To: Travers, David[Travers.David@epa.gov]; Workman, Rosemary[Workman.Rosemary@epa.gov]
From: Pickard, Brian
Sent: Mon 1/13/2014 12:21:58 AM
Subject: FW: EOC Spot Report: Chemical Spill, Charleston WV – Update #7

Latest Spot report, in case you are still not getting them.

-Brian

From: Eoc, Epahq
Sent: Sunday, January 12, 2014 7:01 PM
Subject: EOC Spot Report: Chemical Spill, Charleston WV – Update #7

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EOC Spot Report: Chemical Spill, Charleston WV – Update #7

US Environmental Protection Agency

Report as of 1900 January 12, 2014

Overview: On January 10, the President approved an Emergency Declaration for the State of West Virginia after a chemical leaked through a secondary containment area at a Freedom Industries chemical plant and into the Elk River in Charleston, WV (pop. 51,018) (NRC#1070627). The chemical (MCHM) is a flammable solvent used in the coal preparation process and is an irritant to eyes, respiratory system, and skin. The West Virginia Office of Environmental Health Services (OEHS) estimates no more than 5,000 gallons of chemical leaked in the Elk River. Based on river flow dilution, officials calculate the chemical concentration in the water to be well below the CDC declared safe level. The spill occurred near the Kanawha Valley Water Treatment Plant. The Kanawha Valley Water Treatment Plant detected the chemical even after the increased carbon treatment effort was put in place. Freedom Industries is working to clean up the spill at the facility and in the river.

State, Local and other Federal Agency Actions: West Virginia water authorities have issued a "Do Not Use Water Notice" for 10 counties (Kanawha, Boone, Putnam, Lincoln, Logan, Clay, Roane, Jackson Cabell and Wayne) and the President's Emergency Declaration covers eight counties (Kanawha, Boone, Putnam, Lincoln, Logan, Clay, Roane, and Jackson). West Virginia American Water (WVAW) customers are told not to use tap water for drinking, cooking, washing, or bathing. Water can be used for toilets and fire emergencies. Boiling water will not get rid of the chemical. This is believed to impact 100,000 customers (300,000 people).

The West Virginia Department of Health and Human Resources (WVDHHR) has been getting lab support established for both WVAW and the State. DuPont has been providing support in preparing labs and getting analysts trained. Labs now include: State lab (WVDHHR and possibly WVDEP); DuPont; WVAV (Huntington); two National Guard Civil Support Teams (Canton, OH and Washington, DC). WVAW is in the process of getting two contractor labs on board (Matrix and Test America), who have either multiple GC units or several laboratories. The WV National Guard is transporting samples to the labs in DC and OH. The labs will enable the State to process a large number of samples involved in the distribution system testing.

The latest sample results indicate that the treated water has been consistently less than 1 ppm MCHM over 24 hours, so the water company may now be ready to move to distribution system (DS) sampling. Recent intake (raw river water) samples were very low or non-detect. The recent

rain may have helped by diluting the chemical, but the rain may have washed more chemical through the soil into the river.

There is no specific flushing plan for the system yet. The plan will depend on sampling results. One key will be flushing in individual homes/buildings. Procedures for residents to follow are being developed. WVAW will not flush entire system or resume unrestricted use all at once, because the draw on system would be too severe (esp. in combination with broken lines owing to cold weather). There is no specific timeline for lifting restrictions. The timeline will be dictated by the sampling results. Even if results show concentrations < 1 ppm MCHM, there may be residual odor at 0.1 ppm. Customers may be reluctant to use the water, even if the level is protective of health. The water restrictions will be relieved by zone, as results and flushing allow. The restrictions may not be removed in stages of stringency (e.g., "Do Not Use" to "Do Not Drink" to no restriction) as previously contemplated, as that approach may cause too much confusion for customers, particularly if done by zones. This is not yet been decided.

WVAW and the State are working on getting the drinking water data into an organized electronic format, which will be shared with ATSDR and EPA as well as articulated plans, as developed.

The saturated absorbent boom and pads removed from the river was sitting on a tarp along the shoreline, but some water/product mixture was running off. This has now been rectified and there is a roll-off container to store the boom and pads before disposal.

WVAW reported that a contractor was inside the failed tank #396 performing cleaning operations. The manway from a second tank was removed and the removal of the sludge/product mixture has begun. Then the vapors in the tank will be cleared using an air recirculator before entry is made to clean the tank. WVAW will continue the cleaning of the tanks through the night and will have contractors inspecting the boom placed along the river.

Media Interest: High

The HQ EOC will continue to monitor and provide updates as needed.

Tim Grier, Watch Officer

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