

## **GROUNDWATER RESEARCH SUBCOMMITTEE MEETING RECORD**

### **TIME AND DATE:**

9:00 AM, October 18, 2006

### **LOCATION:**

Texas Commission on Environmental Quality Campus, Building F, 2<sup>nd</sup> Floor, Meeting Room  
2210, 12100 Park 35 Circle, Austin, Texas 78753.

### **PURPOSE OF MEETING:**

First quarter regular business meeting

### **AGENCIES/ENTITIES REPRESENTED:**

Bureau of Economic Geology [BEG]  
Texas Agricultural Experiment Station [TAES]  
Texas Commission on Environmental Quality [TCEQ]  
Texas Department of Agriculture [TDA]  
Texas Department of State Health Services [TDSHS]  
Texas State Soil and Water Conservation Board [TSSWCB]

### **ATTENDEES:**

Bridget Scanlon	BEG, Co-chair of the GW Research Subcommittee of the TGPC
Mary Ambrose	TCEQ, Chairman of TGPC
Patricia Bobeck	TDSHS
Chris Chandler	TCEQ
Alan Cherepon	TCEQ
Richard Egg	TSSWCB
Joseph L. Peters	TCEQ
David Villarreal	TDA

### **MEETING SUMMARY:**

Dr. Scanlon called the meeting to order at about 9:05 AM. The meeting started with self introductions of everyone present. Dr. David Villarreal was standing in for Mr. Richard Eyster for TDA. The Co-Chair, Dr. Jones was not present for this meeting, nor were USGS or TWDB represented.

There was some initial discussion on white papers, whereby Ms. Ambrose indicated that the white paper entitled "Desalination Research at Texas Universities – A Brief Overview" still needed some work, but that "Influences of Natural and Man-Made Sources of Contamination on Water Quality Trends in the Seymour Aquifer: A Status Report" was ready to be included on the TGPC website.

Ms. Ambrose continued by informing us about an introduction earlier in the month by EPA, at the Groundwater Protection Council Meeting, of an EPA position paper on the permitting of experimental facilities for the injection of CO<sub>2</sub>. Basically the position paper indicated that the facilities would be permitted as Class 5 injection wells although they would need to meet Class 1 specifications. There may be seven to eight experimental facilities. EPA will accept comments on the position paper till the end of the month.

Dr. Scanlon asked about the status of the recommendations to the Legislature for research projects that were discussed at our last meeting. Ms. Ambrose announced that the TGPC would vote on them individually at their meeting in the afternoon.

There was some continued discussion from last meeting on the proposed FutureGen zero-emissions coal fueled power plants. There was some discussion on the details of the projects. One important component will be the injection of the CO<sub>2</sub> waste stream. The site selection for the proposed FutureGen power plant has been narrowed down to four possible sites, two of which are in Texas.

There was also some discussion on the injection of desalination wastes and research projects that looked to the effect of the injected wastes on the formation matrix.

At this point Dr. Scanlon started the discussion on sources of funding for projects including the ones being suggested to the legislature. EPA has come out with an RFP for Border Studies. Projects are usually funded at about the 50K level. One possibility would be the expansion of the Arsenic study on the Gulf Coast to the border. Another project could be the assessment of the presence of radio nuclides in the groundwater along the border.

Ms. Chandler indicated that the Remediation Division in the future will be looking at the new Texas Water Plan and using it to evaluate how they do remediation. The plan might help them refocus efforts into areas where greater groundwater supplies are needed. With the use of desalination to make water usable becoming more and more likely, the remediation of waters that will become usable under the application of this technology will become more important.

Dr. Villarreal was asked about present groundwater research interests at TDA. He stated that even though there weren't any present interests for specific projects at this time, that there was general interest in pathogens in both surface and groundwater. He proceeded to give some information on the recent contamination of spinach in California by E-Coli bacteria. It seems that the specific virulent lethal strain of E-Coli bacteria that caused the problem were found at a nearby livestock facility and may have been transferred, perhaps by feral hogs, to the spinach field.

Ms. Ambrose announced that EPA had recently released their disinfection rule, a document of about 300 pages. One of the concerns of this document is the proper disinfection of effluents so that surface waters and groundwaters are not contaminated by pathogens.

Another issue brought up by Dr. Villarreal was the contamination of water by pharmaceuticals and other personal care products. This is an emerging issue for both surface water and groundwaters. Sources of the contamination can be from municipal wastewater treatment plants as well as from confined feeding operations. Dr. Villarreal indicated that TDA and Mr. Eyster in particular had a relatively large collection of publications and other information on CAFOs and pathogens and that he would be glad to share some of this information.

Dr. Scanlon asked Dr. Villarreal specifically about TDA's CAFO interests. He indicated that Mr. Eyster would be the one to ask about that. Ms. Ambrose and Mr. Egg continued the discussion giving some information about EPA's recently finalized new CAFO rule. According to the rule, if an application area is owned by the facility, and if it can be demonstrated that there will not be a release from a 25 year 24 hour rainfall event, then the need for a permit will be eliminated. It may be hard to show that there will not be a 25 year 24 hour release so facilities may still want to get a permit as a precaution. Mr. Egg also mentioned that there had been a couple of studies concerning the application of poultry waste on fields at agronomic levels and what the effect may be on the groundwater. Dr. Scanlon suggested that we try to determine who the researchers were so that we can track down the results of the studies.

Mr. Egg talked a little about the TSSWCB's interests in groundwater contamination, stating that it would be primarily related to the development of BMPs designed to minimize or eliminate the transfer of fertilizers and other agricultural chemicals from the application area.

Dr. Scanlon asked Ms. Bobeck about TDSHS's activities related to groundwater quality. Ms. Bobeck described how the TDSHS is responsible for the waste aspects of uranium surface mining as well as the licensing of in situ uranium mining. They have about three licenses for existing ongoing in situ mining activities, but with the price of uranium going up they now have several new in situ license applications. The Railroad Commission and TCEQ also have jurisdictions in the various aspects of uranium mining. Studies in this area would lend itself well to interagency projects that would be of high public interest. Ms. Bobeck also mentioned that the TDSHS was also now active in reviewing an application for the construction of a by-product landfill near New Mexico border. This would be a site for disposal of certain radioactive wastes. One concern with this project is that landfill liners generally have a life of about 30 years while the deposited wastes would remain radioactive for perhaps around 250,000 years. The landfill would be located over the Dockum aquifer.

In light of the renewed interest in uranium mining, Ms. Ambrose suggested that a proposal for a white paper, presented at an earlier meeting of the Groundwater Research Subcommittee, be revisited. The white paper would propose a project or projects which would look at the background presence of heavy metals, including arsenic, and radio nuclides in areas such as South Texas and perhaps in Dockum where uranium mining might take place, or where radioactive wastes might be disposed. One product of the project would be a fact sheet for landowners in the project areas.

Everyone was reminded again about the need to take the Open Meetings Training.

There was a brief chance for announcements, and Dr. Scanlon adjourned the meeting at 10:12 AM.

Minutes prepared by Joseph L. Peters, January 10, 2007

**Action Items:**

1. Continue work on *Desalination Research at Texas Universities – A Brief Overview*. Comments and suggestions on the two documents should be sent to Dr. Ric Jensen at the TWRI.
2. Put *Influences of Natural and Man-Made Sources of Contamination on Water Quality Trends in the Seymour Aquifer: A 2006 Status Report*, which has been completed, on the TGPC website.
3. Initiate work on white paper describing a proposed project to study background heavy metal and radio nuclide presence in certain areas including the use of the resultant data to put together a fact sheet for local residents.

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