LEAD-BEARING DRINKING FAUCETS:

A Liability Time Bomb or the purification Industry

By Don Arnold

It's been said that the penalty for ignoring history is having to repeat the same mistakes— case-in-point: lead-bearing faucets.

The battle and ultimate settlement between the state of California and a dozen assorted faucet manufacturers during the past five years begs some study and serious reflection by the water purification industry.

Where it all started

Our time line begins Dec. 15,1992, in the California Superior Court in San Francisco. On that day, a suit was brought against virtually all the major players in the mainstream U.S. faucet industry. The plaintiff was the California Attorney General in concert with two environmental groups: the Natural Resources Defense Council and the Environmental Law Center. The defendants included every big name in the mainstream faucet industry: Delta, Moen, Price Pfizer, Kohler, American Standard, Eelier and Sterling among them. The basis of the suit was an alleged violation by these manufacturers of California's-controversial Proposition 65, the most stringent law of its kind at either state or federal levels. "Prop 65" officially appears on the California books as 'The Safe Drinking Water and Toxic Enforcement Act of 1986." This court action was the second and by far the heaviest shoe to drop for faucet manufacturers since the enactment of the law. The first blow to manufacturers had come with the requirement to apply "clear and reasonable" warning labels to lead-bearing faucets (see *Figure 1),* alerting consumers to the presence of a harmful substance. These labels were akin to the Surgeon General's warning on cigarette packs and, though hardly a public relations windfall, that requirement was met without much resistance from the faucet manufacturers.

Battle lines are drawn

The complaint alleged that these manufacturers were marketing faucets containing lead that leached into the drinking water in excess of the law's strict standard of 0.5 micrograms per day (parts per billion). This conclusion was based in part on extensive tests conducted at the University of North Carolina, which revealed lead levels leaching from the defendants' products exceeded the standard—30-to-40 times the maximum allowed in some cases.

To fight the suit, the majority of the faucet manufacturers involved formed a united front and a joint legal defense committee. Key defense arguments questioned the law's application to water outlet devices as well as the scientific validity of the leach ate testing conducted.

Manufacturers felt the law was too strict and reasoned that having to produce faucets to this standard would be economically unfeasible. The group of manufacturers took a militant legal stand against the suit and, initially, this stance appeared to succeed. In the first round in the lower court, a judgment was held that drinking water faucets were not a "source" of drinking water and, therefore, the law's prohibition against discharging toxic chemicals did not apply.

This turned out to be a brief victory in a war ultimately lost—later, the California Supreme Court disagreed and overturned the decision.

This time, a liberal interpretation of the law was handed down, stating that "a source of drinking water is any water that is part of the water supply and delivery system prior to coming out of the tap, from the mountain stream to the faucet." A costly settlement reached

In Aug., 1995, most of the manufacturers reached a settlement with the plaintiffs involving an agreement to meet the new standards. By Jan. 1996, the remaining four manufacturers also agreed to the settlement.

As part of the settlement, manufacturers were given an allotted time period to phase out all lead-bearing faucets—this will be achieved any where from Dec. 31,1997, to Dec. 31, 1999, depending on the specific manufacturer.

In addition to the phase-out requirements, monetary penalties were assessed to each manufacturer, the largest one nearing $2.4 million. These payments were applied to the attorneys' fees borne by the attorney general and private plaintiffs. In addition, each manufacturer made a contribution to a research and education fund. Those manufacturers who settled late in the game paid the highest penalties.

California: trendsetter for the nation?

A lot of people think this is an interesting story about California—but what has it got to do with them? Historically, movements that start in California have had a way of spreading. There is now increasing interest in a national version of Proposition 65. In addition, a "Children's Right to Know Act" is under consideration by Congress, which would apply similar remedies to products disproportionately consumed or used by in fants or young children.

Additionally, the California episode has triggered a more stringent NSF standard (No. 61, Section 9) that has now been adopted into the ANSI standard A112.18.IM. This is the standard of compliance used by both regional and state plumbing code approval agencies across the nation. Though the NSF standard calls for an across-the-board maximum of 11 micrograms of lead per liter in comparison to the California standard of five, faucet manufacturers are producing uniformly to meet the latter. This is more evidence of California's influence—though Proposition 65 is not enforceable outside that state, it nonetheless brought about a national change in the manufacture of conventional faucets. The reason? It would cost the manufacturers more to produce two different versions of their products than to make them all to this stricter standard.

Hitting close to home

Is there a point to this story for those in

Chronology of Legislation Affecting Lead in Drinking Water

1972. Congress passed the Safe Drinking Water Act (SDWA), which authorized U.S. Environmental Protection Agency (USEPA) to set standards for drinking water quality. The Standard for lead is 50 parts per billion (ppb).

1986 Congress passed an amendment to the SWDA, known as the Lead, Ban, which requires that only lead-free pipe/fitting (containing not more than 8 percent lead) and solder (containing not more than 0.2 percent lead) be used in the installation or repair of any plumbing connected to a public water system. All states were require to adopt the provision of the Lead Ban by June 1988.

1986. The Lead Contamination Control Act of 1988, another amendment to the SWDA, focuses on lead in the drinking water of schools and day-care centers. The USEPA published guidelines on how to remedy lead contamination in drinking water. Restrictions were placed on water coolers with lead-linked tanks.

1989 The USEPA recommended that action be taken to limit to limit exposure or reduce lead in water whenever lead levels exceed 20 ppb for all public and private schools (based on samples of the first 250 ml draw after water has been stagnant for six hours).

1991. The USEPA adopts the Lead and Copper Rule, which officially revokes the 50 ppb maximum contaminant level for lead. The new rule adopted 15 ppb action level for lead that is applied as a 90” percentile value, based on a specified number of sampling sites that meet high-risk targeting criteria. Monitoring is based on one-liter samples after the water has standing in the fitting for six hours.

1996. Federal Safe drinking Water Act Reauthorization Law codifies into U.S. law a single federal drinking water quality standard for plumbing manufactures. Since ANSI/NSF Standard 61, Section 9, meets the requirements of this mandate, it will most likely be adopted as federal law by august 1997. NSF Standard 61, Section 9 relates to the lead leach ate from drinking water describes two types of compliance. One relates to the lead leach ate from drinking water facets and the other for commercial kitchen and bar facets. The standard says that plumbing fitting will not contribute more than 11 micrograms of lead to the water after the water has been standing in the fitting for 16 hours. However, the dilution level/sample stringent than the commercial standard.

1997. Beginning this year, several local and state codes will start the evaluation process to make NSF 61, section 9, part of their regulations by the end of the year.

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Reference:

1. Environmental Hazards in Your School, USEPA
2. Lead Contamination Control in School Water, Minnesota Department of Health

NSF No. 61, Section 9.

the water purification industry? It appears there should be.

At this time, a very small percentage of faucets used with filtration, reverse osmosis, distillation or ultraviolet systems are lead free. There's a certain irony in this fact, since, of all faucets, it would seem that those produced for the specific purpose of delivering drinking water would be lead free. Moreover, it has been found that treatment systems that remove lead by TDS reduction can sometimes produce a water composition that's more aggressive in leaching lead from brass components downstream.

Explanations from system manufacturers and assemblers range from ignorance of the standard to the recitation of problems they would have in staying competitive by upgrading. But here's another puzzle: Why have manufacturers in the purification industry been given a pass on this issue, when the mainstream faucet producers have been forced to change to lead-free or low-lead construction?

Who's next?

This question was posed recently to Ed Weil, California's deputy attorney general. He said, "It was simply a matter of priority. We went after the major faucet manufacturers first because, with them, the greatest numbers of products were involved. Now that we've won that campaign, we're beginning to look at the next level—the specialty faucets like those used with filtration systems. Coincidentally, we have received several 60-day notices from consumers within recent months that cite this very thing—high lead content in dedicated drinking faucets."

The 60-day notice refers to a remedy available to citizens, which enables them to submit products for testing and, based on unfavorable findings, bring suit against the manufacturers producing them. The first step in the procedure is a "60-day notice" submitted to the state or federal government, giving that agency first crack at bringing suit against the manufacturer involved. If the government agency fails to pursue the matter within the 60-day period, the citizen can then bring suit against the manufacturer directly.

Cost as a factor

Weil also pointed out that once enforcement begins in earnest within a certain product category, it becomes doubly offensive when a manufacturer continues providing that product for the primary reason of maintaining a cost advantage over the competitors that do comply.

If there is one reason behind the resistance of most purification system manufacturers and assemblers to furnish lead-free faucets, it seems to be the matter of cost. Though the cost premium is minor when factored into the ticket of a total system, many manufacturers felt they would be put at a competitive disadvantage by switching to lead-free faucets. Most acknowledge there would be marketing points to be gained by being able to tout such an upgrade, but indicated that this was not an adequate reason to change.

Conclusion

It seems "round two" is beginning in what has now become a national enforcement campaign against lead-bearing faucets. If recent history is our industry's teacher, we should know that waiting is bad economy. Manufacturers who passed the initial lead leaching tests by the state of California not only didn't have to pay legal fees, penalties and contributions to education funds—they enjoyed a public relations bonanza while their scrambling competitors suffered the opposite. Maybe this should be a lesson to us all.

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