



February 12, 2014

## Lead-Free Requirements for Fire Hydrants

### Overview

The Safe Drinking Water Act (SDWA), Section 1417, broadly prohibits the sale and use of pipes and other plumbing components that are not “lead free” (as defined in the act ) for the installation or repair of public water systems or plumbing in residential or nonresidential facilities providing water for human consumption.

Enacted January 4, 2011, the Reduction of Lead in Drinking Water Act (P.L. 111-380) amended the SDWA to revise the definition of “lead free” and to add new exemptions from prohibitions on the use or sale of pipes, pipe fittings, and plumbing fittings and fixtures that are not lead free.

In late October 2013, less than three months before the January 2014 effective date for the 2011 law, the Environmental Protection Agency (EPA) issued guidance subjecting fire hydrants to new lead-free standards for pipes, pipe fittings, and plumbing fittings and fixtures used for drinking water. EPA had not previously subjected fire hydrants to SDWA lead-free requirements. Nor have state laws or industry standards applied to hydrants. Consequently, EPA’s October 2013 guidance posed problems for manufacturers who had not anticipated the need to change manufacturing processes and for municipalities and water utilities that often have sizable inventories of hydrants, which under EPA guidance were to become illegal to sell or install after January 3, 2014.

Concerns were also raised regarding the supply and reliability of compliant fire hydrants that would be available to communities and fire departments by January 2014.

In response, the House and Senate passed the Community Fire Safety Act of 2013, H.R. 3588, which was signed into law (P.L. 113-64) on December 20, 2013. This law explicitly exempts fire hydrants from SDWA lead-free requirements. (See “Legislation” section.)

### P.L. 111-380 and EPA Implementation

P.L. 111-380 reduced the maximum allowable level of lead in plumbing components in contact with drinking water from 8.0% to a weighted average of 0.25% (in the wetted surface material). Effective January 4, 2014, plumbing components that do not meet the 0.25% lead-free calculation cannot be sold or installed unless they are exempt from the prohibitions established in the law.

**Table 1. “Lead Free” Under SDWA § 1417**

<b>Materials covered</b>	<b>Effective through 1/3/2014</b>	<b>P.L. 111-380, effective 1/4/2014</b>
Pipes and pipe fittings	not more than 8% lead	not more than a weighted average of 0.25% in the wetted surface material
Plumbing fittings and fixtures	products intended to dispense water for human ingestion must meet industry standard: Section 9 of NSF and ANSI Standard 61	same as above (eliminated requirement to comply with industry standards)
Solder and flux	not more than 0.2% lead	no change

**Source:** Prepared by the Congressional Research Service.

Exemptions: P.L. 111-380 provided that the general prohibitions on the use of lead pipes, fittings and fixtures do not apply to

---

pipes, pipe fittings, plumbing fittings or fixtures ... that are used exclusively for nonpotable services such as manufacturing ... irrigation, outdoor watering or any other uses where the water is not anticipated to be used for human consumption; or specified products including tub fillers, shower valves, and water distribution main gate valves two inches in diameter or larger.

---

Sponsors and supporters of P.L. 111-380 had argued that it would parallel California and several other states’ recent lead reduction laws and be compatible with new industry standards. However, the language in the federal law differs from similar state laws, and the state laws and related industry standards have not applied to fire hydrants.

EPA has planned to make regulatory changes to facilitate implementation of P.L. 111-380 as part of ongoing revisions to regulations governing lead in drinking water. In July 2012, EPA announced that it would not promulgate regulatory revisions before the law entered into effect in January 2014 but would provide information to assist plumbing manufacturers and retailers, states, water systems, and other affected parties in implementing the provisions of the act.

In May 2013, the agency issued draft Frequently Asked Questions to guide affected parties on implementation of P.L. 111-380. This document made no mention of fire hydrants. In late October 2013, however, the agency posted on its website a final guidance document, “Summary of the Reduction of Lead in Drinking Water Act and Frequently Asked Questions.” The EPA October guidance stated that fire hydrants would be subject to the new lead-free standards:

---

Information available to EPA indicates that fire hydrants can be, and are, used in emergency situations to provide drinking water when there are disruptions to the normal operations of the drinking water distribution system. Therefore, as a class, hydrants would not qualify for exclusion for pipes, fittings and fixtures used exclusively for non-potable services.

---

## Legislation

On November 21, 2013, H.R. 3588, the Community Fire Safety Act of 2013, was introduced in the House to explicitly exempt fire hydrants from the lead-free plumbing requirements under the Safe Drinking Water Act. The House passed H.R. 3588 on December 2, 2013. A companion bill, S. 1779, was introduced in the Senate on December 9, 2013. On December 17, the Senate passed H.R. 3588, without amendment, by unanimous consent. The

President signed the bill into law (P.L. 113-64) on December 20, 2013.

P.L. 113-64 amends SDWA Section 1417(a)(4)(B) to add fire hydrants to the list of plumbing fitting and fixtures expressly exempted from the act’s lead-free requirements. Additionally, P.L. 113-64 directs EPA to:

- consult with the National Drinking Water Advisory Council on potential revisions to the SDWA regulations for lead, and
- request the council to consider lead sources throughout the drinking water distribution system including components used to reroute water during repairs.

On December 19, 2013, the EPA revised its implementation guidance concerning fire hydrants in anticipation of the enactment of H.R. 3588.

Related legislation was introduced on December 15, 2013, to make broader revisions to SDWA Section 1417. S. 1824 would amend the act to exempt certain pipes, fittings, and fixtures containing brass from SDWA lead restrictions in specified circumstances unless EPA determined that such an exemption would pose an unreasonable risk to human health.

---

**Mary Tiemann**, Specialist in Environmental Policy

IF10197

---

## Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.