Background. Vermont's Lead in Consumer Products Law, Act 193, is intended to phase out most lead from certain consumer products, including plumbing fixtures and solder. The law recognizes that lead is very toxic, particularly to young children; can cause neurological damage such as decreases in I.Q.; and has no safe level in the human body. The section of Act 193 that addresses plumbing supplies is 9 V.S.A. § 2470h(2).

Plumbing fixtures and solder for plumbing. As of January 1, 2010, the concentration of lead in "plumbing fixtures"—pipes, fittings and fixtures used to convey or dispense water for human consumption—will be limited to a "weighted average" of 0.25 percent for fixtures and 0.20 percent for solder or flux for plumbing. (This is the same standard that the State of California has adopted, also as of January 1, 2010.) It is the opinion of the Office that "human consumption" means drinking and/or cooking. Non-compliant plumbing fixtures or supplies may not be sold or offered for sale in or into Vermont, or installed in Vermont, after January 1, 2010.

(For 2009, sellers of plumbing fixtures or solder with more lead than the limits described above have been required to post disclosures and hand out written information on the risks of lead exposure. Those requirements are described in the Vermont Attorney General's Guidance for Businesses.)

Certification/Testing. Act 193 does not require plumbing supplies to be certified as meeting the statutory standard in order for them to be considered compliant with the law. However, sellers and installers must have a reasonable basis for believing that a particular product is compliant before selling or installing it.

In determining whether a fixture is compliant with Act 193, the statute provides that "weighted average" lead content is to be calculated by using the following formula: the percentage of lead content within each component that comes into contact with water is multiplied by the percent of the total wetted surface of the entire pipe and pipe fitting, plumbing fitting, or fixture represented in each component containing lead; these percentages are added, and the sum constitutes the weighted average lead content of the pipe and pipe fitting, plumbing fitting, or fixture. Fixtures are considered compliant that meet the lead standard of Annex G, NSF/ANSI 61—2008 ("Weighted Average Lead Content Evaluation Procedure to a 0.25% Lead Requirement").

Which fixtures are subject to the limit on lead? The Vermont Attorney General's Office, which enforces Act 193, has identified a number of categories of plumbing supplies that do not fit within the statutory definition of "plumbing fixtures." The law also draws no distinction between plumbing fixtures located inside and outside a home or other building, nor between residential and commercial applications, as long as the fixtures convey or dispense water for human consumption.
The following are fixtures that the Attorney General's Office, as the agency charged with enforcing Act 193, does not consider to be subject to the statutory lead limit, because they do not convey water for human consumption.

1. Service saddles that do not come into contact with water for drinking or cooking.
2. Back-flow preventers, if used to convey water to a non-drinking, non-cooking outlet.
3. Fire hydrants and yard hydrants.
4. Fixtures for wastewater distribution systems.
5. Decorative fountains fixtures.
7. Bathtub fixtures.
8. Shower heads and other shower fixtures.
9. Roman tub fixtures.
10. Whirlpool, therapy pool, and hot tub fixtures.
11. Sanitary sewer drains.
12. Interior fixtures and flush valves for toilets, urinals and bidets.
13. Fixtures for laboratory use.
15. Fixtures for service sinks (these are sinks that sit on the floor).
16. Flexible plumbing connectors and risers that do not convey water for drinking or cooking.
17. Fixtures for machines that wash clothes or dishes.
18. Fixtures in closed-loop hot water heating systems (i.e., with no feedback to a source of water for drinking or cooking).
19. Sprinkler systems (e.g., for fires or irrigation).
20. Products on display in Vermont stores but not for sale.

Products that are subject to the statutory lead limit are all fixtures used to convey or dispense water for drinking or cooking, including the following types of fixtures about which there has been some discussion as to the applicability of the limit.

1. Water distribution valves of any size.
2. Fixtures for sinks other than service sinks.
3. Hose bibs, fittings, tees and splitters.
4. Solenoid valves.
5. Water meters.
6. Parts of submersible pumps through which water for human consumption is conveyed.
7. Fixtures for (drinking) water fountains.
8. Fixtures to convey water to appliances for the purpose of creating a product that humans eat or drink (e.g., fixtures conveying water to ice-makers, soda fountains, and coffee-makers).
9. Water heater fixtures through which water for human consumption is conveyed.
10. Mixing valves.
11. Municipal piping.
As for non-compliant fixtures that can be used for both covered and non-covered uses, sellers would be well advised to notify consumers that these should not be used to convey water for drinking or cooking. (This can be done with a clear and conspicuous disclosure posted near the product.) If a consumer, having been so notified, tells a seller that a particular product is to be used for a non-covered purpose (e.g., in the bath), the seller is normally entitled to rely on that representation.

These lists are not exclusive and may be augmented from time to time, as necessary, and they may be amended by the Vermont Legislature.

**Liability.** Under Act 193, manufacturers, importers, wholesalers, retailers and plumbers are liable for their own sale, offer for sale, or installation of non-compliant fixtures or solder. In the event of a violation, under the Vermont Consumer Fraud Act, of which Act 193 is a part, state courts have the authority to impose civil penalties of up to $10,000 per violation, award consumer relief, require reimbursement to the State for fees and costs, and issue appropriate orders. The Consumer Fraud Act also authorizes consumers to sue for violations of the law.