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Gina Thompson <gina.thompson@wyo.gov>

Water Quality Rules, Chapter 12, Water and Waste Advisory Board Meeting comment

1 message

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Mon, Dec 6, 2021 at 11:23 AM

To: dalsaker@dowl.com Bcc: gina.thompson@wyo.gov

Thank you for your comments on the Water Quality Rules, Chapter 12, Water and Waste Advisory Board Meeting. Your comments have been received.

Name: Dayton Alsaker

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Water Quality Rules, Chapter 12, Water and Waste Advisory Board Meeting

Comments on the proposed revisions to Chapter 12:

- Section 4 (a). Incorporates requirements of the 2018 version of Ten State Standards "unless otherwise noted". At the start of most sections it references which sections of the 18TSS are included for that section. Are there any places where it is noted that sections of 18TSS do not apply? I recommend deleting the statement that "18TSS applies unless noted", and where sections of 18TSS are to be included, it be referenced at the start of the appropriate section where they apply, as it appears is done at the start of each section in Chapter 12. This will make it clearer where select sections of 18TSS apply and avoid the above vague catch-all statement.
- Section 9 (b.iv). "A determination of the degree of hazard of all water connections." How does a design engineer know about all the services to be connected to a new water line? It seems this comes later by the system owner through their cross-connection control program, by the person designated to conduct this evaluation.
- Section 14 (g.iii). "Surge Control shall be provided....". For smaller pumps surge control may not always required. Is this saying surge control is always to be provided and that pressure relief valves are not acceptably even with smaller pump stations? I don't agree with either of these requirements.
- Section 14 (h). Booster pumps... Are Booster Pumps defined? It appears this applies to a booster pump installed in a service line, but this should be clarified.
- Section 15 (c.ii). Minimum inlet velocity shall be 10 fps. Mixing is very important and must be provided, however requiring an inlet velocity of 10 fps, seems excessive or restrictive to the design when other considerations on providing adequate mixing/turnover can be considered. This matter is also covered in (d) and (e).
- Section 15 (f and g). Overflow. g allows a mechanical device with a #4 mesh screen, which I prefer. I recommend against installing a #24 mesh screen in an overflow, as this can become easily plugged with any debris, including what can occur if a tank has not been overflowed for quite some time and then is overflowed. This can happen even if the screen is oversized to allow for partial plugging. I recommend the mesh on an overflow screen not be finer than #16.
- Section 15 (i). Shall demonstrate provisions to "prevent mechanical device from freezing shut". Not sure how this is accomplished.
- Section 15 (k.i) Vent. I believe a #24 mesh screen is too fine for vents, but it should definitely not be required for an elevated tank where the vent is placed 100 or more feet above the ground, where the intrusion of the possible contaminants listed is very unlikely. And especially given that the vent is not easily or safely inspected on a regular basis, or simply will not be inspected on a regular basis since the vent is difficult to access. The plugging of a #24 mesh screen by ice/frost can occur and possibly prevent the easy movement of air, which can then result in a major problem, damage to the tank, and cause an increased risk to the water quality than the finer mesh was intended to prevent. The mesh on a vent for an elevated tank should not be finer than #16 mesh. I see potentially significant issues resulting if a #24 mesh is required on elevated tanks. This is my most important comment.
- Section 16 (d.ii). So hydrants cannot be used for flushing of lines not designed to have fire flows? When longer mains are sized at 8" or larger due to the resulting losses because of their length, hydrants can provide a means for the needed flushing.
- Section 16 (f.ii). Designing manholes for air relief valves to prevent submerging the valves under all conditions is difficult. I believe an alternate approach is to design the valve not to discharge into water that might accumulate in the manhole should the installation be subject to possible submergence. I recommend allowing both options.

Dayton Alsaker

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