

**Bacteria Permit Limits Rulemaking
Stakeholder Meeting Summary
January 23, 2009
Austin, Texas**

Welcome and Introductions – Sherry Smith

Bacteria Limits Presentation – Kent Trede (See Presentation “Bacteria Rulemaking”)

Timeline for Rulemaking – Sherry Smith

- Proposal – May 20, 2009
- Comment period – June 5, 2009-July 5, 2009
- Adoption – October 28, 2009
- Have not started drafting – will start in 2-3 weeks
- Hope to have stakeholders suggestions submitted by then

Standards Update – Dr. Jim Davenport

- Currently in process of revising standards
- Standard Revision stakeholders have had a series of 5 meetings
- Last 2 meetings were January 6 and 7, 2009
- Included Implementation Procedures as part of the process
- Some changes include:
 - Adding more categories for fresh water
 - Some flexibility for freshwater, less for tidal water
 - Considering site specific bacteria numbers in place
 - Considering geometric means as daily average

Rulemaking Procedure – Chris Linendoll

- Commitment with EPA to go through rulemaking procedure to establish bacteria limits
 - Areas of flexibility: what limits will be and monitoring frequencies
 - Consider things that stakeholders may have knowledge of or experience with.

Issues for Consideration

- Limitations to be placed in permits considering Water Quality Revisions
 - Should TCEQ reopen Chapter 309 rules?
 - Chapter 309 revisions will be in place before Standards Revision is complete.
 - Do we refer to WQ Standards? The water quality number or a percentage of it?
 - Should numeric limits be placed in Chapter 309?
 - Should permit be reviewed on case by case basis?
 - Question: Why establish a Water Quality based limit rather than technology based limit for bacteria?
 - Answer: TCEQ will be evaluating what other states have done in their rule-making in relation to establishing an across the board bacteria limitation.

Based on the limited time frame involved with this rulemaking, at this point developing a true technology based effluent limitation would not be feasible based on the methodology involved in calculating a technology based limitation.

- Question: Is there flexibility for those outfalls that combine industrial and domestic?
- Answer: The rule committee is investigating how to handle combined outfalls.
- Question: Will facilities still be required to monitor chlorine?
- Answer: Chapter 309 has numerical limits for chlorine that will remain. EPA regulates chlorine because of its toxic effect on in-stream biota. The revised rule will require bacteria limits in permit.
- Question: If the bacteria limit is tied to the WQ Standards and the new standard is higher than the old one, would that cause a "backsliding" issue with permits?
- Answer: There are exceptions to the EPA backsliding prohibition in the Clean Water Act. TCEQ often uses "new information previously not available." If we move forward with referring to the WQ Standards in the rule and the Standards change, the argument could be made that there is new information available that the old limits are not required to maintain water quality.
- Question: Can we simply put a statement in the rule that bacteria limits will be added to domestic permits, and not put a value?
- Answer: EPA is interested in the end project. Flexibility is good, but we hope let applicants know what to expect when they apply for a permit and to avoid permit by permit battles. If limits are in the rule, then applicants know what to expect.
- Question: Can we write a policy/guidance like the Implementation Procedures in Water Quality Standards?
- Answer: Good suggestion.
- Question: Will the agency consider re-growth when setting limits? Harris County would be in support of technology based level.
- Answer: The final bacteria limit may be less than the Water Quality Standard. We may not have time to develop data to support a true state-wide limit and may have to use best professional judgment if a percentage of the WQ Standard is used.
- Question from TCEQ: Does anybody know of studies?
- Answer from stakeholder: There are quite a few available. The data is available. Would have to get a large amount of data.
- Answer from TCEQ: If you really follow protocol to get technology based limits, you must have considerable resources.
- Comment from stakeholder: If chlorine or UV standards are not relaxed, would suggest not having technology based limits.
- Comment from TCEQ's Jim Davenport: Good idea to have an across the board number.
- Question from TCEQ: Can the rule team check and see what other states are doing? EPA says all the other states have bacteria limits.
- Question: Is technology based limit tied to TMDL?

- Answer: If a TMDL has been developed, it would supersede anything else we do.
- Question: Could there be a phased-in approach? Could research be done along the way in TMDL impaired watersheds? Do monitoring for 3 years with limits starting in the 4th year for impaired waterbodies?
- Answer: TCEQ and EPA have an agreement that limits would be effective as soon as the rules are in place. TCEQ would have to meet with EPA and renegotiate compliance schedules.
- Question: Would we continue to allow fecal coliform in permits?
- Answer: In permits issued today, TCEQ is moving away from fecal coliform. EPA allows a 6 month window. Considering allowing transition in standards. UV systems moving to E. coli.
- Statement from stakeholder: The Watershed Protection plan has a limit of 200. Citizens blame the wastewater plants for all bacteria in the receiving stream. Water quality models use the full permitted limits when modeling the source of bacteria in a waterway, which holds wastewater treatment plants accountable for bacteria levels that they may not be discharging.
- Statement from Stakeholder: Evaluate biofilms, relationship with chlorine. Literature review problems with biofilms and chlorine.
- Question: For backsliding – large plants maintain 5 day sampling, or will they be required to go to 7 day?
- Answer: Getting input before decision is made. EPA and TCEQ agreed on monitoring frequency for the interim. Monitoring frequency for antibacksliding is less critical.
- Question: If frequency is already 7 days, will it go to 5?
- Answer: That's open for discussion.
- Question: Can we have some time for transition? How can it go into effect without people having time to understand, and then start optimizing systems, which may lead to substantial changes? If there is no compliance schedule, systems could be over the limit and subject to enforcement.
- Answer: This is what this meeting is about. We could possibly go back and renegotiate with EPA. TCEQ has been arguing that folks are already meeting limits. This rule should be only a new reporting requirement, not a change in they way wastewater plants are operated.
- Question: So limits would not be in permits until December 2009?
- Answer: Some folks are getting limits now; some without a compliance schedule. Across the board limits will be in place once the rule is in effect but not until a permit comes up for renewal or amendment.
- Question: Can we notify permittees a year ahead?
- Answer: TCEQ can send a letter. Will have outreach to let people know. The issue will be discussed at the Environmental Trade Fair, the Water Quality Seminar, and other venues already set.
- Question: Would EPA put a higher limit initially, and then lower it a few years later?

- Answer: Federal law prohibits compliance schedules on technology based limits. Only water quality based limits allow for a compliance schedule. Do you feel like systems could comply now?
 - Answer from stakeholder: May depend on what the limit is.
 - Question: Could we collect data for a month and send it in?
 - Answer: If people have data, we would love to look at it.
 - Statement from TCEQ: Because of the short time line, we will need proposed language by April 1.
 - Question: Are we coordinating with TMDLs?
 - Answer: Jim Davenport is on the rules committee and he keeps the committee updated on TMDL issues. The graphs in the presentation were from TMDL in Houston. TMDL team may have more data.
 - Question: Could stakeholders comment to EPA that they need more time?
 - Answer: Seems like most people want compliance schedules. We could meet with EPA and ask to allow for compliance schedules in the rule. We will keep stakeholders informed. Stakeholders are free to contact EPA if that is their wish.
 - Question: Will labs be able to keep up? That might be a reason for a compliance schedule.
 - Answer: That could be a factor. Limited monitoring? Windows of time for no sampling?
 - Question: What about the availability of labs?
 - Answer: The rule team has completed a survey and the biggest concern is that a lab will be within 6 hours transport time.
 - Question: Is there rationale not to increase holding times?
 - Answer: SWQM work is just for instream studies. It's a possibility, but would need a lot of work.
- **Monitoring Frequencies** – based on permitted flow (Chlorination vs ultraviolet)
 - Will open Chapter 309 for limits and Chapter 319 for monitoring frequencies
 - Will let permittees know in advance what the monitoring frequencies are
 - Question: Any thought to be able to do own analysis for E. coli?
 - Answer: They can now if they have their own lab. If they use a contract lab, it must be NELAC certified for e coli testing. There may be some provision for test frequency reduction for good compliance. Currently, industrial facilities request a reduction in sampling frequencies through a permit amendment. We could build a schedule into a permit so that no amendment would be necessary.
 - Question: Will the max grab sample be 394 cfu/100 ml?
 - Answer: Yes, most probably. Values in Chapter 319.9 table are based on flow regimes.
 - Statement from TCEQ: Bacteria will appear in this rule. Frequency will depend on how much data we need to see if folks are in compliance. We want folks to know what the permit will look like before they apply, not issue them on a case-by-case basis.

- **Chlorine and bacteria limitations** – both required in permits
 - For monitoring bacteria, chlorine could be taken out, but you would have to take bacteria samples more frequently.
 - Chlorine conditions need to remain in permits because of its toxic effects. Bacteria limits would be new additional requirements.
 - Question: If chlorine and bacteria are busted, would that be 2 violations? We should add language to address that situation.
 - Answer: Everything busted in one outfall in the same would be considered one violation by TCEQ.
 - Question: When EPA takes enforcement action, they list every violation. Citizens see every violation in court.
 - Answer: The rule language could possibly account for potential double jeopardy with E. coli and chlorine.
 - Question: Chapter 210 authorizations require reporting fecal coliform. May be different from E. coli discharge limits. How would that be addressed?
 - Answer: We have approval from Executive Director to open Chapter 210 as part of this rulemaking project. Although EPA has no jurisdiction over Chapter 210, we are planning to change the reuse rule to require bacteria testing for the bacteria named in the associated wastewater permit. It will be part of the rulemaking project, so it will be adopted at the same time.

- **Bacteria sample holding times**
 - Currently requirement is 6 hour holding time for fecal coliform, but most facilities only have to process those every 5 years when applying for permit renewal. E coli testing has the same 6 hr hold time.
 - Stakeholder comment: Been involved with sampling on 24 hr basis. Having 24 hour holding time would improve ability to take samples.
 - Stakeholder comment: Might include once per week monitoring requirements for small systems
 - Stakeholder comment: In Harris County upsets matter. Allow for regional issues.
 - Stakeholder comment: Drinking water allows 30 hours for E coli sample holding time.
 - TCEQ comment: Drinking water is doing detection limits; we are doing a numeric level. It may make a difference. Staff will talking with drinking water program to see if we can get good results with longer holding times. We will consider it.
 - Question: Is the list of approved methods growing? There are 136 methods.
 - Answer: We would love to hear of other methods. Most systems only sample for bacteria every 5 years. If they are not paid, they don't have to be certified. If you can find a lab that will do it pro bono, some might have a vested interest.
 - Stakeholder comment: If labs have to start accreditation process, it takes about one year to get certified.
 - TCEQ comment: Ask for specific tests, not just if the lab is certified. NELAC certifies tests, not labs.

- Question: Units of measurement – Storm water changed units to most probable number instead of colony forming units. Which unit will be in the rule?
 - Answer: We'll look into it.
- **Industrial Discharges**– dedicated domestic outfalls vs. combined
 - Internal and external outfalls in industrial permit.
 - All dedicated domestic outfalls will have bacteria limits
 - Exploring how to handle interior outfalls and combined outfalls
 - Stakeholder comment: Many industrial facilities treat in a package plant. Domestic wastewater discharge is less than 1% of total flow. It's not fair to place bacteria standard on these. Other facilities mix with processed wastewater. Add limits to internal outfall for industrial facilities, not end of pipe.
 - Stakeholder comment and question: Put sample location at end of pipe. The discharge canal still considered the system's and not water of the state. External discharge with domestic – Could limit be placed on that?
 - Answer: We will be opening 309, 319 and 210. Those rules don't really apply to industrial except for 210E. But we will be looking at how to address domestic discharges from industrial facilities.
 - Question: Would there be some kind of provision for DNA mapping to prove that the discharge is not human?
 - Answer: Sometimes it's naturally occurring—from natural sources with industrial facilities. Will pass along to TMDL staff
 - Stakeholder comment: This is a WQ standards issue, rather than a domestic. The rule needs to stick to that.
 - TCEQ comment: Agreed. We're here to talk about domestic sewage discharges.
 - Question: Won't TMDL look at bacteria?
 - Answer: Regardless of the rule making, TMDL will still include industrial discharges.
 - Stakeholder comment: Consider a phased data collection process – assumption of bacteria that may or may not be there.
- **Pond Systems**
 - 21-day retention time – method of disinfection
 - Make sure that ponds still have a minimum 21-day retention time
 - Ponds do not use chlorine for disinfection
 - Ponds receive storm water runoff
 - May have difficulty meeting bacteria limit
- **Wet Weather Processing Plants**
 - Some in Houston area provide some treatment
 - Four or five blending facilities across the state
 - Still obligated to fully disinfect
 - EPA Region 6 has blending policy

- **Undersized chlorine contact chambers**
 - Owners and operators should start assessing their systems
 - Do some bacteria sampling to collect data of bacteria levels in discharges
 - Undersized chlorine contact chambers will not be given a compliance schedule
 - Rules require 20 minute detention time at peak flow

Questions/Answers

- Question: What about the timing of the letter to all permittees?
- Answer: Every permit currently being drafted has a notice in it. The Water Quality Advisory Work Group discussed it at their quarterly meetings, and it also discussed at the Trade Fair and Water Quality Seminar. A letter is a good idea, as well as putting it on our website. A notice will be sent out when the rule becomes final.
- Question: How has the land application standard been handled in other states.
- Answer: Texas may be the only state that does land application. A web search will be done.

Adjournment

Bacteria Limits Rule Project Stakeholder Meeting
January 23, 2009
Attendee List

Dana White	Austin Water Utility
Kyle Headley	Brazos River Authority
Lial Tischler	Tischler/Kocurek
Richard Eyster	TDA
Robert Cave	SARA
Debbie Magin	GBRA
Teague Harris	Pate Engineers, Inc
Chris Linendoll	TCEQ
Kendra Riebschleager	Espey Consultants, Inc.
Ross D. Harris	San Antonio Water System
Mark Lowry	AECOM
Julie Woodard	Dow Chemical
Glenn Harwell	USGS
Rex Hunt	Alan Plummer Associates
Ryan Bayle	Luminant Generation Co., LLC
Robert Dabney	CCMA
Janelle Taylor	TPWD
Michael Parr	TCEQ-WQ
Jessica Rawlings	TCEQ – Texas Register
Jan Williamson	Baker Botts
Naila Ahmed	LCRA
Linda Jodry	TPWD
Kevin Rucker	TxDOT
Aaron Wendt	TSSWCB
Peggy Sumner	City of Corpus Christi
Cathy Sieger	TRA
Tim Williford	SWWC
Michelle Harris	TCEQ – FOSD
Dan W. Pedersen	COA – AWU
William Fordyce	COA – WPDR
Catherine Elliott	HCFCFCD
Alisa Max	Harris County
Mike Landry	MCEHS
Lili Murphy	TCEQ
John Trevino	TCEQ
Pat Radloff	TPWD
Kirk Dean	Parsons
Linda Pecharle	LDP Consultants
Pat Byzber	Mont. Co.
Larry Hans	Hanes Geo Components
Ray Pavlovich	Nottingham Country MUD
Mark Stendahl	Self
Kim Laird	TCEQ
Richard Steadman	Harris County FWSD #47
Orren West	City of Austin – AWU
Chris Clay	East Central ISD
Jay Bragg	BRA
Russell Neal	SARA
George Gonzales	SARA

David Harkins
Sara Thornton
Yvonna Miramontes
Kathy Richolson
Clint Ellis
Michael Parrish
Tiffany Morgan
Summer Hohnson
David Ham
Chandra Copplin

Espey
Lloyd Gosselink
TCEQ
GCWDA
CCMA
TCEQ – Texas Register
BRA
CPS
TxDOT
LCRA