Meeting Minutes
Surface Water Quality Standards Advisory Work Group Meeting
March 9, 2020

Location: Building F, Second Floor, Room 2210

Time: 9:30 am – 2:45 pm

All information presented in this document is a compilation of TCEQ staff notes and is not a transcript of the meeting; inadvertent errors and/or unintentional omissions of information may exist in this document. Any information cited should be verified by the user. The slide shows and handouts referenced in the meeting minutes are available on the Surface Water Quality Standards Advisory Workgroup webpage.

9:30 a.m. Welcome and Work Group Introductions, presented by Debbie Miller and Lori Hamilton

- Call to order and general welcome.
- Welcome from Lori Hamilton, director of the Water Quality Planning Division.
- Housekeeping (restroom locations, fire evacuation route, etc.).
- Introduction of Water Quality Standards Group staff and work group members.

9:45 a.m. 2018 Texas Surface Water Quality Standards (TSWQS) Update, presented by Debbie Miller

- Ms. Miller gave a presentation regarding updates to the TSWQS, including recent EPA action letters and items pending EPA action from the 2010, 2014, and 2018 triennial revisions. Please see slide show entitled "Texas Surface Water Quality Standards (TSWQS) Update" for details.
- Debbie Miller's contact information: debbie.miller@tceq.texas.gov; 512-239-1703.

General Discussion

QUESTION: Will all presentations be made available after this meeting?

ANSWER: We will compile all staff notes and comments made today into meeting minutes. The presentations and meeting minutes will be posted to our webpage.

QUESTION: When you say you "wait for further EPA approval for WQS changes", does that mean they are not the current standard?

ANSWER: Correct. The last EPA approved standards stay in effect for Clean Water Act (CWA) purposes until the new ones are approved. The highlighted version of the rule on our webpage explains what standards are and are not approved for CWA purposes. However, with so many triennial cycles still under EPA review, it can be difficult to determine the last time EPA approved a particular standard. Typically, you revert to the previous version of the rule.

QUESTION: As you are going through what EPA still has to act on for each triennial cycle (what's left for the 2010, 2014, and 2018 revisions), are those additive? Or are you instead showing what is left for each individual revision cycle?

ANSWER: No, these are not additive. The slides showing what remains for each revision is for that revision alone.

QUESTION: What is your timeline for informal public comments?

ANSWER: The absolute last opportunity would be by the end of this summer. If it's something you want discussed in an open setting like this, the sooner the better.

10:00 a.m. Recreational Use Changes, presented by Kate Lavelle
Handout: Recreational Use Changes (March 2020)

- Ms. Lavelle discussed possible revisions to appendices A and G of the TSWQS based on recent recreational use-attainability analysis (RUAA) studies. The above referenced handout was discussed with the group. Please see slide show entitled "Recommendations for Recreational Use Changes" for details.
- Kate Lavelle's contact information: katherine.lavelle@tceq.texas.gov; 512-239-6011.

General Discussion
QUESTION: In terms of the historical recreational use that was evaluated when you did an RUAA, how far back does that go and how is it conducted?

ANSWER: We document recreation activities back to Nov 1st, 1975, which marks the start of the Clean Water Act. For the review, we look at all historical records that we can find, such as in newspapers and other publications. However, what is most important are the interviews we do with stakeholders. In the interviews, we ask them about recreation they either do themselves or see happening in the stream, including what types of recreation and the frequency of recreation use. That information is then compiled and factored into the final decision.

FOLLOW-UP ANSWER POST MEETING: The Clean Water Act considers existing uses to be uses that were attained in a water body on or after November 28, 1975. In accordance with the RUAA procedures, we consider recreational activities from November 1, 1975, to the present.

QUESTION: But you don't go back past 1975, right?

ANSWER: Correct, we do not.

QUESTION: The information for these streams with recreational use changes hasn't been posted online yet, right?

ANSWER: Correct. We will post those later today.

QUESTION: Would TCEQ recommend Primary Contact Recreation (PCR) 2 for any of the recreational use changes, even though PCR2 isn't approved by EPA yet?

ANSWER 1: I don't know how we would proceed with that. I don't believe we would.

ANSWER 2: Until it's EPA approved, it's not an option.

QUESTION: For the streams you recommended as retaining PCR1, that is what you truly recommend, right? You're not just recommending PCR1 because PCR2 isn't approved?

ANSWER: Correct.

QUESTION: If EPA approves PCR2, you wouldn't and couldn't roll back to PCR2 from PCR1, right?

ANSWER: If we did decide later to categorize any of these streams as PCR2, we would have to propose it in a future triennial revision and give the opportunity for public comment before adopting a different recreational use. It would be the same process that we're going through now for the standards revision.

QUESTION: Can you give us some more background on why EPA is still contemplating or not acting on PCR2?

ANSWER: We've had meetings with EPA and have tried to push for and justify PCR2, but I can only say that it's still under EPA review.

QUESTION: Has EPA provided any written correspondence about PCR2?

ANSWER: They haven't provided any written correspondence.

10:20 a.m. Toxics Criteria Update (Tables 1 and 2), presented by Debbie Miller
Handout: Changes to Toxic Criteria Table 1
Handout: Changes to Toxic Criteria Table 2

- Ms. Miller gave an overview of changes being considered for this revision to freshwater and saltwater acute and chronic criteria for cadmium. The handout "Changes to Toxic Criteria Table 1" was discussed with the group. Please see handout for details.
  - EPA recently adopted a 304(a) criteria document for developing acute and chronic criteria for aluminum in freshwater entitled *Aquatic Life Ambient Water Quality Criteria for Aluminum – 2018.* EPA's recommendation develops criteria for aluminum on a site-specific basis using local water chemistry parameters (pH, dissolved organic carbon, and hardness). EPA has not yet finalized a guidance document on how to implement these revised criteria, so they are not currently being considered for inclusion in this revision cycle. However, this document can be utilized in the development of site-specific toxic criteria for aluminum.

- EPA recently adopted a 304(a) criteria document for developing a chronic criterion for selenium in freshwater entitled *Aquatic Life Ambient Water Quality Criteria for Selenium – 2016*. EPA's recommendation for selenium includes a chronic criterion based on fish tissue concentrations (egg/ovary, whole body, and muscle). EPA has not yet finalized a guidance document on how to implement the revised criterion, so it is not currently being considered for inclusion in this revision cycle. However, this document can be utilized in the development of site-specific toxic criteria for selenium.
- Ms. Miller gave an overview of revisions being considered for several human health criteria. The handout "Changes to Toxic Criteria Table 2" was discussed with the group. Please see handout for details.
- Debbie Miller's contact information: debbie.miller@tceq.texas.gov; 512-239-1703.

General Discussion – Table 1

QUESTION: For saltwater cadmium criteria, it looks like the criteria are more stringent?

ANSWER: Correct. The criteria are more slightly more stringent for both fresh and saltwater.

QUESTION: Do the cadmium saltwater criteria apply to high saline inland waters?

ANSWER: No. We will continue to apply aquatic life criteria as we always have.

QUESTION: Aquatic life criteria for selenium are not included in this revision?

ANSWER: EPA adopted a chronic freshwater criterion for selenium in 2016, and EPA also adopted new freshwater criteria for aluminum in 2018. However, EPA has yet to issue final implementation guidance for either selenium or aluminum. Until they finish that, we will not be adopting those criteria or changing how we're applying the current standards.

However, if you want to develop site-specific criteria for either selenium or aluminum, you can still use those criteria documents to do so.

QUESTION: Since the selenium chronic criterion is based on fish tissue, is there fish tissue data available to develop a site-specific criterion?

ANSWER: No, not that I am aware of.

QUESTION: When you say no, does that include the Department of State Health Services data?

ANSWER: We get their data, but it is not part of SWQMIS. So no, that data is not included.

QUESTION: Would it be reasonable to look at the Department of State Health Services data to see if there might be an issue?

ANSWER: Yes, you would have to do an analysis of the fish tissue data to get that standard.

General Discussion – Table 2

QUESTION: Can you describe the oral slope factor and how that was used?

ANSWER: Typically, slope factors are based on animal studies. The animals are dosed upward until you figure out your response endpoint. Then that endpoint must be scaled up from an animal body weight to a human body weight to determine the appropriate cancer potency factor. Different slope factors are based on studies which used different test animals. Changing what animals were used to determine the slope factor can impact those animal-to-human scaling calculations (e.g. if the slope factor was determined using hamsters, mice, rats, or a combination of animals). Most of these slope factors came out of EPA's online Integrated Risk Information System, or IRIS. That's the main source we use to come up with both the carcinogenic and non-carcinogenic factors.

QUESTION: What would cause an oral slope factor to be that wrong at first? Why would it need to be changed?

ANSWER: As new studies and data come in, changes are made as needed. If you're curious about the studies or data used to calculate human health criteria, we have all of that in the Excel table on our webpage for the public to see. This spreadsheet was posted online at the same time as the agenda and handouts for this meeting.

QUESTION: Why was there such a dramatic change in the chrysene criteria?

ANSWER: EPA updated the oral slope factor to a less stringent value.

QUESTION: Why did the animal body weight used for dicofol change?

ANSWER: We've had human health criteria for dicofol since 1991. Shortly after we adopted our criteria, EPA took everything for dicofol off of their IRIS database. When I scaled the animal-based slope factor to a human body weight, I went with the most stringent assumption by basing it on a rat body weight of 350 grams. During the preliminary comment period for this triennial revision, EPA commented that the oral slope factor was based on hamster and mice studies instead of rats. This changed the animal weight we used for scaling and made the criteria a bit less stringent.

QUESTION: Are the toxic criteria changes driven by EPA releasing new information, and is IRIS the main source for these criteria updates?

ANSWER: Yes, these changes were driven by updates to IRIS.

10:40 a.m. Site-Specific Criteria Changes, presented by Elizabeth Malloy
Handout: Site-Specific Criteria Changes

- Ms. Malloy gave a presentation regarding possible site-specific changes to appendices A and D. The above referenced handout was discussed with the group. Please see slide show entitled "Site-Specific Criteria Changes" for details.
- Elizabeth Malloy's contact information: elizabeth.malloy@tceq.texas.gov; 512-239-3166.

General Discussion
QUESTION: Can you give us a ballpark as to how many changes will be covered in the next meeting?

ANSWER: We're looking at two, maybe three.

QUESTION: For the Brushy Creek map displayed on the slide, can you orient us on the map? What city is nearby?

ANSWER: The Round Rock area is to the left and below of the recharge zone on the bottom left corner of the map.

QUESTION: For Brushy Creek, is there an assessment unit (AU) number or specific landscape marker to demarcate where the public water supply (PWS) use removal applies to the creek? Is there a way to specify where that boundary is?

ANSWER: Normally there is a specific marker, such as a road or stream confluence, to define the AU. However, in this case we don't have a specific landmark because the PWS use will not apply downstream of the Edwards Aquifer zones. There is no specific landmark where the Edwards Aquifer ends.

QUESTION: Are you suggesting this simply because there are no PWS in the area, or was it suggested by someone?

ANSWER: There is a permittee operating under a variance who asked if we could look at the PWS use.

QUESTION: Can you say who the permittee is?

ANSWER: I don't know for sure that I can share that information, so I'm going to hold off on answering that for now.

QUESTION: Has a PWS use been removed before?

ANSWER: Yes.

QUESTION: Going back to the Brushy Creek PWS and not having a specific boundary, how does the non-PWS area get broken out for assessment purposes? How does the assessor know how to the define the AU?

ANSWER: We will put the boundary in a footnote in the Appendix A table. Since the PWS does not apply downstream of the Edward's Aquifer, the water body assessor will need to check the station locations on Brushy Creek to see if they are located within or downstream of the Edwards Aquifer. This is a bit messy, but there is not a defined point on a map we can use for an AU description.

QUESTION: Can you tell me what prompted the use-attainability analysis (UAA) on Buckners Creek?

ANSWER: Buckners Creek was added to the 303(d) list in 2010 for depressed dissolved oxygen. Further analysis revealed that the listing may be due to a water quality standards issue rather than something else, so we contracted with the Lower Colorado River Authority (LCRA) to do the UAA.

QUESTION: How refined are the breaking points for the UAA recommended AUs for Buckners Creek?

ANSWER: They are well defined. LCRA supplementary information and tributary locations were used to set the proposed AU boundaries.

QUESTION: What implications will this UAA have?

ANSWER: It will not immediately delist Buckners Creek, but it will more accurately reflect the natural historical conditions in the stream. More 24-hour dissolved oxygen data would need to be collected before the stream could re-evaluated for delisting.

QUESTION: Are there any dischargers on the stream?

ANSWER: No.

QUESTION: Are there any proposed new dischargers for Buckners Creek?

ANSWER: None that I am aware of.

11:45 a.m. Adjourn for lunch

1:00 p.m. *Procedures to Implement the Texas Surface Water Quality Standards* (RG-194) Updates and Discussion Topics

- Many topics regarding possible revisions to the *Procedures to Implement the Texas Surface Water Quality Standards* (RG-194) were discussed, including:
  - pH Screening Procedures;
  - Whole Effluent Toxicity Testing Updates;
  - Appendix B Updates: Federally-listed Aquatic-dependent Endangered Species;
  - Appendix C Updates: Critical Low-Flows and Harmonic Mean Flows for Classified Segments;

    - Tables D1 – D25: Classified Segment Ambient Water Quality Values;
    - Appendix E: Minimum Analytical Levels and Suggested Analytical Methods;
    - Establishing Permit Limits for Toxic Pollutants without Criteria; and
    - TDS Screening Procedures Update.
- For information and items presented during the afternoon session, please see the Implementing the Surface Water Quality Standards in Permitting webpage.
- Peter Schaefer, Team Leader of the Standards Implementation Team, contact information: peter.schaefer@tceq.texas.gov; 512-239-4372.

2:45 p.m. Adjourn