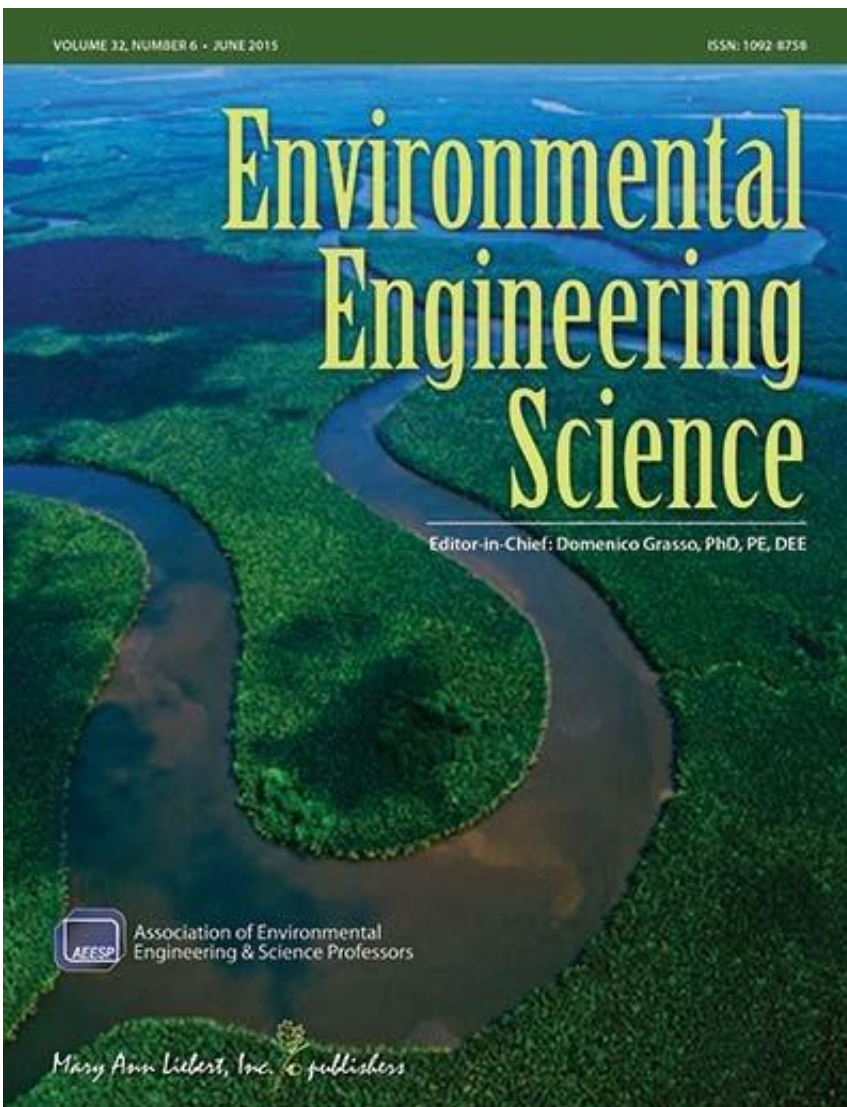


Common method to lower lead levels in drinking water may have opposite effect

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Credit: Mary Ann Liebert, Inc., publishers

New research has shown that pH lowering of municipal water supplies, a common strategy used to control the release of soluble lead from plumbing materials, can affect corrosion of cast iron water mains, resulting in increased levels of both particulate iron and particulate lead in drinking water. The results of intensive laboratory and field testing of samples from a municipal system following consumer complaints of "red water" and the link between iron corrosion and lead leaching are described in an article in *Environmental Engineering Science*.

In the article "[Increased Lead in Water Associated with Iron Corrosion](#)", Sheldon Masters and Marc Edwards, Virginia Tech, Blacksburg, VA, state that the benefits of decreasing lead solubility by reducing the pH of the water supply from about 10.3 to 9.7 can be outweighed by the associated increase in particulate lead levels at the lower pH. As the study demonstrates an interplay between iron corrosion in the water distribution system and mobilization of lead from plumbing systems, the authors suggest that future strategies to reduce lead in [drinking water](#) might require infrastructure upgrades or iron control measures, in addition to methods targeting lead solubility.

"This important paper from one of the top research groups in the nation on drinking water quality, highlights previously unquantified health risks by modifying [water](#) treatment strategies," says Domenico Grasso, PhD, Editor-in-Chief of *Environmental Engineering Science* and Provost, University of Delaware.

More information: The article is available free on the [Environmental Engineering Science](#) website until July 3, 2015.

Provided by Mary Ann Liebert, Inc

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