BACTERIA IMPLEMENTATION GROUP

WASTEWATER TREATMENT FACILITY SOURCES
WORK GROUP MEETING
Meeting Notes
May 12, 2009

Individuals Present

Jim Wolfe (Severn Trent), Kathy Richolson (GCWDA), Alisa Max (Harris County), Jennifer Elms (EHRA), Trent Martin (Harris County), Steven Johnston (GBEP), Jason Iken (City of Houston), Kim Laird by phone (TCEQ),

H-GAC Staff Present

Erin Livingston, Rachel Powers, Carl Masterson

Call to Order/Welcome/Introductions

Rachel welcomed attendees, initiated self-introductions, and reviewed the agenda.

Discussion

Rachel began the discussion with a review of the March BIG meeting prioritization exercise results related to this workgroup.

Regionalization

Harris County has been looking into regionalization and the appropriateness of on-site systems. Regionalization isn't a possibility for many plants as they don't have extra capacity or the money for upgrades. Small plants just need to be regulated the same as large plants.

The City of Houston has dropped the idea of regionalization for money reasons. It is too expensive. The current regionalization plan has been taken to its limits.

TCEQ has a regionalization program, but it is weak.

The difficulty with regionalization is a funding issue and there is currently not a mechanism for oversizing a plant. If the state allowed for oversized pipes as a reimburseable cost it would be more possible.

Where appropriate Harris County collection systems are tied into existing WWTF (City of Houston or MUDs) instead of building a new plant.

H-GAC

One opinion is that biomonitoring will drive regionalization. Every plant 0.5 MGD will be required to conduct biomonitoring. Tests are expensive and require dechlorination, which small plants are not currently doing.

If water reuse is being considered we shouldn't be working towards regionalization.

Regionalization is effective for industrial wastewater. They tend to be clustered and the plants have a desire for regional industrial wastewater plants. Compliance with air quality regulations is a huge driving force.

Are there places that have regionalized successfully? We need to plan for the future, look where development will be occurring.

GHBA needs to be involved in the conversation. Need to determine what they are willing to do.

When considering regionalization need to think about costs (including those from energy use) for pumping wastewater long distances.

When speaking with the public about regionalization the message should be that it is being considered where appropriate.

Harris County has contracted with Dannenbaum to conduct random, unannounced sampling for WWTFs, to determine if there is a correlation between plant size and pollutant loading. Did not look at bacteria.The study is ongoing, they have done basic analyses and statistics. Preliminarily the issues are not intuitive.

We might want to consider beginning a monitoring study in the Aldine area. It will be a twenty-year regionalization project, so monitoring could begin from the front end. Harris County may have data to share.

Bacteria monitoring of effluent: Is the TCEQ proposed limit appropriate?

The limit is not meant for TMDL areas. WWTFs in these areas need to be regulated by TMDLs. It could take a while for bacteria limits to be in all permits.

Should we wait on TCEQ to do their thing? On the TCEQ website they have posted the proposed rule. The requirements are likely not as strict as we would like them. Small plants will only have to monitor quarterly. We need to take a strong stance if we want them to be more stringent.

Maybe bacteria limits should be at the TCEQ proposed limits for one permit term and then stricter bacteria limits could be imposed on the next permit if appropriate.

Improving design and operation criteria for new plants

The engineering community will change how they design a plant once bacteria limits are added to the permit. Equipment technology is where changes are needed. We need a more focused group to discuss this issue, those who design plants every day.

Plants, as they are already designed, should be able to meet bacteria limits. Maybe we need extra filtration for when solids are elevated. There needs to be greater review of plant designs.

Could we identify common pitfalls in design? Maybe, but it would be difficult to come up with a common list. It would be a long list. TCEQ did just revise the design criteria rules in

30 TAC 217, which replaced 30 TAC 317. They now include how the plant should be operated; 317 were minimum requirements, 217 has corrected this. There is currently no mechanism to check that what was designed was actually installed before it goes on line. Engineers do have to sign a statement that the plant was built as it should have been, but some are dishonest.

In the past TCEQ measured plants that kept going to enforcement and found that they were much smaller than they were supposed to be.

Plans and specifications don't even have to be submitted to TCEQ for wastewater. The Plans and Specs Department needs to be recreated. Maybe the problem is that TCEQ could be held responsible in court if an approved design doesn't work.

There are many problems with the permitting process.

Next Steps

Kim to talk about internal permit issues she has found and how that affects construction, design, and impact on the operations.

Next Meeting

Wednesday, July 8, 2009, 9:30 AM to 11:30 AM, Conference Room B