# Texas Commission on Environmental Quality
# Chapter 217 Design Criteria
# Stakeholder Meeting

### November 19, 2020 @ 1:30 p.m.
### Via MS Teams Live Event

### Q & A Session Handout

**Question 1:** Will this session be recorded and available for viewing at a later date?
**Answer:** Yes

**Question 2:** Emergency power for WAS pumps?
**Answer:** Short term "No" Long term "Yes"

**Questions 3:** Will there be recommended "Peaking Factor" for design of the sewer lines in §217.53 Pipe Design?
**Answer:** No. We are not proposing any changes at this point. But you are not expected to surcharge the sewer pipe

**Question 4:** Can Laser Profiling be an acceptable alternate to the Mandril Testing?
**Answer:** May be acceptable for greater than 27-inch diameter on a case-by-case basis

**Question 5:** We don't want so much storage in lift station that we cause septic conditions.
**Answer:** This is a comment not a question

**Question 6:** Will any of these rules be retroactive to older lift stations?
**Answer:** No, they are grandfathered

**Question 7:** Will max pipe pressure rating consider surge protection?
**Answer:** No

**Question 8:** What editorial corrections are expected?
**Answer:** Undetermined at this point

**Question 9:** Current guidance indicates pump must run continuously during cycle time. Industry typically defines pump cycle time as pump on to pump on, or pump off to pump off, which includes the time the pump is not running.
**Answer:** We will clarify. An editorial change may be required

**Question 10:** Currently there is no recommended way of calculating peaking factor in §217.53 Pipe Design. So, is there one at another section of the rule that should be used?
**Answer:** Same answer as Question No. 3 above. The engineer needs to design the sewer pipe based on several factors such as aging, I/I, etc.

**Question 11:** Will there be a recommended peaking factors for mass loadings – BOD, etc.?

**Answer:** No

**Question 12:** Does TCEQ allow pump control elevations to be above incoming flowline elevations? If yes, in which cases?

**Answer:** The engineer designs the pump control elevations based on location factors, so sewage does not backup on private property

**Question 13:** Example – a typical mass loading factor for BOD 5 is 1.8 based on average daily flow. This is used if no existing data is available.

**Answer:** Yes

**Question 14:** Used to size aerations basins, blowers, etc.

**Answer:** Yes

**Question 15:** Are there different volume requirements on aeration for package plants / interim plants versus the ultimate plant?

**Answer:** No

**Question 16:** Do you have a feel if reuse is increasing/expanding in Texas?

**Answer:** Yes

**Question 17:** Does the volume-flux design method apply to both hollow fiber and plate membranes?

**Answer:** If referring to Chapter 217.64, the answer is no

**Question 18:** There are areas that need to be clarified on the volume flux.

**Answer:** Yes, it needs update

**Question 19:** Will you require existing permits to meet nutrient removal during the permit renewal?

**Answer:** Yes, this will be on a case-by-case basis

**Question 20:** Is there a time frame for implementation of nutrient limits? My understanding is that nutrient limits are based on requirement of receiving streams.

**Answer:** Time frame is three years

**Question 21:** Please clarify whether you plan to start imposing nutrient limits on permit renewals.

**Answer:** This depends on location and site-specific conditions

**Question 22:** Will you include anoxic zone design?

**Answer:** Yes

**Question 23:** Nutrient removal plants are most commonly designed using process models. Any thoughts on rules on how these are used?

**Answer:** We are open to any process model

**Question 24:** Are there process model(s), TCEQ use or recommend using?

**Answer:** No

**Question 25:** Will you include criteria for biological removal only, chemical removal only, and combined processes?

**Answer:** Yes

**Question 26:** Is TCEQ planning to recommend or encourage municipalities to use process model for design and operation?

**Answer:** This is up to the engineer and the permittee

**Question 27:** Why does TCEQ not have TN requirements and only NH3 requirements?

**Answer:** It does have TN requirements on a case-by-case basis for certain permits

**Questions 28:** Will the liner change also apply to effluent holding ponds following treatment?

**Answer:** Yes, it applies to both based on location

**Question 29:** Will process modeling be allowed for BNR design? If so, will there be specific model(s) allowed?

**Answer:** Yes, it will be allowed, and the selection of the process model is up to the engineer

**Question 30:** Should effluent filters, such as disk filters, be prior to disinfection or can they be after disinfection?

**Answer:** Can be either, but TCEQ's preference would be before disinfection

**Question 31:** Is there a listing or a map available of the recharge zones for major and minor aquifers that are not the Edwards?

**Answer:** Yes, there is. Please refer to the Texas Water Development Board's major and minor aquifer map

**Question 32:** UV systems don't disinfect well if TSS is present. Filters need to be upstream of UV.

**Answer:** This is a comment, not a question

**Question 33:** Any requirements for plants to be hydraulically capable of pushing treated effluent out during 500-year flood events?

**Answer:** No

**Question 34:** Will TCEQ require electrical components and other important equipment to be above 500-year el. (instead of 100 year) for locations such as Houston, Corpus Christi, and others susceptible to Hurricane flooding?

**Answer:** We will recommend, but it's not required

**Question 35:** WAS measurement is required for I believe (0.4 mgd) flows but most plants don't seem to have these.

**Answer:** Yes

**Question 36:** Is influent meters required for new customers?

**Answer:** We don't require influent meters, only effluent meters, but we recommend them highly

**Question 37:** Any other update to flood plain requirements? Either site access during 25-year storm for LS, or protection from 100 year storm?

**Answer:** We intend to look at these. We don't know at this point

**Question 38:** Any updates to equalization basin requirements? Screening, DO, mixing, etc.?

**Answer:** We are planning to review the requirements for this

**Question 39:** Is influent meters required for new construction?

**Answer:** Same answer as Question No. 36 above

**Question 40:** Is there a waiver available for access road to be above the 100-year floodplain if adjacent highways are under water during 100-year flood?

**Answer:** Yes

**Question 41:** Will you have a copy of the slide presentation on the TCEQ website and/or email to participants?

**Answer:** Yes

**Question 42:** FYI – In Florida insurance companies have been requiring electrical equipment elevations that are more conservative that those of regulatory agency – is it worth checking with them?

**Answer:** No. We recommend the electrical components to be above the 100-year flood elevation

**Question 43:** Clarification required – for sludge holding tank mixing requirement for aerobically digested sludge. The code requires mixing. Which cases allow TCEQ to make variance on these requirements? Refer 217.251 (d) (1)

**Answer:** We will review all variance requests based on Chapter 217.4, except the prohibitions

**Question 44:** It is 0.4 MGD refer to 217.159 Process Control

**Answer:** This is a comment, not a question

**Question 45:** Is there considerations given to grit system redundancy for aerobically digested sludge for Wastewater Treatment Plants (WWTPs)?

**Answer:** No, but it's highly recommendable in places with high sand wastewater concentrations such as in coastal areas

**Question 46:** Is a grit removal system a mandatory process in a WWTP?

**Answer:** Same answer as above

**Question 47:** For these revisions, are you looking and comparing with other states rules, e.g. EPA 10 states standard?

**Answer:** We do look at other states design criteria, but we are not looking at Ten State standards because these were developed for cold wastewater

**Question 48:** Anything in the planning phase to look at Total Dissolved Solids, Chlorides and Sulfate which are showing up in permits?

**Answer:** Not at this time. We will review on a case-by-case basis

**Question 49:** 10 State Standards are not good; they are very old and do not address nutrients. I recommend using WEF Manuals of Practice instead.

**Answer:** Thanks! This is a comment not a question

**Question 50:** Will there be limits imposed for TDS?

**Answer:** This a permitting question, based on location

**Question 51:** Will there be a schedule posted for future meetings? It is very difficult to schedule for this important meeting on short notice.

**Answer:** Yes

**Question 52:** Can you go through the timeline again?

**Answer:** Yes

**Question 53:** Will TDS effluent criteria be based on background/drinking water?

**Answer:** This a permitting question, based on location

**Question 54:** Is there a list of Texas average WW temps, WW loadings, air temp ranges for design purposes?

**Answer:** No

**Question 55:** What is TCEQ's thoughts on PFAS? Future of technology and effluent criteria?

**Answer:** We are still monitoring this. TCEQ most probably will address this in the future

**Question 56:** Any 217 related changes to Chapter 321 Subchapter P?

**Answer:** No, there should not be anything in Chapter 217 that will affect Chapter 321 Subchapter P

**Question 57:** Will you be looking at design flows and influent WW characteristics knowing, based on flows trends, flows tend to be much lower and influent loadings are much higher than in the past?

**Answer:** Yes

**Question 58:** What prompted this revision?

**Answer:** Time, a petition, and technology that keeps updating

**Question 59:** Are there any considerations for special treatment criteria for wastewater plants that may become a building block for a potable reuse project? An example of this would be incorporating membrane integrity testing requirements for an MBR system that could provide additional LRV credit?

**Answer:** We will look at this and will be in coordination with TCEQ's Water Supply Division

**Question 60:** Any specific guidance that might be provided for how to calculate storage volume requirements for a flow equalization tank (e.g. frequency storm and duration)?

**Answer:** This is on a case-by-case basis

**Question 61:** Any additions for high rate clarifications requirements for peak flow treatments such as Actiflo (Veolia)?

**Answer:** We are not planning to include any requirements at this time

**Question 62:** Will you please go back to the slide showing the number of plants in the state with a total nitrogen limit?

**Answer:** This a comment

**Question 63:** Can you briefly go over Chapter 309 and its intent? Regarding 309, beneficial reuse Credits.

**Answer:** This is a permitting question, not a part of 217 update

**Question 64:** We have some permits with TDS limitation. I am not aware of how we could practically treat for TDS if we exceed. Do you?

**Answer:** This is up to the engineer and will be reviewed on a case-by-case basis

**Question 65:** How do we get added to the distribution list for announcements related to this effort?

**Answer:** Please send an email to Outreach@tceq.texas.gov with "DCSG" in the subject line to get added to the Design Criteria Stakeholder Group.

**Question 66:** I recently moved to Texas and was asked to review a 90% design. I had several questions regarding the regs. The updates are spot on! Good job TCEQ folks!

**Answer:** This a comment

**Question 67:** When is the next meeting scheduled? Or has it been scheduled yet?

**Answer:** Most probably early summer

**Question 68:** How many in attendance for this live session? Kudos for your efforts!

**Answer:** The total number of attendees will be posted on the website.