GROUNDWATER RESEARCH SUBCOMMITTEE MEETING RECORD

TIME AND DATE:
9:00 AM, Wednesday July 30, 2008

LOCATION:
Texas Commission on Environmental Quality Campus Building F, Room 2210, 12100 Park 35 Circle, Austin, TX 78753

PURPOSE OF MEETING:
Fourth quarter regular business meeting

AGENCIES/ENTITIES REPRESENTED:

Bureau of Economic Geology [BEG]
Texas AgriLife Research [TAR]
Texas Commission on Environmental Quality [TCEQ]
Texas Department of Agriculture [TDA]
Texas State Soil and Water Conservation Board [TSSWCB]
Texas Water Development board [TWDB]

ATTENDEES:

Allan Jones	TAR, Co-chair of the GW Research Subcommittee of the TGPC
Bridget Scanlon	BEG, Co-chair of the GW Research Subcommittee of the TGPC
Radu Boghici	TWDB
Alan Cherepon	TCEQ
Richard Eyster	TDA
Donna Long	TSSWCB
Joseph L. Peters	TCEQ
David Villarreal	TDA

MEETING SUMMARY:

Dr. Bridget Scanlon called the meeting to order at about 9:20 AM. She then had everyone introduce themselves.

After introductions she began the discussion by introducing a research idea that she helped to draft that may be of interest to the TCEQ NPS program.

It consists of a reconnaissance study of the risks to human health of pathogens in alluvial aquifers and the Edwards Aquifer. The principal pathogens to be addressed are viruses, protozoa, *cryptosporidium/giardia*, and bacteria. Dr. Scanlon gave a summary of how the project would be carried out. Some of the following discussion included comments on how

groundwater and surface water interactions would be important in this type of study. There was also discussion of the weakness of using *E. coli* (*Escherichia coli*) as an indicator of pathogens originating from human contamination sources.

Dr. Jones introduced another potential project. This would be the remediation of the groundwater in the area of Hale County Airport to remove the atrazine contamination. One method to do this would be to pump water from the plume area, and then either use it for irrigation or treat it and re-inject it along the periphery of the plume. There is irrigated land adjacent to the airport, and perhaps the farmer on that land would be interested in purchasing the water. The method chosen for utilizing the water would depend on economics and feasibility. Clean-up scenarios would be analyzed using computer modeling, probably by BEG, before any plan is finalized.

Another project proposed by Dr. Jones would be studying the feasibility of applying point-of-use water treatment at individual households that have arsenic levels above the MCL. The problem of arsenic in drinking water has come under more scrutiny recently with the lowering of its MCL. The idea in this study would be to equip the individual households with available off-the-shelf water treatment systems using existing technology. This study would determine the efficacy and economics of existing water treatment systems in reducing arsenic levels. Different approaches such as reverse osmosis, ion exchange, filtration, etc. would be studied, as well as comparing systems from various purveyors. Also, the sociological aspect of the users willingness to use the systems, pay for the systems, and provide upkeep for the systems could be studied. The results could then be used by Texas AgriLife Extension Service (TAES) to educate people whose water supplies have elevated arsenic. This is an important issue since about 50% of the wells in the Southern High Plains exceed the MCL for arsenic. Also, public water supply systems usually are the focus of research attention, and it would be important not to neglect individual households systems.

Preliminary proposals for the three projects described above have been drafted. Copies were provided to those attending the meeting. The present plan is to determine in which of the projects TCEQ might have an interest and then to fully develop the proposal for the chosen project. Some other sources of funding might be pursued for the others. Some other possibilities include the Office of Rural Community Affairs (ORCA), Rural Development, and EPA Region 6.

Discussion continued on the need to integrate groundwater and surface water modeling and also to include water quality modeling along with the GAM modeling supported by the TWDB. One of the major issues is salinity. This is a big issue in some areas around Dallas/Ft. Worth.

Since there has been an interest in updating TEX*A*Syst, Ms. Donna Long suggested that the arsenic removal project described above could easily be included in the context of TEX*A*Syst, since it also would also involve working with individual households. Ms. Long also suggested that often it is necessary to spend leftover money from other projects. This leftover money could be used for this type of work.

Dr. Jones brought up the subject of inputs into the next *Groundwater Protection Strategy* and *Report to the Legislature*. He indicated that he had gotten a lot of emails on the subject and had responded accordingly. Dr. Jones also indicated that one thing they had included in these responses was a recommendation that the PET (potential evapotranspiration) network be funded for water conservation in the Ogallala.

There was some discussion of the resurgence of in situ mining of uranium in South Texas. There is some concern by land owners in the area that past practices that have caused problems in the past may be repeated. Dr. Scanlon suggested the possibility of putting together a fact sheet covering all the aspects and issues of in situ uranium mining. Dr. Jones also suggested that we need a strong effort by BEG, TCEQ, and the TWDB to bring together all our groundwater quality information, making it easily available so that it could be put into fact sheets, etc.

The meeting adjourned at 10:20 AM.

_____

Minutes prepared by Joseph L. Peters, October 16, 2008

Action Items:

1. Continue pursuing the three projects outlined above.
2. Determine the feasibility of performing the Point-of-Use water treatment project in conjunction with a new TEX*A*Syst effort.

I:\GROUND\Gwpcmmte\Subcommittees\Research Subcommittee\Minutes\ Minutes(07-30-08)RS.doc