a national primary drinking  
21 water regulation for perchlorate pursuant  
22 to this subsection, in accordance with the  
23 schedule established by this subparagraph.

24 “(ii) PROPOSED REGULATIONS.—Not  
25 later than 12 months after the date of the

1           enactment of this subparagraph, the Ad-  
2           ministrator shall publish in the Federal  
3           Register a proposed national primary  
4           drinking water regulation for perchlorate.

5           “(iii) FINAL REGULATIONS.—Not  
6           later than 18 months after the date of  
7           publication of the proposed national pri-  
8           mary drinking water regulation required by  
9           clause (ii), after notice and opportunity for  
10          public comment, the Administrator shall  
11          promulgate a national primary drinking  
12          water regulation for perchlorate.”.

○

AMENDED IN ASSEMBLY APRIL 17, 2007

CALIFORNIA LEGISLATURE—2007—08 REGULAR SESSION

**ASSEMBLY BILL**

**No. 1127**

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**Introduced by Assembly Member Carter**  
*(Principal coauthor: Senator Negrete McLeod)*

February 23, 2007

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An act relating to public health to add Section 116365.6 to the Health and Safety Code, relating to drinking water.

LEGISLATIVE COUNSEL'S DIGEST

AB 1127, as amended, Carter. Public health: percholorate: ~~state standards: report.~~ *drinking water standards: City of Realto: perchlorate.*

*Existing law, the Calderon-Sher Safe Drinking Water Act of 1996, requires the State Department of Health Services to adopt regulations covering water testing, the monitoring of contaminants, the frequency and method of sampling and testing, the reporting of results, and other matters as may be necessary to determine and ensure the quality of domestic water supplies.*

*Effective July 1, 2007, responsibility for the administration of the above-described provisions will be transferred to the State Department of Public Health.*

*The bill would authorize the department to contract with the Santa Ana Watershed Project Authority for the purposes of assessing and treating drinking water for perchlorate contamination in and around the City of Rialto, including the identification of perchlorate contamination in drinking water sources, the assessment and identification of inorganic and organic perchlorate in those sources, and the treatment of drinking water to meet primary drinking water standards for the protection of public health.*

~~Existing law, the Perchlorate Contamination Prevention Progeam, required the Department of Toxic Substances Control to adopt regulations by December 31, 2005, specifying the best management practices for managing perchlorate materials after the effective date of those regulations, except in compliance with the best management practices specified in those regulations.~~

~~This bill would require the State Department of Public Health, no later than June 30, 2008, to prepare and submit to the Legislature a report reviewing state standards for perchlorate in drinking water that currently limit the amount of perchlorate in drinking water to 6 parts per billion, containing specified information and recommendations.~~

~~Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.~~

*The people of the State of California do enact as follows:*

- 1     SECTION 1. Section 116365.6 is added to the Health and
- 2     Safety Code, to read:
- 3     116365.6. The department may contract with the Santa Ana
- 4     Watershed Project Authority for the purposes of assessing and
- 5     treating drinking water for perchlorate contamination in and
- 6     around the City of Rialto, including the identification of perchlorate
- 7     contamination in drinking water sources, the assessment and
- 8     identification of inorganic and organic perchlorate in those
- 9     sources, and the treatment of drinking water to meet primary
- 10    drinking water standards for the protection of public health.
- 11    SEC. 2. The Legislature finds and declares that the drinking
- 12    water of the City of Rialto and the surrounding communities has
- 13    been seriously impaired by perchlorate contamination in
- 14    groundwater aquifers, and that state funds may be advanced for
- 15    the purposes of providing the citizens of that area with pure and
- 16    potable water consistent with the requirements of Chapter 4
- 17    (commencing with Section 116270) of Part 12 of Division 104 of
- 18    the Health and Safety Code. It is therefore declared that a general
- 19    law cannot be made applicable within the meaning of Section 16
- 20    of Article IV of the Constitution, and that the enactment of this act
- 21    as a special law is necessary.
- 22    SECTION 1. ~~The Legislature finds and declares all of the~~
- 23    ~~following:~~

1 ~~(a) After many months of review, the State Department of Public~~  
2 ~~Health has adopted a public health goal for reducing the maximum~~  
3 ~~allowable limit for perchlorate in drinking water to 6 parts per~~  
4 ~~billion (ppb).~~

5 ~~(b) On October 5, 2006, the federal Centers for Disease Control~~  
6 ~~(CDC) issued a report stating that the health threat to women,~~  
7 ~~pregnant women, and fetuses from perchlorate contamination is~~  
8 ~~more serious than earlier believed.~~

9 ~~(c) The state's adoption of a limit of 6 ppb for perchlorate in~~  
10 ~~drinking water was determined before the results of the CDC study~~  
11 ~~were available for public review.~~

12 ~~(d) The State of Massachusetts, after due deliberation, has~~  
13 ~~recently adopted a state standard for drinking water that limits~~  
14 ~~perchlorate to 2 ppb, and has determined that this lower allowable~~  
15 ~~limit for perchlorate is necessary to ensure that drinking water is~~  
16 ~~safe for human consumption.~~

17 ~~SEC. 2. (a) The State Department of Public Health shall, no~~  
18 ~~later than June 30, 2008, prepare and submit to the Legislature, a~~  
19 ~~report on state standards for perchlorate in drinking water that~~  
20 ~~currently limit the amount of perchlorate in drinking water to 6~~  
21 ~~parts per billion, taking into consideration the findings of a federal~~  
22 ~~Centers for Disease Control (CDC) study on perchlorate that was~~  
23 ~~issued on October 5, 2006. The report shall also consider a recently~~  
24 ~~adopted Massachusetts state standard for perchlorate that limits~~  
25 ~~the levels of perchlorate in drinking water in Massachusetts to 2~~  
26 ~~ppb.~~

27 ~~(b) The report shall discuss its findings with regard to both the~~  
28 ~~CDC study and the Massachusetts state standard for perchlorate~~  
29 ~~described in subdivision (a), and shall make recommendations~~  
30 ~~concerning any changes that should be made in existing state~~  
31 ~~standards for perchlorate in drinking water.~~