

Chemical leak in W.Va. shows gaps in research, policy

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The chemical leak that contaminated drinking water in the Charleston, W.Va., area last month put in sharp relief the shortcomings of the policies and research that apply to thousands of chemicals in use today. An article in *Chemical & Engineering News* (C&EN), the weekly magazine of the American Chemical Society, delves into the details of the accident that forced 300,000 residents to live on bottled water for days.

A team of C&EN reporters and editors note that the main [chemical](#) that leaked into the water supply is an obscure one called 4-methylcyclohexanemethanol, or MCHM, which has a black licorice scent. Freedom Industries, the company that owned the leaking tank, used it to process coal. Freedom hypothesizes that the ground beneath the tank froze and caused it to rupture. As a result, an estimated 10,000 gallons of crude MCHM and associated material flowed into the nearby Elk River. Soon after, residents reported a licorice smell in their water, with some also experiencing rashes, mild burns and stomach upset.

To what degree MCHM affects long-term human and fetal health is a major concern for residents because of the lack of complete toxicology and other studies on the chemical. This gap of information goes back to the timing of the chemical's commercialization and subsequent scaling-up that largely allowed it to slip through regulatory holes. The tests that have been done suggest that MCHM is a skin and eye irritant. The lack of information has spurred more research and discussion on how to improve the handling of such accidents in the future.

More information: "Obscure Chemical Taints Water Supply"
cen.acs.org/articles/92/i7/Obs...ts-Water-Supply.html

Provided by American Chemical Society

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