# Meeting Summary DIOXIN TMDL STAKEHOLDER MEETING

## September 19, 2006 1-4 PM

**MEMBERS PRESENT:** Chris Barry; Charles Beckman; Louis Brzuzy; Tracy Hester; Rory Lang; Ed Matuszak; Lial Tischler; Jack Wahlstrom; John Westendorf; Bob Wood

<u>MEMBERS ABSENT:</u> Scott Aspelin; Ronald Crabtree; Winston Denton; Luke Giles; George Guillen; Guy Jackson; Sara Metzger; Kristy Morten; David Ramsden; Bob Stokes; Steve Weishar; Kerry Whelan; Kirk Wiles

## H-GAC STAFF PRESENT: Carl Masterson

**OTHERS PRESENT:** Mary Jane Naquin (Facilitator); Larry Koenig (TCEQ); Linda Broach (TCEQ); Hanadi Rifai (UH); Scott Hinz (Limno-Tech, Inc.); Jeff Stevens (Shell); Brent Dyer (Shell); Felicia Nojera (GCWDA); Monica Suarez (Parsons); Linda Mercer (WOBA); Jim Doberstine (GBF)

## WELCOME & INTRODUCTIONS

The meeting was called to order at 1:00p.m. Self introductions followed.

## **REVIEW AGENDA**

The agenda was reviewed with no additions.

## FORMAL ADOPTION OF JUNE 16, 2006 MEETING SUMMARY

The June 16, 2006 meeting notes were adopted.

## <u>STATUS OF MODEL CALIBRATION EFFORTS</u> <u>DISCUSS MODELING CONCEPTS APPLICABLE TO PROJECT</u> <u>DISCUSS FUTURE MODELING EFFORTS</u>

The Technical Team (UH) presentation focused on the details of what has happened with the modeling and where they are with the load allocation spreadsheet model. They have taken the last three months to address issues that were still not taken care of.

The RMA2 (nodes) is the flow model for the Houston Ship Channel. To develop the WASP (segments), they incorporated aspects of the RMA2. RMA2 has a lot more elements; WASP has fewer elements but does calculations with the concentrations. The RMA2 gives you depth and velocity and the WASP model gives you concentration. There are issues with the entire process that are associated with the software itself. To fix these problems, they changed some of the elements in the modeling software: the 1-D element geometry was modified to eliminate water leaks, the 2-D grid was refined to minimize mass-balance problems, and the RMA2 has more nodes and was recalibrated so that the difference was not greater than 3%. The data has not changed, just the segmentation. However, there are still some problems with the model: 1006, the junction of 1001, Greens Bayou, and a mass-balance problem in a couple of segments.

The load allocation spreadsheet model has a few changes. For example, the flow is now calculated with a 5-year average of self-reported flows. Loads included in the model include: point source, runoff, direct deposit and in-stream. If you add up the point source, runoff and direct deposit load estimates and subtract them from the in-stream load estimates, you get the

sediment distribution or the rest of the load that we are getting in-stream. The spreadsheet model does not account for dredging activities, so it still isn't accounting for all of the sediment.

In summary, the hydrodynamic model is finished, but a few mass-balance issues still remain. The runoff loads will be entered to WASP as the measured concentrations (dry and runoff) and USGS flows. The WASP model is very sensitive to sediment-related parameters. The preliminary dioxin results indicate source in 1001 affects dioxin levels in 1006. The preliminary load calculations and model results indicated major contribution from sediment.

This is short term modeling, but in reality, we really want to know what is happening annually.

### NEXT STEPS

For next steps, UH and TCEQ would like feedback on the presentation today and how to address the remaining RMA2/WASP issues. In addition, the dioxin model needs to be calibrated to concentrations measured between 2002 and 2004, the scour and settling models need to be refined, and the load spreadsheet model needs to be updated and TMDL defined.

#### MEMBERSHIP ISSUES

No one has expressed interest in joining.

#### NEXT MEETING

Next meeting will be scheduled for December or January.

ADJOURN

The meeting adjourned at approximately 2:42 PM.