



State of Ohio Environment



Northeast District Office

2110 East Aurora Rd.
Twinsburg, Ohio 44087

TELE: (330) 963-1200 FAX: (330) 487-0769
www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

January 15, 2009

RE: **MONITORING VIOLATION -
FAILURE TO PROFILE**
LORAIN COUNTY
CITY OF LORAIN
COMMUNITY WATER SYSTEM
PWS ID # OH4700711
STU ID # 4755820

Mr. James J. Miller, Water Superintendent
City of Lorain Water Treatment Plant
1106 First Street
Lorain, Ohio 44052

Dear Mr. Miller:

This letter is notification that the City of Lorain public water system is in violation of the Ohio Administrative Code (OAC) 3745-81-75 recordkeeping, reporting and actionable requirements pertaining to individual filter turbidity monitoring of your public water system.

Rule 3745-81-75(B)(2)(b) indicates:

For any individual filter that has a measured turbidity level of greater than 0.5 NTU in two consecutive measurements taken fifteen minutes apart at the end of the first four hours of continuous filter operation after the filter has been backwashed or otherwise taken offline, the public water system shall report the filter number, the turbidity measurements, and the date(s) and time(s) on which the exceedance occurred.

In addition, the public water system shall either produce a filter profile for the filter within seven days of the exceedance and report that the profile has been produced or report the obvious reason for the exceedance.

On October 9, 2008 between 10:00 a.m. and 12:00 p.m., the City of Lorain reported individual filter effluent turbidity values ranging from 0.8 to 1.0 NTU in a number of filters. According to the Ohio EPA Form 5109-A monthly operating report, those filters included Filter No.'s 2, 3, 4, 5, 7, 9, 11, and 12. In accordance with the above rule citation, the City was required to conduct a filter profile for each filter, or produce an obvious explanation of why the turbidity values were above the actionable level(s). Filter profiles were not conducted in a timely manner and the initial explanation provided on the October MOR was inconclusive.

Subsequent telephone conversations resulted in a December 23, 2008 submittal of key records for the above time frame. Included with the submittal were filter profiles for Filter No.'s 8 and 12 only. Filter No. 8 did not experience a turbidity event. Additional information submitted included a graph of the backwash water turbidity for Filter No.'s 10 and 12, copies of the lab sheets for turbidity, pH, and chlorine for October 8 and 9, 2008, a copy of the October 9, 2008 chemical usage record, copies of the turbidimeter calibration records, and a copy of the IFE turbidity for each filter during the relevant time frame on October 9, 2008. While the information submitted did not yield any obvious reasons for the turbidity spikes, it is difficult to ascertain the condition of the filters with a random filter profile obtained one or two months after the occurrence. If an obvious explanation for the occurrence does not exist, the public water system is required to conduct a prompt filter profile of each filter in question to properly assess the situation, per the above OAC rule citations.

An additional follow-up action should have included identifying the eight filters in question on the Ohio EPA Form 5109-A MOR during the following month. This was not shown on the November 2008 Form 5109-A. It should be noted that, based upon a review of the submitted information, the City did not actually appear to have any filter results above 1.0 NTU, as was originally reported on the October Form 5109-A.

Failure to meet the requirement of OAC rule 3745-81-75 (B) is a monitoring and reporting violation for which public notification is required. The public notice shall be conducted in accordance with OAC 3745-32 [D] and shall be provided as soon as practical but no later than one year after the public water system learns of the violation or situation. Community water systems shall provide notice using the following forms of delivery in order to reach all persons served:

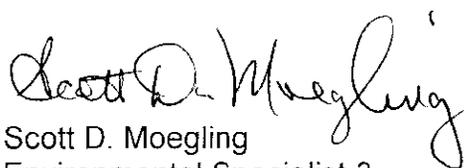
- (a) Mail or other direct delivery to each customer receiving a bill and to other service connections to which water is delivered by the public water system; and
- (b) Any other method reasonably calculated to reach other persons regularly served by the system, if they would not normally be reached by the notice required in (a). Such persons may include those who do not pay water bills or do not have service connection addresses (e.g., house renters, apartment dwellers, university students, nursing home patients, prison inmates, etc.). Other methods may include: publication in a local newspaper; delivery of multiple copies for distribution by customers that provide their drinking water to others (e.g., apartment building owners or large private employers); posting in public places or on the Internet; or delivery to community organizations. If the public notice is posted, the notice shall remain in place for a minimum of seven (7) days, even if the violation or situation is resolved.

- (c) The consumer confidence report (CCR) required under Chapter 3745-96 of the Administrative Code may be used as a vehicle for the initial public notice and all required repeat notices, as long as:
 - (i) The CCR is provided to persons served within one year of the date of learning of the violation; and
 - (ii) The notice contained in the CCR includes all the required content; and
 - (iii) The CCR is distributed to customers by July 1 of each year.

The required public notice is included with this correspondence. The public notice must be issued as shown. Any modifications to the public notice must be approved by the Ohio EPA Northeast District Office prior to issuance. A copy of both the public notice (as issued) and the completed verification form must be returned to the Ohio EPA Northeast District Office at the letterhead address within ten (10) days after issuing the notice.

Please note that we understand the turbidity events appear to be an unexplainable occurrence that has not re-occurred since October 9th. This would appear to indicate the integrity of the filters has not been compromised. However, prompt follow-up actions within the timeframes required by rule did not occur, and appropriate evaluation of the events should have triggered an investigation by the operator in charge during this shift. Failure to identify the filters in question on the November 2008 Addendum for Individual Filter Turbidity Results (Ohio EPA Form 5109-A) constituted an additional monitoring and reporting deficiency. If you have any questions, please contact me at (330) 963-1277.

Respectfully,



Scott D. Moegling
Environmental Specialist 3
Division of Drinking and Ground Waters

SDM/ams

Enclosures: Tier 3 Monitoring Violation Notification (#29)
Verification Form

cc: Kim Eppers, Ohio EPA, NEDO, DDAGW
Toni Buchanan, Ohio EPA, Central Office, DDAGW