UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
DENVER, COLORADO 80202-1129
Phone 800-227-8917
http://www.epa.gov/region08

MAY 12 2016

Ref: 8ENF-W

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Corporation Service Company
1821 Logan Avenue
Cheyenne, Wyoming 82001

Mr. Tim Brown, Environmental Services Manager
Solvay Soda Ash Joint Venture
P. O. Box 1167
Green River, Wyoming 82935

RE: Emergency Administrative Order under Section 1431 of the Safe Drinking Water Act, Solvay Chemicals, Inc., Public Water System, PWS ID #5600914, Docket No. **SDWA-08-2016-0009**

Dear Sir/Madam and Mr. Brown:

Enclosed is an Emergency Administrative Order (Order) issued by the U.S. Environmental Protection Agency (EPA) to the Solvay Chemicals, Inc. (Company) under section 1431 of the Safe Drinking Water Act (Act), 42 U.S.C. § 300i. The EPA has determined that conditions exist at the Solvay Chemicals Public Water System (System) that may present an imminent and substantial endangerment to the persons served by the System. The EPA has made this determination based on notification that there is very high turbidity in the System's finished water due to an extreme rainfall event in the Green River drainage.

Pursuant to the authorities cited herein, the EPA is authorized to take actions necessary to protect human health. The enclosed Order sets forth requirements to ensure provision of safe drinking water to those served by the System. The System is required to: provide an alternate source of water; issue a boil water advisory and public notice until notified by EPA to discontinue; flush and disinfect the distribution system and storage tanks; and take additional total coliform bacteria samples, among other requirements. The penalties for failing to comply are set forth in the Order.

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If you have any questions or wish to discuss this Order, please contact Jill Minter at (800) 227-8917 extension 6084 or 303-312-6084. Any questions from counsel for the Company should be directed to Mia Bearley, Enforcement Attorney, at the above 800 number, extension 6554, or at (303) 312-6554.

Thank you for your attention to this matter.

Sincerely,

Jordue Wells for

Arturo Palomares, Director
Water Technical Enforcement Program
Office of Enforcement, Compliance
and Environmental Justice

Enclosures
Emergency Administrative Order
Boil Order Template

cc: Missy Haniewicz, EPA Regional Hearing Clerk
Ms. Melissa Ellerbeck, Process Engineer (via email)
Mr. Todd Brichacek, Plant Manager (via email)
WY DEQ/DOH

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

2016 MAY 12 AM 10: 27

FILED
EPA REGION VIII
HEARING CLERK

IN THE MATTER OF	)	
	)	Docket No. SDWA-08-2016-0009
Solvay Chemicals, Inc.,	)	
PWS ID 5600914	)	**EMERGENCY ADMINISTRATIVE ORDER**
	)	
Respondent.	)	
	)	

AUTHORITY

1. This Emergency Administrative Order (Order) is issued by the Environmental Protection Agency (EPA) pursuant to the authority of section 1431(a) of the Safe Drinking Water Act (Act), 42 U.S.C. § 300i(a). The undersigned officials have been properly delegated this authority.

2. Failure to comply with this Order may result in civil penalties of up to $21,500 per day. 42 U.S.C. § 300i(b); 40 C.F.R. part 19.

3. The EPA may issue an order pursuant to section 1431(a) of the Act, 42 U.S.C. § 300i(a), when certain conditions exist which may present an imminent and substantial endangerment to the health of humans, and other state or local authorities have not acted, or do not have the authority to act, to protect human health.

4. The Solvay Chemicals, Inc. (Respondent) is a company and therefore a "person" as that term is defined in the Act. 42 U.S.C. § 300f (12).

5. Respondent owns and/or operates the Solvay Chemicals Public Water System (System) located in Sweetwater County, Wyoming, which provides water to the public for human consumption.

6. The System is supplied by a surface water source which is treated with cartridge filtration, preceded by adequate pretreatment, and is classified as alternative filtration. The System also provides disinfection using an ultraviolet (UV) disinfection system and chlorine gas.

7. The System has approximately 9 service connections and/or regularly serves approximately 452 of the same individuals daily for at least six months out the year. Therefore, the System is a "public water system" as defined in section 1401(4) of the Act, 42 U.S.C. § 300f (4). The System is also a "non-transient, non-community" water system as defined in 40 C.F.R. § 141.2.

8. Prior to issuing this Order, the EPA consulted with the System and State and/or local governmental authorities to confirm the facts stated in this Order and to confirm that State and local governments are unable to act to protect public health in this instance.

9. The EPA has determined that conditions exist at the System that may present an imminent and substantial endangerment to the health of humans, based on the facts indicated below. The EPA has determined that this Order is necessary to protect public health.

10. The Green River drainage had an exceptional rainfall event the weekend of May 7, 2016, resulting in extremely high raw water turbidity. The System learned on May 7, 2016, that the filtered potable water turbidity exceeded 5 Nephelometric Turbidity Units (NTUs). Samples of filtered water taken May 7, 2016, through May 10, 2016, were above the maximum limit of 5 NTUs for alternative filtration. 40 C.F.R § 141.551(b). On May 9, 2016, filtered water turbidity was 40 NTUs and on May 10, 2016, filtered water was 20 NTUs.

11. Respondent notified the EPA on Monday morning, May 9, 2016, of the extremely high turbidity in the filtered water.

12. High levels of turbidity increase the chance that the drinking water may contain disease-causing organisms, such as cryptosporidium, giardia, and *E. coli.*

13. The EPA has been advised that the Respondent has sent an e-mail to all employees notifying them to not drink the water due to high turbidity levels and that bottled water is available. In addition, the Respondent has put "DO NOT DRINK" tags on faucets and drinking fountains. On May 11, 2016, the EPA provided the Respondent with a template for a boil water advisory.

ORDER

INTENT TO COMPLY

14. Within 24 hours of receipt of this Order, Respondent shall notify the EPA in writing of its intention to comply with the terms of this Order. Notification by e-mail to the EPA point of contact identified below is acceptable.

BOIL ORDER AND PUBLIC NOTICE

15. Upon receipt of this Order, Respondent shall notify the public of the problem described in this Order in the affected area and distribute a boil water advisory. Directions on the required content for the public notice and advisory are included in the public notice template enclosed with this Order. Respondent shall submit a copy of the notice to the EPA within 24 hours of its distribution. Respondent shall continue the public notice until the EPA provides written notification to discontinue public notice. Respondent must carry out the public notice and other notice requirements that the EPA directs. Respondent must comply with this requirement in any future high turbidity event or any similar emergency situation.

ALTERNATE WATER SUPPLY

16. Using the public notice required in paragraph 15 above, Respondent shall notify the public that an alternative potable water supply is available. Respondent shall provide at least two liters of potable water daily per person at a central location that is accessible to all persons served by the System. Respondent may also opt to provide an alternate water supply that is either 1) provided by a licensed water distributor, 2) purchased bottled water, or 3) provided by another public water system that meets the requirements of the Drinking Water Regulations. Any alternate water supply shall be made available at no cost to all users of the System as needed for drinking and cooking until water service is restored to affected users of the System.

DISTRIBUTION SYSTEM DISINFECTION AND MONITORING REQUIREMENTS

17. Once the System's combined filter effluent turbidity is less than 1 NTU (post-cartridge filtration), Respondent shall flush and disinfect the System, including disinfection of the distribution system and any storage tanks that are part of the system.

18. Within 24 hours after flushing and disinfecting the System as required by paragraph 17, above, Respondent shall collect consecutive daily (one sample per day) special purpose samples (defined in 40 C.F.R. § 141.21(a)(6)) from the System's distribution system. Respondent shall ensure that each sample is analyzed for total coliform and *E.coli.*

19. After Respondent receives written notification from the EPA that it may discontinue daily total coliform sampling, Respondent must collect weekly bacteriological samples (one sample per week) to determine compliance with the total coliform maximum contaminant level as stated in 40 C.F.R. § 141.63.

20. After Respondent receives written notification from the EPA that it may discontinue weekly total coliform sampling, Respondent shall thereafter resume monthly total coliform sampling as required by 40 C.F.R. § 141.853-857.

21. Respondent shall monitor and report the System's chlorine residual at the same time and same location as all special and routine total coliform samples.

22. Respondent shall remain obligated to comply with all applicable requirements of 40 C.F.R. part 141, including, but not limited to the requirements in 40 § C.F.R. 141.858 to collect three repeat samples within 24 hours of being notified of a total coliform-positive sample result. If a repeat sample is total coliform or *E.coli* positive, within 24 hours of being notified of the positive sample, Respondent shall consult with the EPA for further compliance requirements. Depending on the results of the bacteriological monitoring, Respondent may be required to conduct a Level 1 or Level 2 assessment.

23. Respondent shall collect all total coliform sampling at sites that are representative of water throughout the distribution system according to the Sample Siting Plan. Additionally,

Respondent shall report all sampling results to the EPA by telephone, email or fax immediately upon (i.e., as soon as practicable, and in no event more than 24 hours after) receiving the results.

24. The EPA may require Respondent to increase turbidity, total coliform and chlorine residual sampling at any time while this Order is in effect.

REPORTING

25. Respondent must give weekly updates to the EPA on progress of monitoring turbidity, flushing and disinfecting the distribution system and storage tanks, monitoring total coliform and residual chlorine, as well as any other treatment changes made. Weekly updates must be submitted to the EPA until the EPA notifies the System that reports may be discontinued. These reports may be submitted via phone, fax, or e-mail.

26. Any notices or reports required by this Order to be submitted to the EPA shall be submitted to:

Jill Minter, 8ENF-W
US Environmental Protection Agency
1595 Wynkoop Street
Denver, Colorado 80202-1129
Telephone (800)227-8917, ext. 6084, or (303) 312-6084
Fax (303) 312-7518
e-mail: minter.jill@epa.gov

27. This Order does not relieve Respondent from complying with any applicable federal, state, or local law.

28. This Order constitutes final agency action. Respondent may seek federal judicial review of this Order under section 1431 of the SDWA, 42 U.S.C. § 300(i), pursuant to section 1448(a) of the SDWA, 42 U.S.C. 300j-7(a).

29. Issued and effective this 12th day of May, 2016.

Kendrue Wade for

Art Palomares, Director
Water Technical Enforcement Program
Office of Enforcement, Compliance
and Environmental Justice

James H. Eppers, Supervisory Attorney
Regulatory Enforcement Unit
Legal Enforcement Program
Office of Enforcement, Compliance
and Environmental Justice

DRINKING WATER WARNING

Solvay Chemicals Public Water System has High Turbidity Levels

BOIL YOUR WATER FOR THREE MINUTES BEFORE USING

We routinely monitor your water for turbidity (cloudiness). This tells us whether we are effectively filtering the water supply. Due to a recent extreme rainfall event, turbidity levels in the Green River, our source water, are very high. A water sample from our public water system, taken on Saturday night, May 7, 2016, exceeded the turbidity level of 5 turbidity units and a water sample taken on Monday, May 9, 2016, had a turbidity level of 40 turbidity units. These are above the turbidity standard for systems with alternative filtration. Because of these high levels of turbidity, there is an increased chance that the water may contain disease-causing organisms.

What should I do? What does this mean?

- **DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST.** Bring all water to a rolling boil for at least three minutes and let it cool before using or use bottled water. Boiled or bottled water should be used for drinking, making ice, food preparation, washing dishes and brushing teeth **until further notice**. Boiling kills bacteria and other organisms in the water. ALL STORED WATER, DRINK OR ICE MADE RECENTLY FROM THIS SUPPLY SHALL BE DISCARDED.

- *Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea and associated headaches.* These organisms may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems. These people should seek advice about drinking water from their health care providers.

- The symptoms above are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice. People at increased risk should seek advice about drinking water from their health care providers.

What is being done?

- **We are providing bottled water for drinking, food preparation, brushing teeth, etc. Bottled water can be obtained in the Mine Rescue Room.**
- We have put "Do Not Use" tags on all faucets and drinking fountains at the plant.
- We will flush and disinfect the water distribution and storage tanks once the turbidity level drops.
- We will monitor the treated water for the presence of total coliform bacteria and chlorine residual prior to resuming service to users.
- We will inform you when you no longer need to boil your water.

For more information, please contact Tim Brown, by phone at (307) 872-6570, or by mail at Solvay Soda Ash Joint Venture, P.O. Box 1167, Green River, Wyoming 82935.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by the Solvay Chemicals Public Water System.
PWS ID# 5600914. Date distributed: _____.

ATTENTION: PWS Operator/Responsible Party

You must provide public notice to persons served as soon as practical but within 24 hours after you learn of the violation or loss of pressure (141.202(b)). During this time, you must also contact your primacy agency. You should also coordinate with your local health department. This public notice shall be posted in conspicuous locations throughout the area served by the water system and hand delivered to persons served by the water system. You must use one or more of the following methods to deliver notice to consumers (141.202(c)):

- Radio
- Television
- Hand or direct delivery (including email)
- Posting in conspicuous locations

You may need to use additional methods (e.g., newspaper, delivery of multiple copies to hospitals, clinics, or apartment buildings), since notice must be provided in a manner reasonably calculated to reach all persons served.

The notice on the reverse is appropriate for hand delivery or a newspaper notice. However, you may wish to modify it before using it for a radio or TV notice. If you do, you must still include all required elements and leave the health effects language in italics unchanged. This language is mandatory (141.205(d)). If you post or hand deliver, print your notice on letterhead, if possible.

Population Served

Make sure it is clear who is served by your water system - you may need to list the areas you serve.

After Issuing the Notice

It is recommended that you notify health professionals in the area of the violation. People may call their doctors with questions about how the violation may affect their health, and the doctors should have the information they need to respond appropriately. In addition, health professionals, including dentists, use tap water during their procedures and need to know of contamination so they can use bottled water.

Make sure to send your primacy agency a copy of each type of notice and a certification that you have met all the public notice requirements within ten days after issuing the notice (141.31(d)).

Please send a copy of your notice and dates posted to:

Jill Minter
US EPA Region 8 (8ENF-W)
1595 Wynkoop Street
Denver, CO 80202-1129
Email: minter.jill@epa.gov. Fax: 303-312-7518

Certification of Public Notification

I _____ certify that the attached public notification was issued from
(PWS Operator / Responsible Party)

_____ to _____.
(Date) (Date)

The attached notice was issued by _____.
(Method of delivery)

Signature _____ Date _____