

ENGINEERS • SURVEYORS • PLANNERS

December 20, 2016

Illinois Environmental Protection Agency
Public Water Supply
4302 North Main Street
Rockford, IL 61103

ATTENTION: Ms. Joy Bliton
SUBJECT: Village of Sheffield, Illinois
Facility No. 0110950
Non-Compliance Advisory – Dated November 14, 2016

Dear Ms. Bliton:

This letter is being submitted on behalf of the Village of Sheffield in response to a letter received by the Village dated November 14, 2016 and described as a "Non-Compliance Advisory."

As noted in Attachment A, Cross-Connection Control surveys must be conducted by the Village every two years for every business and residential customer. The Village's Superintendent, Mr. Leif Porter, will complete the required surveys by January 31, 2017. Annual test results for individual cross connection control devices are required for two businesses in the Village. Test results for 2016 have been obtained from these businesses and a copy of these test results will be maintained on file by the Village Clerk.

The Public Water Supply Data Sheet has been reviewed by the Village Superintendent. The Max Day Pumpage shown as greater than the average daily pumpage does not appear to be correct and will need to be revised.

The reminders and recommended improvements listed in Attachment B have been reviewed with the Village. The following constitutes the Village's response to each issue raised:

1. ***The piping to the aerator is deteriorating. In order to prolong the useful life of the piping, it is recommended that it be sandblasted and repainted.***

The Village plans to address the coating issue on the aerator piping at the same time that the water tower is repainted. See response to Item 7.

2. ***The water system does not have standby electrical power to operate the system in the event of a power outage. A standby generator sized to operate one well to bypass the plant so that the system can meet the average daily demand during an extended electrical power failure should be obtained. A construction permit must be obtained from the Agency to install a fixed generator; however, a permit is not required if a manual transfer switch is installed and a portable generator is obtained.***

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The Village agrees that a standby source of electrical power for the wells and water treatment plant should be installed. A generator will be obtained and installed when funding becomes available.

3. *It is recommended that dedicated pump to waste fittings and piping be installed on each well discharge line so that they may be disinfected and the highly chlorinated water may be pumped to waste following any well pump service operation, or in the event a well should become bacterially contaminated.*

The Village will make these improvements when funding becomes available.

4. *It is recommended that the equipment and piping be descaled and painted. A commercial grade dehumidifier can be purchased to use in the treatment plant to help reduce corrosion.*

The filter vessels in the treatment plant have been cleaned and re-painted following the November inspection. The preparation of the steel surface and application of the new coating were closely monitored by a coating consultant to ensure maximum resistance to corrosion in the future. A dehumidifier has been purchased for use in the treatment plant to help reduce corrosion.

5. *It is recommended that the air lines for wells 5 and 6 be replaced or repaired.*

Repairs or replacement of the air lines will be made by the Village when funding becomes available.

6. *According to Mr. Porter, water rates have not been raised for a few years, even though the Village Board had the approval to do so. The system is in poor condition and the water system does not generate sufficient revenue to meet needed repairs and future expenditures. Therefore, it is recommended that water rates be increased annually to meet estimated expenses.*

Village Ordinances require the water rates to automatically increase 3% each year. This increase occurs each year unless the Village Board acts to not implement the rate increase for a given year. The automatic 3% increase was allowed to occur in 2011, 2013, and 2015 with rates remaining constant for the periods 2011-2012, 2013-2014, and 2015-2016 due to action taken by the Village Board. The poor condition of the water system and the fact that funding will be needed for repairs and future expenditures will be considered by the Village Board should the Board consider acting to prevent future automatic increases.

7. *The recent tank inspection report revealed needed repairs that should be addressed.*

The water tower was inspected for the purpose of determining a scope of work for repairs and painting. The Village intends to pursue this work as soon as a source of funding can be identified and made available.

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8. *It is recommended that two separate chemical feed pumps and separate injection pumps be installed on each chemical tank for the potassium permanganate and chlorine chemical feed systems to address the different capacity and chemical properties of each well, so that chemicals are applied in the correct proportion for each well.*

The Village will make these improvements when funding becomes available.

9. *Controls for wells 5 and 6 should be upgraded so that the lag well will automatically operate if the lead well fails and so that the wells will run on alternate pump cycles.*

The Village will make these improvements when funding becomes available.

Should you have any questions or require any additional information, please feel free to contact me.

Sincerely,

CHAMLIN & ASSOCIATES, INC.


Adam J. Ossola, P.E.

Cc: William Rosenow – Village President
Leif Porter – Village Superintendent
File No. 04867.00

Village of Sheffield

est. 1852

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To: I.E.P.A.

In regards to the engineering evaluation, tests have been performed on 1 of the 2 backflow devices we have in town. I have results of test done at Wyanet Locker and I am waiting results for Garfield Stier Co.

In regards to the vent for sodium fluoride, this will be re-installed.

Daily finished test results have been given to the field representative

A routine of testing of fluoride and chlorine every day has been established

The sandblasting and painting of filtration tanks, and aeration piping will be conducted when monies are available.

The electrical back up system for plant is a very expensive, and intensive purchase, we will try to get funding for this project.

We are working forward to fund the well bypass updates.

Upgrading of controls is also on our list for financing.

In regards to the cross connection control survey for residential and commercial properties will be performed this spring. Information will be filed with the water superintendent.

We have been working towards the improvements that are suggested in your survey, however funding is very tight, and most of the recommendations are going to have to be funded by grant money, we are currently to our maximums on being able to borrow money. We have done some extensive changes in our system the past few years; this has depleted our funds that were available. Our tax money has also been lower due to property values, population drop, and overall slowed businesses in town.



William A Rosenow

Mayor

