BACTERIA IMPLEMENTATION GROUP

WASTEWATER TREATMENT FACILITY SOURCES
WORK GROUP MEETING
Meeting Notes
March 4, 2009

- **Individuals Present**

  Jim Wolfe (Severn Trent), Scott Nichols (Montgomery County), Kathy Richolson (GCWDA), Alisa Max (HC), Jennifer Elms (EHRA), John Emerson (Harris County EPH), Philip Moore (Montgomery County), Frank Green (Montgomery County), Linda Broach (TCEQ), Steve Barry (Jones & Carter), Mark Lowry (AECOM), Thomas Barrett (TCEQ), Nwachukwu Sam Okonkwo (TCEQ)

- **H-GAC Staff Present**

  Erin Anderson, Rachel Powers

- **Call to Order/Welcome/Introductions**

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

  Kathy Richolson was chosen to give the workgroup report to the BIG.

- **Discussion**

  Develop/review the workgroup's list of top sources:

  #1 Cause identified at the last meeting was effluent. Steve Barry suggested that stormwater runoff from the WWTF might be the largest source. Steve provided an example on Little Cypress Creek (?) where it appears that the runoff was more significant than the effluent. Jim Wolfe asked how regrowth would be addressed by this group, and Rachel Powers suggested that it would be discussed outside of this workgroup.

  There was a question about the use of UV plants and their effectiveness.. In particular, he asked whether the bacteria testing was appropriate immediately at the outlet weir, or whether it is being tested at the end of the outfall pipe. The water at the outfall pipe will most likely have higher levels of bacteria than the outlet weir. Mark discussed the logistical difficulties of testing at the end of the outfall and the subsequent regrowth.

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What is an acceptable bacteria level in effluent in effluent-dominated streams? It must be lower than the stream standard… Alisa reported that TCEQ is discussing this question, and for now, it looks like TCEQ is looking at ½ the stream standard.

Alisa discussed a new project that HC just funded to test efficacies of various treatment regimens for immediate bacteria reductions and regrowth potential (over 48 hours).

Develop/review the workgroup's list of top implementation activities:

The activities that were identified in the last meeting were:

1. Imposing monitoring requirements on all WWTFs (the group discussed how TCEQ is already in the process of doing this).
2. (The group added "the imposition of stricter bacteria limits than those being applied universally by TCEQ.")
3. Improve compliance and enforcement
4. Design and operations criteria for new plants
5. Retrofit old plants (Kathy added that this should specify for plants not meeting standards)

Erin asked if the group still felt that these were priority activities.

Alisa asked that research related to these activities be added as an activity.

Steve Barry asked that stormwater outfalls from the facilities should be tested. Each facility does have a stormwater permit, but they do not require bacteria testing. Perhaps that permit should require bacteria testing (but not limits, necessarily). The general thought was that this would not be a high priority activity—although it is important.

Alisa suggested that reduction of nutrients should be added to the list. Linda suggested this might be too big a task for now.

Introduction to the Coordination & Policy prioritization tool:

Erin introduced the table developed by the C&P workgroup to the group. She suggested that the group take the top activities and run them through the evaluation. There are three purposes to this exercise: 1) evaluate the tool itself, 2) compare the group's top activities to each other, and 3) consider the group's top activities in the perspective of other workgroup's recommended activities. The third objective will be difficult.

The group decided to evaluate "Imposing a limit on the effluent of half (63) the geometric mean of the stream sample and 126 for the single sample grab."

Criteria	Evaluation factor	Score	stricter	Comments
Item 1	Source Bacteria Load	5	5	
Item 2	Engineering or scientific feasibility	5	5	
3	Pathogenicity of Source	5	5	
4	Precursor activity	4	5	will allow greater enforcement will facilitate more rigorous operation and maintenance
5	Capital Costs	3	0	*May* require upgrades to some plants//probably will require upgrades
6	Operational Costs	3	1	Will require more maintenance etc.
7	Unit cost for bacteria removed	3	2	BPJ (limited to comparison to each other, only)
8	Land needs	4	2	This will probably require additional land for many plants.
9	Anticipated effectiveness	2	5	It ought to work.
10	Size of load reduction	3	5	
11	Additional benefits	2	2	Reduced seeding, reduced other pollutants,

1) Source bacteria load

The second would be "Imposing a limit on the effluent of 20 for the geometric mean of the stream sample and 63 for the single sample grab."

- **Wrap-up**

  Next meeting date: Tuesday, May 12, 2009, 9:00 am to 10:30 am, H-GAC Conference Room C

  Tasks: none specifically

  Next meeting topic: continue evaluations