TEXAS GROUNDWATER PROTECTION COMMITTEE RECORD OF MEETING

Third Quarterly Meeting, Fiscal Year 2007

Meeting Date: April 18, 2007 Meeting No.: 72 Place: TCEQ Campus, Bldg F Room: 2210

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MEETING ATTENDANCE

Committee Members Affiliation

Mary Ambrose Texas Commission on Environmental Quality

Janie Hopkins Texas Water Development Board (TWDB) Leslie Savage Railroad Commission of Texas (RRC) Ken Ofunrein Department of State Health Services (DSHS)

Ambrose Charles Texas Department of Agriculture (TDA)

Texas State Soil and Water Conservation Board Richard Egg

(TSSWCB)

Texas Alliance of Groundwater Districts (TAGD) Barry Miller Susan Hovorka

University of Texas Bureau of Economic Geology

(BEG)

Agency Staff Affiliation **Program**

Abiy Berehe Water Supply Division TCEQ Water Supply Division Cary Betz TCEQ Alan Cherepon TCEQ Water Supply Division Water Supply Division Peggy Hunka TCEQ Paul Lewis Remediation Division TCEQ Kathy McCormack TCEQ Water Supply Division Joe Peters **TCEQ** Water Supply Division Texas Cooperative Extension (TCE) Bruce Lesikar

Interested Parties Affiliation

Naila Ahmed Lower Colorado River Authority (LCRA)

Tyson Broad Sierra Club, Lone Star Chapter Ed Baker Syngenta Crop Protection Syngenta Crop Protection Danelle Farmer

Texas Department of Transportation (TxDOT) Holly Brady

Ned Meister Texas Farm Bureau (TFB)

URS Corporation Grant Snyder

United States Geological Survey (USGS) Ann Ardis

Gloria Orsinger

MEETING HANDOUTS

- 1. Agenda for Texas Groundwater Protection Committee meeting on April 18, 2007
- 2. Record for Texas Groundwater Protection Committee meeting on February 15, 2007
- 3. Summary of Texas Groundwater Protection Committee (TGPC) Public Outreach and Education (POE) Subcommittee Meeting on April 5, 2007
- 4. Draft Figures 1, 2a, 2b, and 4 from the *Joint Groundwater Monitoring and Contamination Report* 2006 ("*Joint Report*") (TGPC members, only)
- 5. Drought 2007 Public Water Supply Systems Affected as of April 1, 2007
- 6. Texas Public Water Systems Limiting Water Use to Avoid Shortages (updated April 1, 2007)
- 7. EPA Fact Sheet: Preliminary Regulatory Determinations for the Secondary Drinking Water Contaminant Candidate List (CCL 2), EPA 815-F-07-002, April 2007 (http://www.epa.gov/safewater/ccl/pdfs/reg_determine2/fs_ccl_regdetermine2.pdf)
- 8. Current Rulemaking at TCEQ of Interest to TGPC
- 9. 2007 Water-related Conferences in Texas
- 10. TCEQ Environmental Trade Fair & Conference brochure
- 11. 15th National Nonpoint Source Monitoring Workshop Call for Papers Proposal Submission Form

MEETING RECORD OF APRIL 18, 2007

1. CALL TO ORDER AND INTRODUCTIONS

Mary Ambrose (TCEQ), Designated Chair of the Texas Groundwater Protection Committee (TGPC), called the meeting to order at approximately 1:04 PM CST.

2. SUBCOMMITTEE REPORTS

Agricultural Chemicals

Joe Peters reported that the Agricultural Chemicals Subcommittee met that morning for their third quarter meeting starting at approximately 10:04 AM. The meeting was chaired by Steve Musick (TCEQ).

The Task Force Reports were the first item on the agenda:

- Janie Hopkins (TWDB), Chair of the Site Selection Task Force, reported that their monitoring had begun for the season in the Trinity and Pecos areas.
 - Alan Cherepon (TCEQ) reported that the first batch of cooperative samples had recently been received from TWDB, and TCEQ had subsequently analyzed them by immunoassay for atrazine.
- Bruce Lesikar (TCE), Chair of the Educational Task Force, reported that ten educational events to prevent pesticide contamination of groundwater had or would soon be conducted by TCE in the Panhandle.

The second, and main, business item included two closely related subjects which were discussed together:

- The State Management Plan (SMP) Task Force Charge; and,
- U.S. Environmental Protection Agency (EPA) program changes related to Pesticide Management Plan (PMP) activities.

A draft new Charge for the SMP Task Force was discussed. Based on EPA's change in focus in its pesticide program (moving away from a pesticide management plan rule, and more towards program performance measures), the SMP Task Force is being refocused to achieve new goals. The suggested new name for the Task Force will be the PMP Task Force. Ambrose Charles (TDA) and Alan Cherepon (TCEQ) will be the Co-Chairs.

The third item on the agenda was an Information Exchange:

- Ed Gates (TDA) gave a short presentation on the recent registration by EPA and TDA of the herbicide propazine. EPA registered the product on March 7, 2007 and TDA registered it on March 21, 2007. Along with atrazine, propazine belongs in the triazine family of pesticides. It was registered for use in grain sorghum. The compound has been unregistered since about 1997.
- There was a brief update on the Interagency Pesticide Database (IPD).

Data Management

Janie Hopkins (TWDB) reported that the Data Management Subcommittee had met two or three times since the last TGPC meeting with the contractor, Geotechnical Research Institute (GTRI). The Data Management Subcommittee had been working on two of the short-term goals in the *Texas Groundwater Protection Strategy* (http://www.tceq.state.tx.us/assets/public/comm_exec/pubs/as/188.pdf), and a more complete report on these activities was postponed until the Business Discussion section of the meeting.

Public Education and Outreach

Bruce Lesikar (TCE) reported that the POE Subcommittee last met on April 5, 2007 and six agencies and organizations were represented.

The implementation strategy for the *Groundwater Educational Outreach Plan* (see Reference 1, below) was discussed. The POE Subcommittee agreed to send out the draft implementation strategy outline again for any additional revisions so that it can be finalized at the next meeting.

Feedback on three draft Fact Sheets were discussed:

- Best Management Practices to Prevent Pesticide Contamination of Water Resources
- Capping of Water Wells for Future Use
- On-Site Wastewater Treatment System Operation and Maintenance

TCE is incorporating comments for the last two draft Fact Sheets into the final texts in order to meet their Fiscal Year 2007 contract deadline.

The POE Subcommittee posted Texas-specific information related to National Groundwater Awareness Week (March 11 – 17, 2007) on the TGPC website (http://www.tgpc.state.tx.us/GW AwarenessWeek2007.pdf), and developed a poster that was displayed in the Texas Capitol rotunda on March 14, 2007.

The next POE Subcommittee meeting is tentatively scheduled for July 11, 2007.

(1) http://www.tgpc.state.tx.us/subcommittees/POE/TGPC%20POE%20Edu%20Outreach%20Plan%2013Nov2006.pdf

Groundwater Research

Mary Ambrose (TCEQ) reported that the Groundwater Research Subcommittee did not meet that morning due to the schedule conflicts of both Co-Chairs.

Nonpoint Source Task Force

Richard Egg (TSSWCB) reported that the Nonpoint Source Task Force did not meet in the last quarter, but announced that the 15th National Nonpoint Source (NPS) Workshop will be held in Austin in August and is currently making a call for papers. In addition, the TSSWCB has finished their initial review of 319 projects for Fiscal Year 2008 and hopes to get that package to the EPA by the end of May 2007. Finally, the TSSWCB website (http://www.tsswcb.state.tx.us/) has been updated, and all of their Nonpoint Source projects (work plans, reports, etc.) are available there.

3. PRESENTATIONS

Overview of Carbon Capture and Storage in Texas – Texas Bureau of Economic Geology

Susan Hovorka (BEG) gave a presentation in which she discussed the three questions that need to be answered before injecting carbon dioxide into the subsurface as part of a greenhouse gas mitigation program:

- Are subsurface volumes adequate to sequester the volumes needed to impact atmospheric concentrations?
- Is storage security adequate to avoid inducing hazards and to benefit atmospheric concentrations?
- Is the whole system technology (pipeline, well construction, permitting) mature enough to proceed forward?

The information presented indicates an affirmative response to all three questions.

4. BUSINESS DISCUSSION AND POSSIBLE ACTION

Texas Groundwater Protection Strategy – Discuss Strategy Implementation Issues Including Improving Groundwater Data Collection and Assessment and Monitoring for Pesticides

Mary Ambrose (TCEQ) asked two Subcommittees, Data Management and Agricultural Chemicals, to explain how they are achieving the implementation strategy that is outlined in the *Texas Groundwater Protection Strategy* (http://www.tceq.state.tx.us/assets/public/comm_exec/pubs/as/188.pdf).

Janie Hopkins (TWDB) reported that the Data Management Subcommittee had been meeting once per month and addressing two short-term goals in the *Strategy*'s Chapter V, Groundwater Information and Data Management.

Considering the unmet needs of all the agencies that are part of the TGPC, directly from the perspective of the regulatory agencies, and indirectly from the perspective of all agencies concerned with usable and/or drinkable fresh water, not enough data is collected nor are the means to easily assess existing data available. To address this goal of determining which constituents need more monitoring, in which aquifers, and at what frequency of sampling, TCEQ entered into a Grant Agreement with Geotechnical

Research Institute (GTRI) to facilitate the development of a statewide groundwater monitoring strategy. Thus far, GTRI has produced their first deliverable, a monitoring framework that includes the following elements:

- A description of network types (basic, reference, and targeted);
- Guidelines to follow when selecting wells for monitoring in each of the networks;
- Three aquifer priority levels to which each of the major and minor aquifers has been assigned;
- Groups of constituent analytes for sampling at specific frequencies, by aquifer, and by network type; and,
- A matrix illustrating frequency of sampling by constituent group for each network and its three aquifer priority levels.

GTRI is currently working on their second deliverable – a framework for data assessment and methodology. Out of the preliminary discussions, the Data Management Subcommittee has determined four basic databases that are most appropriate for use in this framework:

- Interagency Pesticide Database (http://www.tceq.state.tx.us/permitting/water_supply/groundwater/pesticides.html);
- USGS's water quality data, including National Water-Quality Assessment (NAWQA, http://water.usgs.gov/nawqa/) data;
- TCEQ's Water Utility Database (http://www3.tceq.state.tx.us/iwud/); and,
- TWDB's Groundwater Database (http://wiid.twdb.state.tx.us/ims/wwm_drl/viewer.htm?).

In order for the data from each of these sources to be useful, and specifically to be captured in map form, each of the well sites must have good location data. All have adequate lat-longs; however, capturing information from TCEQ's Water Utility Database is more challenging due to Homeland Security issues. Furthermore, of the approximately 20,000 wells designated by TCEQ as part of its water supply database, only 1,000 have groundwater quality data solely from the specific well site and do not represent groundwater quality from the blending of several wells or well water mixed with surface water. Water quality information from this population is desirable because it is comparable to the data collected in the other three databases. GTRI will outline methods used to obtain data from each of these databases as well as methods used to assess the data; ideally, a method to identify and ultimately capture data from the 1,000+ public supply wells will be determined.

The Data Management Subcommittee is also addressing a second short-term goal, that of reviewing data management standards and practices, particularly to facilitate information exchange. The Data Management Subcommittee has reviewed the *Texas Groundwater Data Dictionary* (http://www.tceq.state.tx.us/comm_exec/forms_pubs/pubs/gi/gi-272.html). Some of this document hinges on information in the TWDB's Data Dictionary, which is currently in the process of being revised, although this project will not be completed before the end of the fiscal year. Therefore the Data Management Subcommittee is postponing updates to the *Texas Groundwater Data Dictionary* until after this revision.

Simultaneously, however, the data methodology and assessment portion of the monitoring strategy may obviate the necessity of this update. Neither TWDB, nor USGS, nor staff at TCEQ (especially those involved with the Water Utility Database) depend on this document to facilitate exchange of information or in their respective agencies' evaluation and mapping of data. The data assessment and methodology portion of the monitoring strategy document will refer specifically to the most direct means of obtaining information (for example, from online queries) and supporting documents that describe the associated metadata, such as Quality Assurance Plans and the TWDB's Data Dictionary, that are already in use by the different agencies.

Alan Cherepon (TCEQ) indicated that the Agricultural Chemicals Subcommittee needs to monitor urban pesticides in urban waters, especially those identified in the USGS *Pesticides in the Nation's Streams and Ground Water, 1992–2001* (http://pubs.usgs.gov/circ/2005/1291/). The Interagency Pesticide Database draft report also indicates that areal sample coverage is incomplete for most pesticides, especially the urban pesticides. This new direction in monitoring resulted from the Office of Management and Budget (OMB) Program Assessment Rating Tool (PART) review of U.S. EPA programs, which recommended several items and program areas that needed improvement in order to avoid a reduction in program funding. This monitoring shift, along with other program changes related to protecting water resources from pesticides, will be addressed by the Agricultural Chemicals Subcommittee via changes to the Charge of the State Management Plan Task Force.

Joint Groundwater Monitoring and Contamination Report - 2006 – Discussion

Abiy Berehe (TCEQ) presented highlights from the draft 2006 *Joint Groundwater Monitoring and Contamination Report* ("*Joint Report*"). In the 2006 *Joint Report*, there were:

- 5,576 groundwater contamination cases, down by 9 % from the previous year.
 - Of these, 93 % are overseen by TCEQ, 6 % by RRC, and < 1 % by DSHS and TAGD.
- 548 new groundwater contamination cases, down by 16 % from the previous year.
 - o Of these, 95 % are overseen by TCEQ and 5 % by RRC.
- 884 closed groundwater contamination cases, down by 24 % from the previous year.
- 26 groundwater contamination cases which required notification to local officials.

TGPC members reviewed a draft of Figure 2a from the 2006 *Joint Report*, and Abiy Berehe (TCEQ) pointed out the generally declining trend of total groundwater contamination cases over the past six years, mainly attributed to the decreasing number of cases reported by TCEQ's Petroleum Storage Tank (PST) Section. However, in the past six years, there is an increasing trend in the number of groundwater contamination cases reported from TCEQ's Corrective Action (CA) Section, Voluntary Cleanup (VC) Section, Voluntary Cleanup Innocent Owner (VCIO) Section, Dry Cleaners Remediation Program (DCRP), Superfund Cleanup (SC) Section, and Waste Permits Division (WPD), as well as an increase in groundwater contamination cases related to oil and gas activities overseen by RRC.

When the 2006 *Joint Report* is published, it will be posted on both TCEQ and TGPC websites and hard copies will be mailed to County judges, County health officials, Groundwater Conservation Districts (GCDs), and TGPC member agencies.

Set Future Meeting Dates

The next TGPC meeting is scheduled for August 8, 2007 at 1:00 PM CDT.

5. INFORMATION EXCHANGE FOR GROUNDWATER-RELATED ACTIVITIES – STATUS UPDATE

Water Quality Inventory (305(b)) Report

Cary Betz (TCEQ) reported that work continues on the 2006 *Water Quality Inventory* (305(b)) Report ("305(b) Report") and that the format will be similar to what was used in the 2004 305(b) Report. TCEQ is still working on posting the groundwater portion of the 2004 305(b) Report on the TCEQ website

(http://www.tceq.state.tx.us/compliance/monitoring/water/quality/data/04twqi/twqi04.ht ml), but once this is completed there will be a link to it from the TGPC website.

Groundwater Contamination Notice Coordination (HB 3030, 78th Legislature)

Peggy Hunka (TCEQ) pointed out a page in the TGPC's package from the draft 2006 *Joint Report* with the number of Private Water Well Owner Notification cases in 2006. There were 31 cases, and 423 letters were mailed by TCEQ's Toxicology Section. In addition, there have been 10 additional cases and 164 letters have been mailed since the beginning of 2007. One of these 2007 cases involved coordination with the RRC. TCEQ staff is working to coordinate a meeting between the DSHS Bottled Water Section and their Radionuclide Section in order to discuss procedures for reporting groundwater contamination.

Regional Water Planning – Texas Water Development Board

Janie Hopkins (TWDB) did not have anything to report on this subject.

Groundwater Availability Modeling – Texas Water Development Board

Janie Hopkins (TWDB) reported that a Technical Advisory Group is meeting on April 20, 2007 to discuss joint planning and the groundwater management areas, the current status of Groundwater Availability Modeling (GAM) and initiatives, proposed work for the GAM team, and TWDB responses to comments from the August 18, 2005 meeting.

Drought Status – All Agencies

Mary Ambrose (TCEQ) distributed a map of Texas entitled, "Drought 2007 – Public Water Supply Systems Affected as of April 1, 2007" and a list entitled, "Texas Public

Water Systems Limiting Water Use to Avoid Shortages (updated April 1, 2007)". There are now 93 Public Water Supply Systems that are under voluntary water use restrictions and 155 under mandatory water use restrictions (compared to 110 and 166, respectively, as of February 1, 2007). Many of the systems under water use restrictions use groundwater as their source.

Richard Egg (TSSWCB) reported that he had attended the last Drought Preparedness Council (http://www.txwin.net/dpc/) meeting and the situation was improving for the first time in three years. The state's average March 2007 rainfall was the wettest on record, although there are still some areas of the state that are below average.

National Groundwater Initiatives – All Agencies

Mary Ambrose (TCEQ) reported that carbon dioxide sequestration is a hot topic at the national level (e.g., program development, coordination between the U.S. Department of Energy and the U.S. EPA, regulations, etc.). The U.S. Department of the Interior's Advisory Committee on Water Information (http://acwi.gov/sogw/index.html) Will be meeting in May to discuss the design of the national framework for groundwater monitoring. Volunteers are welcome to serve on one or more of the four workgroups (http://acwi.gov/sogw/sogw/sogw/sogw/sogw/wkgcontacts.html):

- Monitoring Inventory (who is doing what monitoring);
- Data Standards and Data Management (mining existing data);
- Field Practices (sampling); and,
- National Monitoring Design (quantity modeling).

6. ANNOUNCEMENTS

Rules Update

Mary Ambrose (TCEQ) distributed a summary of current TCEQ rulemaking that was of interest to the Committee:

- Pending Proposals (1)
 - o Compliance History
- Proposals (1)
 - o RCRA Authorization for Federal Rule Clusters XI, XII, XIII, and XV
- Adoptions (1)
 - Texas Risk Reduction Rule Amendment

Additional information on a specific rule can be found at http://www.tceq.state.tx.us/nav/rules/propose_adopt.html.

Leslie Savage (RRC) reported that new Rules regarding the commercial recycling of oil and gas wastes under the RRC's jurisdiction were effective December 4, 2006 (http://info.sos.state.tx.us/pls/pub/readtac\$ext.ViewTAC?tac_view=5&ti=16&pt=1&ch=4&sch=B&rl=Y).

New Publications

Mary Ambrose (TCEQ) referenced a U.S. EPA Fact Sheet titled, "Preliminary Regulatory Determinations for the Secondary Drinking Water Contaminant Candidate List (CCL 2)", EPA 815-F-07-002, April 2007

(http://www.epa.gov/safewater/ccl/pdfs/reg_determine2/fs_ccl_regdetermine2.pdf). This Fact Sheet is about emerging drinking water contaminants, how widespread they are in public drinking water systems, and whether they are a threat to public drinking water. Of 51 contaminants on the CCL 2, 11 have been determined to pose no threat to public drinking water.

Upcoming Conferences

Mary Ambrose (TCEQ) pointed out the brochure for the upcoming TCEQ Environmental Trade Fair and Conference. Like last year, TGPC members willing to staff a shift in the TGPC booth would be able to attend some of the conference presentations at no charge. Kathy McCormack (TCEQ) will send the TGPC an email about this opportunity.

Janie Hopkins (TWDB) announced an upcoming GAM Workshop on June 26 – 27, 2007 (http://www.twdb.state.tx.us/GwRD/pages/gwrdindex.html). Modeling, Desired Future Conditions, monitoring databases and programs, water quality sampling techniques, and well telemetry equipment will be discussed.

- TCEQ 2007 Environmental Trade Fair and Conference, May 1 3, Austin, http://www.tceq.state.tx.us/assistance/events/etfc/etf.html
- Texas River and Reservoir Management Society (TRRMS) and South Central Society
 of Environmental Toxicology and Chemistry (SETAC) 2007 Annual Meeting –
 Understanding Urbanizing Landscapes: Atmospheric, Terrestrial and Aquatic
 Linkages, May 17, Nacogdoches, http://www.baylor.edu/trrmssetac/
- 15th National NPS Monitoring Workshop (sponsored by U.S. EPA, TCEQ, River System Institute), August 26 30, Austin, http://www.rivers.txstate.edu/NPS07/
- Gulf Coast Association of Geological Societies (GCAGS) 57th Annual Convention, October 21 – 23, Corpus Christi, http://gcags.org
- Conference for the Advancement of Science Teaching (CAST) 2007 Annual Convention, November 15 17, Austin, http://www.statweb.org/exhibits/

7. PUBLIC COMMENT

There was no public comment.

8. ADJOURN

Mary Ambrose (TCEQ) adjourned the meeting at approximately 2:27 PM CST.