

Regional Wastewater Management Stakeholder Initiative

Agenda for technical workgroup meeting on 12/01/2015

Austin City Hall, Room 1029 (the staff bull pen)
301 West 2nd Street
Austin, TX 78701

Draft rule available at: <ftp://ftp.ci.austin.tx.us/wre/wastewater>

1. Discuss removal of alternative disposal method provision

Proposed Action: Remove proposed subsections 309.21(h) and 222.6(h)

Current Text: “If firm reclaimed water cannot be applied to reclaimed water dispersal sites or transferred, the applicant must provide an alternative method to dispose the reclaimed water and provide notice to the regional office.”

Explanation: The original intent of this provision was to clarify that the applicant is always liable for the disposal of effluent, such that if effluent could not be applied to the reclaimed water dispersal sites that the applicant would have to “pump and haul” the effluent to another facility for disposal. Some comments have been received that indicate that “pump and haul” of large volumes of effluent is impractical, that this provision is not necessary because it is already covered under other provisions of the standard land application permit, and that this could be interpreted to require the applicant to maintain dedicated disposal field areas sufficient to also dispose of the firm reclaimed water demand volume to contrary to the concept of the proposed rule revision. Thus, we are proposing removing this subsection from the draft rule.

2. Discuss requiring mapping of areas receiving firm reclaimed water demand

Proposed Action: Clarify proposed subsection 309.21(c) and 222.6(c) to require a map of the areas that receive firm reclaimed water demand with sufficient information for TCEQ staff to verify that the buffer requirements of proposed subsections 309.20(d)(2) and 222.128(2) are met.

Current Text: “Applicant must provide the executive director with a list of users and areas that receive firm reclaimed water demand. If users or areas change, the applicant is required to provide an updated list within 30 days. A change in user or area is not an amendment to the permit.”

Explanation: Beneficial reuse areas under 30 TAC 210 are not required to be explicitly mapped in the same way that dedicated wastewater land application disposal fields are required to be mapped. With regard to our proposed rule, TCEQ staff questioned the mechanism by which the buffer requirements for the off-site areas receiving firm reclaimed water demand proposed in subsections 309.20(d)(2) and 222.128(2) are to be verified. Additionally, some stakeholders wanted the language to be more explicit to ensure that the areas were actually mapped, rather than just being named in a text description.

3. Discuss the proposed allowance for a reduction in the required storage based on the amount of firm reclaimed water demand

Proposed Action: Discuss whether to retain the language in 30 TAC 309.20(b)(3)(B) related to a proposed reduction in the storage requirements based on the amount of firm reclaimed water demand.

Current Text: “An effluent storage study shall be performed to determine the necessary storage requirements. The storage requirements shall be based on a design rainfall year with a return frequency of at least 25 years..and a normal monthly distribution, the rate application rate and cycle, the effluent storage available on a monthly basis, and evaporation losses. Storage may be reduced based on the volume of firm reclaimed water demand.”

Explanation: Reclaimed water demand utilized for the credit under the proposed rule is “firm” and thus represents a minimum amount that could be transferred off-site under any conditions. The draft rule was crafted under the assumption that is not necessary to include the firm reclaimed water demand volume in the calculation of the storage required for the land application permit. TCEQ staff questioned the logic behind this assertion, so let’s revisit this need for this provision.

4. Discuss the method by which firm reclaimed water demand is demonstrated to TCEQ

Proposed Action: Discuss whether the group prefers to further clarify the method by which firm reclaimed water demand is demonstrated to the TCEQ under 30 TAC 309.21(a-b) and 222.6(a-b).

Current Text: “(a) An applicant establishes that reclaimed water demand is firm when the applicant:

- (1) Demonstrates to the satisfaction of the executive director that it is able to transfer a specific volume of reclaimed water on a periodic basis;
- (2) Demonstrates a specific amount of reclaimed of reclaimed water use by the applicant.

(b) An applicant may demonstrate its ability to transfer reclaimed water on a periodic basis when it requires a user to accept a specific amount of reclaimed water by contract or appropriate local regulation.”

Explanation: This intent of this language was to provide multiple means that an applicant could demonstrate to TCEQ that some portion of their effluent could be guaranteed to be utilized off-site under a beneficial reuse authorization. Some stakeholders have expressed the need for a hydrologic definition for firm reclaimed water demand, potentially as demonstrated by a separate water balance for the off-site areas being used for the credit. Additionally, TCEQ staff indicated that a more prescriptive method for demonstrating firm demand may be necessary. Let’s discuss what modifications may be necessary to this section, specifically including a water balance as part of the demonstration of firm reclaimed water demand when the beneficial use is outdoor irrigation.

5. Discuss the need for an additional margin of safety relating to the amount of credit for reclaimed water use

Proposed Action: Discuss whether a discount should be applied to the credit, or other potential provisions, to ensure that a sufficient margin of safety exists such that beneficial reuse could not entirely replace the requirements of the wastewater land application regulations of 30 TAC 309 or 30 TAC 222.

Current Text: 30 TAC 309.20(b)(3)(A): “A water balance study shall be provided as part of a detailed application rate analysis in order to determine the irrigation water requirement, including a leaching requirement if needed, for the crop system on the wastewater application areas. The total volume of effluent to be land applied to dedicated disposal fields may be reduced by the volume of firm reclaimed water demand.”

Explanation: TCEQ staff and some stakeholders have expressed a concern that this provision of the draft rule could allow an applicant to demonstrate via a questionable contract that all of volume of effluent to be treated could be utilized off-site under a beneficial reuse authorization thus bypassing most of the land application requirements in 30 TAC 309 or 30 TAC 222, although the City of Austin believes this to be an unlikely scenario. Several proposals have been offered to counter this potential eventuality that require discussion amongst the larger stakeholder group, including:

- (1) Allow only 80% of the demonstrated firm reclaimed water demand to be removed from the water balance used to determine the hydraulic application rate.
- (2) Include a provision that explicitly states that the firm reclaimed water demand must be less than the total volume of the permit application.
- (3) Require new land application permits to buy, reserve or otherwise dedicate sufficient area to land apply the full volume of effluent for at least the first permit term, but allow the permittee to not construct irrigation infrastructure on the portion of the dedicated disposal fields equivalent to the volume of firm reclaimed water demand.