



John D. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott L. Jisile, Director

January 18, 2013

Mr. Richard C. Westerfield, PhD, Administrator  
Division of Power and Water  
City of Columbus Department of Public Utilities  
910 Dublin Road  
Columbus, Ohio 43215

## NOTICE OF VIOLATION

**Re: Hap Cremean WTP  
NPDES Permit 4IW00031/ OH0030716  
Lime Sludge Spill**

Dear Dr. Westerfield:

This letter serves as a **Notice of Violation** regarding the lime sludge that overflowed from an air release valve vault on the Hap Cremean WTP sludge pipeline and entered the Scioto River on December 8 and December 9, 2012. This unpermitted bypass is a violation of NPDES permit 4IW00031 and Ohio Revised Code 6111.07. The release resulted in documented violations of Ohio Administrative Code (OAC) 3745-1-04 (A) for sludge and OAC 3745-1-07 for pH within the Scioto River.

There have been 19<sup>1</sup> reported leaks of the Hap Cremean sludge line with 13 leaks resulting in impacts to waters of the state since 1997. The Agency acknowledges that the City of Columbus has made considerable progress towards reducing the frequency of releases. However, given that leaks are continuing to occur and are not being detected in a timely manner, additional work is necessary to prevent future spills of lime sludge. In particular, the operations and maintenance (O&M) schedule as well as the leak detection system should be reviewed and revised.

The failure of the leak detection system is especially troubling. A significant quantity of lime sludge began leaking no later than 3:00 PM on December 8. The City did not become aware of the leak until 3:00 PM on December 9. The five-day follow-up report your staff submitted for this incident indicates that the leak alarm system failed due to a

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<sup>1</sup> This includes 2 instances which were caused by physical damage from unrelated road construction work, 1 instance in which a release occurred while removing an air release valve, and 2 instances of failure of repair work within 6 months of repair.

lost phone communication with the meter pits. Please explain why the telecommunication failed and what steps and schedule Columbus will implement to improve the leak detection system and prevent such a failure from occurring in the future. In addition, please submit documentation of the capabilities of the current leak detection system including an explanation for how it works, what pressure drop it will detect, and what size leak will create this level of a pressure drop.

The July 27, 2012, letter that accompanied the Hap Cremean Lime Sludge Pipeline Operation and Maintenance Plan stated that you planned to advertise a RFP in August 2012 to hire an engineering firm to design improvements associated with the air release valves and to enter into a design contract by the end of 2012. However, the five-day follow-up report submitted for the December 8-9, 2012, spill stated that the RFP has been started, not completed. Please explain this delay and what the revised schedule for this work is now.

Regarding the O&M plan, it appears that Slurry Air Release Valve (ARV) Station 10 was incorrectly identified as being closed at the force main. It is counterintuitive that the operations and maintenance plan is being implemented effectively without this mistake being discovered. It calls into question the status of all stated relief devices that are noted as closed at the force main. If an inspection checklist is not already in use, please initiate a way to document all actions taken associated with the Hap Cremean pipeline O&M plan. These completed checklists or maintenance documents should be compiled into a log book and available to Ohio EPA upon request. Please forward to me a blank copy of an inspection checklist and explanation of how you will be documenting the maintenance actions.

A letter detailing Ohio EPA's comments on your proposed HCWP Lime Slurry Pipeline O&M Plan will be sent to you separately.

The Agency requests a meeting to discuss progress being made with the lime sludge force main. Agenda items to be discussed include:

- The leak detection system.
- The O&M plan.
- Status of projects and upgrades.
- Long-term sludge disposal plans.
- A description of the known deficiencies of the pipeline and how each is planned to be addressed.

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Please contact me at (614) 728-3846 or e-mail at [cole.miller@epa.state.oh.us](mailto:cole.miller@epa.state.oh.us) as soon as possible to schedule a meeting. A written response to this letter is requested by February 15, 2013.

Nothing contained in this letter shall be construed as a limitation or waiver of Ohio EPA's right to pursue all available remedies including escalated enforcement action.

Sincerely,

A handwritten signature in cursive script, appearing to read "Cole Miller".

Cole Miller  
Environmental Specialist II  
Compliance and Enforcement Unit  
Division of Surface Water  
Central District Office