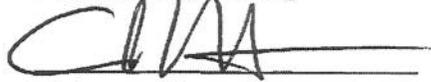


November 11th, 2011

Comments to Proposed Rules Docket No. 58-0108-1101, Dated September 29th, 2011

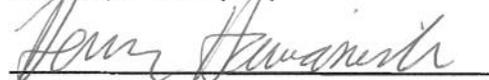
Comments provided by:

Pharmer Engineering



Carl Hipwell

J.R. Simplot Company



Henry Hamanishi

1. Page 11, regarding definition of Membrane Unit. Propose to delete 'while still operating similar redundant units'.
2. Page 12, regarding definition of Plant Design Capacity. Propose to change definition to 'The plant design capacity is the maximum rate of production of the plant.'
3. Page 13, regarding definition of Potable Water. Propose to change definition to 'water that meets federal primary drinking water standards and state groundwater quality standards.'
4. Page 14, regarding definition of Redundancy. Propose to change definition to 'The provision of at least two components so that the plant design capacity can be maintained with any one component out of service for maintenance or repair.'
5. Page 14, regarding definition of Reverse Osmosis. Propose to modify definition to delete 'high pressure'.
6. Page 27, Item 300.02.b regarding Table of Maximum Log Removal Credits. Propose to add column to show Cryptosporidium Removal credit.
7. Page 41, regarding Design of Treatment Facilities. Propose change to redundancy requirement as follows: 'Redundancy. Unless otherwise approved by the Department or as specified in other sections of these rules, all public drinking water systems whose plant design capacity services non-industrial uses, shall in order to ensure that minimum quality, quantity, and pressure requirements of these rules are continuously met during maintenance, breakdowns, structural failures, emergencies, or other periods when components must be out of service, water system treatment, filtration, and disinfection components for all new or substantially modified community or nontransient, noncommunity drinking water systems shall be designed such that plant design capacity can be maintained with any component out of service. Raw water intake structures are excluded from the general redundancy requirement but shall be designed to ensure that plant design capacity will be maintained. Potable water system providing water for industrial use shall be excluded from the general redundancy requirement.'
8. Page 44, Item 19 regarding Pilot Studies. Propose the following language. Pilot Studies. Unless otherwise approved by the Department, pilot studies are required for treatment processes other than disinfection or point of use installations. Pilot studies may be

performed in the field using the proposed source water and/or in conjunction with bench scale testing in the lab using the proposed source water. The system shall obtain the Department's approval of a pilot study plan before the pilot study is implemented. The pilot study plan may propose the use of a proof pilot, whereas the full scale facility will act as the pilot, with proposed design criteria for the proof pilot based on existing similar water treatment facilities using similar source water quality and/or literature design criteria. A final pilot study report with results shall be submitted to the Department for review and approval. Upon completion of the pilot study, final approval of equipment and treatment processes is subject to the applicable requirements of Sections 500 through 552.

Pilot Study Plan. A pilot study plan shall include the following and any other items required by the Department:

Introduction and Background. The plan shall discuss general information about the project including the existing system, the reason for conducting the pilot study, and anticipated results of a successful pilot study.

Alternative Processes. Provide a brief description of alternative processes that could be used if the proposed process is shown to be ineffective from the study.

Procedures and Methods. The procedures and methods section shall discuss how the pilot study will be conducted, the time frame of the study, source water quality and how the source water may be altered to mimic various source water quality conditions and the water quality parameters that are monitored and evaluated to determine if the treatment process was effective.

Pilot Study Report. The pilot study report shall include the following and any other items required by the Department: **Introduction and Background.**

Results. A discussion of the overall pilot study progress, including any issues or problems and a general discussion of results of the study and what the results indicate.

Conclusions. Conclusions and recommendation to proceed with the treatment process if the results of the study proved successful.

Additional specific pilot study requirements in sections 500 through 552 shall be included in pilot study plans and reports.

9. Page 52, Item e.iii regarding Treatment methods. Propose wording as 'Describe the treatment methods and potential alternatives including the removal of pathogens, disinfection, enhanced disinfection, and water quality monitoring. Discuss if and how redundancy will be provided.'
10. Page 64, Item 511.06.c. Propose to change second sentence to read 'All equipment required for conducting water level measurements shall be purchased and made available to the water system operator at the time well is put into service.'
11. Page 67, item 518.10. Propose to modify Item 518.10 to delete all verbage with exception of the following sentence 'The system shall conduct pilot studies in accordance with Subsection 501.19 for all proposed filtration facilities and structural modifications to existing filtration facilities, unless the Department modifies the requirements in writing.'

12. Page 68, 520.01, replace 'units' with components to allow other methods for backup, such as an alternative water source.
13. Page 80, 525 opening paragraph, add 'for disinfection' to the first sentence. Delete the last sentence 'no membrane system shall have fewer than two (2) units.'
14. Page 80, Item 525.01.c. Propose the following wording, Pilot Study. Pilot studies shall be conducted in accordance with Section 501.19. The Department may waive the pilot study requirement if a pilot study has been conducted on or existing membrane plants operate using very similar water (i.e. same lake, reservoir, or same reach for stream sources). In addition to the requirements in Subsection 501.19, the pilot study shall include:
 - i. A means to identify the best membrane to use for the anticipated water quality,
 - ii. Analysis of any need for pretreatment,
 - iii. Range of anticipated flux rates,
 - iv. Operating and transmembrane pressure,
 - v. Fouling and scaling potential,
 - vi. Turbidity; and
 - vii. Integrity testing procedures