



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

March 4, 2013

RE: GEAUGA COUNTY
MANCHESTER FARMS
COMMUNITY WATER SYSTEM
PWS ID #OH2801712

Ms. Andrea Petkosek
7475 Devon Lane
Chesterland, OH 44026

SUBJECT: NOTICE OF VIOLATION OF THE SECONDARY CONTAMINANT
STANDARDS

Dear Ms. Petkosek:

This office has received the monthly operating reports (MOR form 5002) for November and December 2012 and January 2013 from the Manchester Farms public water system. The MOR is provided as a means to relay compliance information about the operation of the water treatment plant. Operational monitoring is conducted throughout the month to test the treatment effectiveness of the water plant. Since Manchester Farms treats its water by filtration for iron and manganese removal, and adds chlorine as a disinfectant, you are required to conduct monitoring for iron, manganese, and chlorine residual.

Please note the following violations:

At least one sample each week for manganese is required to be analyzed.

During the months of November and December 2012, and January 2013, the manganese levels were reported as summarized in the following table:

| Sample Collection Date | Manganese Results (mg/L) (MCL = 0.05 mg/L) |
|------------------------|---|
| November 2, 2012 | 0.1 |
| November 9, 2012 | .08 |
| November 16, 2012 | .11 |
| November 22, 2012 | .1 |
| November 30, 2012 | .11 |
| December 7, 2012 | .1 |
| December 13, 2012 | .11 |
| December 19, 2012 | .06 |
| December 28, 2012 | .11 |
| January 4, 2013 | .11 |
| January 11, 2013 | .1 |
| January 18, 2013 | .12 |
| January 24, 2013 | .11 |

The results indicate that your system is not adequately removing manganese. The results must be below 0.05 mg/L in accordance with OAC Rule 3745-82-02. We also note that the system was not installed in accordance with detail plan approval. Plans specified an ion-exchange softener after the iron filter.

Failure to install treatment equipment in accordance with 3745-82-02 and detail plans is in violation of detail plan approval dated September 16, 2009 and OAC Rule 3745-91-02. However, we understand that we agreed that the softeners would only be installed if needed. Please note that if fixes to the system are not effective in removing the manganese, then the softeners must be installed.

Options to Remove Manganese:

1. **Move the chlorine feed.** The existing system may work more efficiently if chlorine is fed ahead of the filters. If moving the chlorine

adequately removed the manganese, a request for revision to the detail plans must be made.

Should chlorine residual be difficult to maintain after the feed point is adjusted, a second chlorinator may be needed. Detail plans would be required.

2. **Other fixes.** Other fixes may be suggested, such as media replacement or the installation of additional contact time. Please call me at the number below to discuss options. Detail plan approval may be needed to install additional treatment.
3. **Install Softeners as required by detail plan approval.** If the above solution doesn't work to bring manganese below the secondary contaminant level of 0.05 mg/L, then
 - The softeners must be installed as per the original detail plan approval of September 16, 2009 (no detail plan approval needed unless there are changes in the capacity of the softener).

Please move forward in implementing water system improvements immediately.

Please keep me updated regularly as to what solutions you are implementing and when. If you have any questions regarding this correspondence, or if you need any assistance, please contact me at 330-963-1149 or at my e-mail address, kathy.metropulos@epa.state.oh.us.

Sincerely,



Kathy Metropulos
Environmental Specialist
Division of Drinking and Ground Waters

KM:ds

ec: Kathy Metropulos, Ohio EPA, DDAGW, NEDO
Stivo DiFranco, Ohio EPA, DDAGW, NEDO

pc: Kim Ethers, Ohio EPA, DDAGW, NEDO
Geauga County Health Department