## Coos Health & Wellness

**Together, Inspiring Healthier Communities** 



March 2, 2016

Arago Community Church Gary Lillie 54239 Arago Fishtrap Rd Myrtle Point, OR 97458

Subject: Corrective Action Required for Arago Community Church to Address

Fecal Contamination at "Dug Well" Water Source (pws 4195325)

Mr. Lillie:

The Drinking Water Services (DWS) has verified recent monitoring which confirms fecal (*E. coli*) contamination of the dug well including these sample results:

Sample Date	Sample Type	Sample Location	Result (sample #)
1-28-16	Assessment	Well	Positive for <i>E. coli</i> (1/1)
2-9-16	Confirmation	Well	Positive for <i>E. coli</i> (1/2)
2-11-16	Confirmation	Well	Positive for <i>E. coli</i> (3/3)

Based on the Groundwater Rule and the attached Hydrogeologist's report this letter will outline a process that will allow continued use of the current well and a brief explanation regarding the option of changing the current source or water. In any case, by no later than July 8, 2016 the Arago Community Church water system should either be in compliance with one of the five (A-E) corrective actions outlined below or be on an approved schedule toward completion for one of the options.

Rick Hallmark, Environmental Health Program Manager

Please contact me by April 8, 2016 and verify your understanding of this letter and identify which course of correction you intend to follow. If July 8 does not appear to be a reasonable time frame to meet the requirements to comply, be prepared to justify an alternate schedule.

(A)Presuming you will move forward continuing use of your current well source, the following three points apply:

- 1. Provide a conspicuous boil notice at any likely point of use. Even though it appears nonsensical for the application at the church I advise use of the enclosed "boil notice" template. Maintain a notice until you receive correspondence from Coos Health & Wellness or Oregon Drinking Water Services (DWS) that it is no longer needed. In the interim, on a monthly basis, provide a copy of the public notice to DWS-DMCE at PO Box 14450, Portland, OR 97293-0450. You may also fax the report to (971) 673-0694 or email to <a href="mailto:dwp.dmce@state.or.us">dwp.dmce@state.or.us</a>. Please copy my office with each [monthly] notice.
- 2. Complete a microscopic particulate analysis (MPA) to determine if your source water is satisfactorily free of elements representing potential parasite intrusion in the source. Note an extra measure of disinfection above the 4-log viral level is required if the MPA shows a risk of parasites and note there is the potential to be required to add more filtration for some parasite situations.

The state has a circuit rider HBH Consulting Engineers, Inc., which provides limited technical help without cost to a non-profit organization operating a public water system. I advise calling Robert Henry of HBH at 503-554-9553 or 866-669-6603 and make a request to clearly determine if HBH acting as the state's circuit rider can provide an MPA at no cost to the church (and perhaps immediately?).

It is customary for DWS to provide written direction about performing MPA. It is a technical process requiring at least two separate full days of work spaced apart by at least 30 days. Each day of work must immediately follow a significant precipitation event. If HBH is not able to do the work for you, please wait patiently to receive detailed MPA information from DWS such as what labs do the analysis and where equipment can be rented. I think it would be ideal to complete the MPA during the current winter rainy season and before you move forward to purchase tanks to meet disinfection requirements.

3. Prepare to meet plan review requirements to meet "compliance monitoring" criteria for disinfection. This means (1) providing chlorination with enough contact time to achieve at least 4-log viral disinfection (unless more disinfection is required due to MPA results), (2) documenting that the minimum chlorine residual is maintained at the entry point at all times and (3) reporting findings/results to state Drinking Water Services on a monthly basis.

Aside from the plan review requirement for disinfection there is some chance of need for plan review to increase filtration. This need will be based on the MPA.

If MPA can be completed in the next several weeks I think it is logical to wait for those results to be obtained before starting plan review. This will allow you to pay the plan review fee only one time. If the MPA cannot be completed before spring 2016, expect to move forward as soon as practical with disinfection without the MPA results.

To obtain information for plan review enquire with DWS by calling 971-673-0408 or go to <u>Oregon.gov</u> and then type in "drinking water plan review" using the internal search engine.

Considering the hydrogeologist's report and despite the fecal contamination confirmed in the source I do not advise abandoning your water source, but you may consider doing so. Plan review (noted above) is required for changing a source. Modifying the source does not change the "boil notice" requirement noted above and does not necessarily eliminate the need to provide disinfection or at a later date performing an MPA. Here are examples of changing a source.

- (B)Drill a new well in hopes of finding an aquifer without fecal contamination.
- (C)Provide adequate storage capacity for hauling water from an approved public system.
- (D) Find means to connect to a viable public water system.
- (E)Reconstruct the existing well using current well construction standards. (Well reconstruction does not always eliminate fecal contamination.)

<u>Please ask for more detail if any of the four above options (B-E) interest you.</u>

July 8, 2016 is the goal is to provide a remedy to the fecal contamination of the water source. A series of public notice requirements become applicable if the goal is not

achieved and if a corrective action plan is not approved by that date.

Please remember to contact me by April 8, 2016 to confirm your understanding of the

requirements outlined in this letter.

If you have any questions or concerns, or would like this in an alternate format, please

contact me at 541-751-2403. I appreciate your immediate attention to this matter.

Sincerely,

Rick Hallmark

Environmental Health Program Manager

CC:

Betsy Parry, DWS

Encl: Instructions for Fecal Coliform or E. coli Notice