To: Hedrick, Elizabeth[Hedrick.Elizabeth@epa.gov]
Cc: Ex. 6 - Personal Privacy @waterisac.org]
From: Ex. 6 - Personal Privacy @waterisac.org
Sent: Sun 1/12/2014 5:17:27 PM
Subject: RE: NATIONAL WARN Request: Lab Support Needed in WV

Thank you Elizabeth,

This is very helpful information. We've also provided your contact information to our POCs at American Water.

Very Respectfully,

Ex. 6 - Personal Privacy

-----Original Message-----
From: "Hedrick, Elizabeth" <Hedrick.Elizabeth@epa.gov>
Sent: Sunday, January 12, 2014 11:11am
To: " Ex. 6 - Personal Privacy org>
Cc: " @waterisac.org>
Subject: RE: NATIONAL WARN Request: Lab Support Needed in WV

Mr. Ex. 6 - Personal Privacy

They are different cpds. The 4-methylcyclohexanol is a hexane ring with methyl (-CH3) and (-OH) groups. The 4-cyclohexanemethanol (MCHM) is a hexane ring with methyl (-CH3) and methanol (-CH2OH) groups. Scholarly articles on MCHM are hard to find and it appears it has a narrow range of applications. Synonyms include: 4-Methyl-1-Cyclohexanemethanol, Cyclohexanemethanol, 4-Methyl-, Cis-; 4-Methylcyclohexanemethanol.

The most helpful information I found was the CAS registry number, on, of all places, Wikipedia. With the CASRN you will be able to find more information.

Another bit of information: TCIChemicals sells MCHM in the U.S. and may be able to provide some technical information. http://www.tcichemicals.com/eshop/en/ca/commodity/M1412/

Please feel free to pass my name onto American Water contacts. The Water Security Division wants to be of much help as possible. I'm sure more specific areas we can help with will become apparent.

Thanks,

Elizabeth

Water Security Division

Office of Ground Water and Drinking Water

U.S. Environmental Protection Agency

26 West Martin Luther King Drive

MS 140

Cincinnati, Ohio 45268

Ph (513) 569-7296

Fax (513) 569-7191

From: Ex. 6 - Personal Privacy i@waterisac.org]
Sent: Sunday, January 12, 2014 10:00 AM
To: Hedrick, Elizabeth
Cc: Ex. 6 - Personal Privacy @waterisac.org
Subject: RE: NATIONAL WARN Request: Lab Support Needed in WV

Good morning Ms. Hedrick,

Do you know if the chemical that was leaked is the same as 4-Methyl Cyclohexanol? We operate a chemical database, and I believe this chemical (further described below) is the same as 4-Methylcyclohexane Methanol.

4-Methyl cyclohexanol

Methyl cyclohexanol is a mixture of 1-, 2-, 3- and 4-methyl cyclohexanol isomers. Methyl cyclohexanol is used as a solvent for cellulose esters and ethers, a lubricant antioxidant, a blending agent in soaps and detergent, and as a degassing agent. Data on the toxicity of methyl cyclohexanol are extremely limited. It is of low acute toxicity to experimental animals and is a skin, respiratory and eye irritant in man. No data on the toxicity of methyl cyclohexanol to aquatic organisms were located at the time of update. Methyl cyclohexanol is of high water solubility, is not expected to sorb to sediment or suspended solids, and is expected to volatilise slowly from water surfaces. A tentative 24-hour health-based SNARL of 0.8 mg/l is proposed.

Thank you for your time and assistance.

Very Respectfully,

Ex. 6 - Personal Privacy

Lead Analyst

Water Information Sharing and Analysis Center (WaterISAC)

24-hr: 866-H2O-ISAC

Office: Ex. 6 - Personal Privacy

Mobile

Ex. 6 - Personal Privacy waterisac.org

@waterisac.org

-----Original Message-----
From: "Hedrick, Elizabeth" <Hedrick.Elizabeth@epa.gov>
Sent: Saturday, January 11, 2014 6:41pm
To: Ex. 6 - Personal Privacy @waterisac.org
Subject: RE: NATIONAL WARN Request: Lab Support Needed in WV

Mr. Ex. 6 - Personal Privacy

Thank you for the information. If you can't answer the following questions I understand. I am sure you are busy on other fronts.

As a chemist, I took a look at the Eastman method to determine how easily a water lab could adopt it. The Eastman Method is a percent purity method based on crude materials. Is Eastman going to provide pure MCHM to support labs so that quantitative work can be done? And do you know if the WARN Request that went out is saying that an alternative method is SM 524 (Standard Methods)? I'll have to be in the office to take a look at the SM 524 method but I am wagering that it does not have MCHM on the analyte list. A lab with GC-FID and pure MCHM could probably implement the Eastman method but they may not have the extraction solvent, DMF, on hand. It is a nasty solvent.

Just sharing my quick analysis.

Thanks,

Elizabeth

Water Security Division

Office of Ground Water and Drinking Water

U.S. Environmental Protection Agency

26 West Martin Luther King Drive

MS 140

Cincinnati, Ohio 45268

Ph (513) 569-7296

Fax (513) 569-7191

From: Ex. 6 - Personal Privacy [@waterisac.org]
Sent: Saturday, January 11, 2014 4:00 PM
To: Hedrick, Elizabeth
Subject: FW: NATIONAL WARN Request: Lab Support Needed in WV
Importance: High

Ms. Hedrick,

Please see below and the attached documents. The equipment and methods being used to test the water are described.

Additionally, American Water is seeking additional mobile lab support for testing water sample from those that have this capability.

Very Respectfully,

Ex. 6 - Personal Privacy

Lead Analyst

Water Information Sharing and Analysis Center (WaterISAC)

24-hr: 866-H2O-ISAC

Office Ex. 6 - Personal Privacy

Mobile

Ex. 6 - Personal Privacy aterisac.org

@waterisac.org

From: Ex. 6 - Personal Privacy
Sent: Saturday, January 11, 2014 2:51 PM
To: Ex. 6 - Personal Privacy @amwater.com)
Cc: Shelly Shafer (Ex. 6 - Personal Privacy ; Wisniewski, Patty-Kay; Tingley, Kevin; Laws, John; Copple, Angela
Subject: NATIONAL WARN Request: Lab Support Needed in WV

NATIONAL WARN NOTICE - WIDE DISTRIBUTION

Many of you have likely seen reporting on the chemical spill in Charleston, WV which has impacted the drinking water for the American Water's treatment and distribution systems.

I received a request from American Water that they are seeking additional mobile lab support that can run samples for decision making support as they begin to take actions to clear the system.

The method and equipment specifications are attached.

Equipment - ThermoFisher GC/MS unit utilizes SM 524. The attached files includes the protocol utilized by Eastman, the chemical producer.

If you have this capability please contact Ex. 6 - Personal Privacy American Water, for further details and logistical arrangements.

Ex. 6 - Personal Privacy Jr. CPP, PSP, PCI
Director, Operations Security
American Water
(O) Ex. 6 - Personal Privacy
(C)

Thank you.

Ex. 6 - Personal Privacy PhD
Security & Preparedness Program Manager
American Water Works Association
1300 Eye Street, NW Suite 701W
Washington, DC 20005
O: Ex. 6 - Personal Privacy
E:

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