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From: Burneson, Eric
Sent: Tue 2/18/2014 1:42:33 PM
Subject: FW: BNA: Lingering Odor From West Virginia Spill Prompts New Study of Health Effects

Chris and Mike:

Thanks for assisting Region 3 and WV on a sampling study design. Here is a news clip about the study. Looks like they went to an outside researcher to conduct the study.

From: Flaharty, Stephanie
Sent: Tuesday, February 18, 2014 6:22 AM
To: Grevatt, Peter; Clark, Becki; Travers, David; Burneson, Eric; Bergman, Ronald; Green, Holly; Workman, Rosemary; Lopez-Carbo, Maria
Subject: BNA: Lingering Odor From West Virginia Spill Prompts New Study of Health Effects

Drinking Water

Lingering Odor From West Virginia Spill Prompts New Study of Health Effects

Feb. 14 — Odors in drinking water lingering more than a month after a chemical spill in West Virginia are prompting officials to test homes and consider the potential long-term health effects from exposure.

After initial resistance, Gov. Earl Ray Tomblin (D) named Andrew Whelton from the University of South Alabama to lead a team that will test water from 10 Charleston-area homes to see if chemical residues are still present. The first batch of samples was shipped to laboratories Feb. 13, and evidence of the chemical's distinctive licorice odor has been found in at least one home,

Whelton said.

Separately, the local county health commissioner, Rahul Gupta, said his office will begin studying possible long-term health effects of exposure to the chemical used in coal processing, known as Crude MCHM, especially for signs of birth defects or cancer.

"There are more unanswered questions for us to state either way" that the water is safe, Gupta said in an interview. "We need to find the long-term consequences from exposure."

The Jan. 9 leak of Crude MCHM (4-methylcyclohexane methanol) and some related chemicals used to clean coal triggered the largest "do-not-use" order by the West Virginia water utility, covering 300,000 people in the capital and nine nearby counties (08 DEN A-13, 1/13/14). Whelton said the accident is "unprecedented" in its scope and severity.

Oversight Gaps

The experience in West Virginia underscores gaps in the oversight of chemicals and the limits to much of the safety testing now done by companies, health specialists said.

Eastman Chemical Co., the maker of the chemical, tested for possible toxic effects from high doses on rats over 28 days. It has been 35 days since the spill was detected.

Eastman's results don't "speak to what this could be doing in the long-term," Adam Finkel, a senior fellow at the University of Pennsylvania Law School and former director of health standards at the U.S. Occupational Safety and Health Administration, said in an interview. "We know things are toxic and don't cause cancer, and vice versa."

Eastman Chemical isn't conducting any follow-up tests of its own. Its earlier tests determined that the compound isn't a mutagen, indicating it doesn't alter genetic material, and so "it is unlikely that Crude MCHM is a carcinogen," Maranda Demuth, a company spokeswoman, said Feb. 13.

The U.S. Centers for Disease Control and Prevention also said it has seen no reason to worry about the incident.

"It is encouraging at this point that we do not see indications that long-term health effects are a likely outcome of this incident," Bernadette Burden, a spokeswoman for the Atlanta-based agency, said Feb. 13 in an e-mail.

West Virginia American Water Co., the local drinking water utility, warned customers about using water after thousands of gallons of 4-methylcyclohexane methanol spilled from a tank at Freedom Industries Inc. and into the Elk River upstream from a treatment plant.

Level Below One PPM

The level of the chemical in the water is now below 1 part per million, which the CDC said

makes it safe to consume. Lower levels of the chemical persist in many homes and schools, according to testing and residents who say they can still smell it.

The water company is dealing with a lack of certainty about potential health risks from the low-level exposure.

“We're dealing with this fear of the water, because it has this odor to it,” Jeff McIntyre, president of West Virginia American Water, said at a congressional hearing in Charleston on Feb. 10. “Just because you smell something doesn't mean it's not safe.”

Health advocates said the odor may signal that something is amiss in the water. The risks of showering and inhaling fumes released from hot water may be an added worry, said Jennifer Sass, a senior scientist at the Natural Resources Defense Council.

“It's not normal that you are smelling these at safe levels,” Sass said in an interview. “I would not drink anything that tasted or smelled bad.”

Sass said the CDC erred in setting the safe level of MCHM in water at 1 part per million and instead should have set it at a level 40 times lower, close to a concentration at which the chemical can no longer be detected.

Whelton is checking the water in 10 homes, taking as many as 60 samples from each to determine whether different temperatures or faucets contain higher levels of the chemicals. The initial results were sent to out-of-state laboratories Feb. 13.

Possible Pipe Problems

Whelton has said it's possible the chemical has adhered to plastic pipes in the homes or to corroded metal pipes or that it broke down into other compounds.

Gupta, executive director of the Kanawha-Charleston Health Department, said his office will be working with local physicians to determine the long-term consequences.

“The most important point is to identify and apply early detection techniques” for local doctors, he said.

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