



December 13, 2019

Camanche, City of
Attn: Honorable Mayor and Council
P.O. Box 77
818 7th Avenue
Camanche, IA 52730

RE: Complaint #27688 – Awful Taste of Chlorine
Facility: Camanche Water Supply
PWSID: IA2322066
State ID: #310339149
County: Clinton

Attn: Honorable Mayor and Council:

This letter is a follow up to a complaint investigation on December 5, 2019 by Ryan Stouder and Mark Heiderscheid regarding an awful taste of chlorine. During the investigation we met with the Public Works Director, Mark Hilgendorf, who was informed as to the nature of the complaint.

Mr. Hilgendorf indicated the city had received a similar complaint about the same time. However, per Mr. Hilgendorf, city personnel were not able to respond to the complainant's location to investigate the matter because the complainant would not provide a name or address. City personnel reportedly asked the complainant for a location or address, and all the complainant would provide was that it was on 15th. City personnel attempted to clarify by asking if it was 15th Place or 15th Avenue. The complainant reportedly replied that it was on 15th.

During the visit chlorine residuals were checked to determine if they were within operating standards. In addition, to checking the chlorine, samples for manganese (copies enclosed) were also collected. These samples were collected in response to protocols developed for ammonia and manganese by this department, and are explained as follows:

Ammonia

The DNR has recently developed protocols to identify systems which may have a potential for nitrite formation due to sources with high raw water ammonia content; or add ammonia as part of their treatment process. The presence of ammonia at or above 1.0 mg/L indicates a potential for exceeding the nitrite MCL of 1.0 mg/L. A review of the SDWIS database indicates:

1. The wells' have not been tested for ammonia.
2. There have been no detects for nitrites.
3. There have been detects for nitrates, but no indication that they have exceed the maximum contaminant level (MCL's).
4. Field test for free chlorine indicate the free chlorine residuals were stable.

It is noted that the Camanche Water Supply does not add ammonia to their water for disinfection purposes. Therefore, based on the protocols developed, the system does not appear to be disinfecting via chloramines. In conclusion, unless further sampling determines otherwise, the system may continue to use a minimum disinfection level based on free chlorine (minimum of 0.3 mg/L); or total chlorine (minimum of 1.5 mg/L) for compliance purposes. However, the facility should consider sampling the raw water for ammonia; and collecting special samples for ammonia, nitrate and nitrite in the distribution to establish a baseline.

Manganese

DNR has also developed protocols for manganese in response to a health advisory issued by the United States Environmental Protection Agency (US EPA) for manganese in drinking water with levels of 0.3 mg/L and 1 mg/L. These are not enforceable standards.

However, when manganese levels in drinking water exceed 0.3 mg/L the facility needs to issue a public notice stating that infants under 6 months of age should immediately stop consuming the water and formula prepared with the water.

When manganese levels in drinking water exceed 1 mg/L, the facility needs to issue a public notice stating all children and adults should use bottled water or an alternative source of water for drinking and food preparation. A copy of DNR's Manganese in Drinking Water Fact Sheet and Frequently Asked Questions document is attached for your reference.

The intent of this protocol is to identify systems with high levels of manganese in order to assist them in establishing public notification; and implementing the best available treatment for reducing manganese within their finished water in order to comply with EPA's Health Advisory for manganese.

During the visit, water samples were collected from each source entry point (S/EP) or finished water tap; and in the distribution system at 409th Avenue. The sample results (copies enclosed) indicate there were no detects (0.03 & 0.07 mg/L at the maintenance garage and well #6) for manganese. These results are below the action level of 0.3 mg/L for infants; and 1 mg/L for all others. In conclusion, no further action is required by the department at this time. However, it is recommended that the facility collect special samples for manganese from each well (Raw Water), the S/EP, and in the distribution system to set a baseline and/or determine the amount of manganese people are consuming or may consume.

In summary, based solely on the field tests during the investigation and a review of the monthly operating reports, it appears the chlorine residuals are being maintained within the required levels, and do not appear to be exceeding the MRDL limit of 4.0 mg/L. The facility is encouraged to continue implementing procedures that ensure this facility is maintained and operated as efficiently as possible to achieve compliance with the terms and conditions of their permit and standards for water supplies.

If you have any questions, please contact us.

Sincerely,

FIELD SERVICES & COMPLIANCE BUREAU



Mark Heiderscheid

Environmental Specialist

Iowa Department of Natural Resources

1023 West Madison, Washington, IA 52353

Phone: 319-653-2135 | Fax: 319-653-2856

Mark.Heiderscheid@dnr.iowa.gov

Encl. Lab Report for Manganese

Manganese in Drinking Water Fact Sheet and Frequently Asked Questions

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Picture Filenames: N/A – None Taken

C: IDNR Water Supply Operations Section, w/enclosure

Camanche Water Supply, Attn: Public Works Director, P.O. Box 77, 818 7th Avenue, Camanche, IA 52730
w/encl

Facility File – Municipals, w/enclosure