

AGRICULTURAL CHEMICALS SUBCOMMITTEE MEETING RECORD

TIME AND DATE:

10:30 AM, October 3, 2007

LOCATION:

TCEQ, Park 35, Building F, Room 2210, Austin, Texas

PURPOSE OF MEETING:

The FY08 First Quarter Meeting of the Agricultural Chemicals Subcommittee of the Texas Groundwater Protection Committee.

ATTENDEES:

AGENCIES

Texas Commission on Environmental Quality [TCEQ]
Texas Department of Agriculture [TDA]
Texas Water Development Board [TWDB]
Texas State Soil and Water Conservation Board [TSSWCB]
Texas Cooperative Extension [TCE]
Texas Alliance of Groundwater Districts [TAGD]
Texas Structural Pest Control Board [TSPCB]
Texas Agricultural Experiment Station [TAES]

REPRESENTATIVES

Joseph Peters	Acting Chair, Member, TCEQ, Austin
Ambrose Charles	Member, TDA, Austin
Janie Hopkins	Member, TWDB, Austin
Richard Egg	Member, TSSWCB, Austin
Bruce Lesikar	Member, TCE, College Station
Barry Miller	Member, TAGD, Gonzales

AGENCY STAFF

Alan Cherepon	TCEQ, Austin
Cary Betz	TCEQ, Austin
Richard Eyster	TDA, Austin
David Villarreal	TDA, Austin

INTERESTED PARTIES

Ed Baker	Syngenta Crop Protection, Mineola
Denise Gentsch	Syngenta Crop Protection, Austin
George Caldwell	Texas Farm Bureau

MEETING SUMMARY:

I. Opening Remarks

The Acting Chairman of the Agricultural Chemicals Subcommittee, Dr. Joseph Peters (TCEQ), called the meeting to order. The only Subcommittee member not in attendance was C. Allan Jones (TAES). Dr. Peters welcomed everyone to the meeting. The Subcommittee members introduced themselves and the meeting proceeded to the Task Force Reports.

II Task Force Reports

Site Selection Task Force: Janie Hopkins (TWDB), the Task Force Chair, provided a brief summary of the TWDB groundwater monitoring for 2007. The wells sampled by TWDB this year included 230 wells in the Trinity aquifer, 160 wells in the Edwards-Trinity Plateau/Southern High Plains area, and 65 wells from the Pecos Valley and other aquifers. The TWDB should finish this cycle of sampling by late October. The TWDB is scheduled to sample in the Ogallala and Dockum aquifers in 2008, including some sampling for arsenic speciation in three counties in the southern portion of the aquifer. The reduced form of arsenic was detected there in earlier studies, and the results are in need of verification. The TWDB also has recently contracted with a new lab in Houston, and it appears that this lab will be less expensive than previous ones. The reduced rates for analysis should free up money for more samples to be analyzed or for additional types of analyses, including special isotope studies. Alan Cherepon (TCEQ) presented the summary of TCEQ's pesticide monitoring under item III of the agenda.

Education Task Force: Bruce Lesikar (TCE), the Task Force Chair, provided a brief summary of activities undertaken in the past quarter. Dana Porter has the Public Outreach and Education Subcommittee tri-fold on agricultural chemicals and water quality in the editorial review stage, and she should have the finished version printed within a couple of months.

Pesticide Management Plant Task Force: The issues for the PMPTF were addressed under "Business Items" in the agenda, which is later in the program.

None of the other attending task force chairs had anything new to report.

III. TCEQ 2007 Groundwater Monitoring Summary

Alan Cherepon (TCEQ) gave a Power Point presentation and provided a handout summarizing the TCEQ 2007 groundwater monitoring program. The presentation is given annually as a summary of pesticide monitoring results for the year. The presentation also serves as a basis on which to plan for the upcoming year's monitoring.

The major areas covered in the talk included:

- Cooperative atrazine screening with the TWDB
- On-Going Public Water Supply monitoring in the Panhandle Region
- Urban Pesticide Monitoring in San Antonio and Austin

The Cooperative atrazine screening program of the TWDB and TCEQ saw a phasing out of the metolachlor screening (discussed at the previous meeting). Due to budget concerns, the TWDB collected considerably fewer samples in 2007. 149 well samples and 62 blank and duplicate samples were analyzed by immunoassay for atrazine. 37 of these samples were also analyzed for metolachlor, using what reagents were left from the previous year. A total of 228 immunoassay analyses were run for the Cooperative screening program in 2007. Most of these samples stretched across the center of the state, with some also collected further north. The locations were indicated on a GIS generated map.

The annual On-Going sampling in the Panhandle, which included Public Water Supply systems with previous atrazine detects, was carried out in June. 16 PWS wells were sampled from eight systems, along with 17 monitoring wells at Hale County Airport. Additionally three private wells and one surface water body was sampled. A total of 40 atrazine analyses were done and 13 of the well samples also underwent laboratory analysis by EPA Methods 525.2 and 8141A. The latter method is a waste method used to analyze for several high-priority urban pesticides.

A new category of monitoring was added this year, anticipating a change of program focus and also correcting somewhat for the limited past monitoring for these pesticides. Urban pesticide screening, using immunoassay analyses, was conducted in San Antonio and Austin. Pesticides analyzed for included atrazine, pyrethroids, chlorpyrifos, diazinon, and a limited number of analyses for Organo Phosphates/Carbamates. A total of 27 wells and 7 entry points were sampled in San Antonio, and 22 wells and 4 springs were sampled in Austin for urban pesticides. From these samples, a total of 298 immunoassay analyses were run.

A total of 566 immunoassay analyses were conducted from all programs, with 13 samples also analyzed by laboratory methods. Maps and tables of results were presented, along with graphs showing long-term trends in immunoassay atrazine concentrations in the five Panhandle PWS systems undergoing long term investigation for high atrazine concentrations.

One result stands out in 2007. The atrazine concentration in MW-13 at the Hale County Airport had greater than 700 ppb atrazine by laboratory analysis, which is over an order of magnitude higher than any previous analyses for samples from this well (2004). After careful examination of the laboratory results no reason can be found to discount the validity of the result, but it is difficult to envision an explanation for the sudden increase, when previous sample results for the airport are nowhere near this concentration. Several other samples from the airport wells have exceeded MCLs or HALs for atrazine, propazine, alachlor, or pentachlorophenol, and there were also detects of metolachlor and Dieldrin. Previous maps of the atrazine concentrations at the airport show a plume with highest concentrations near the pump island for the airplane fuel, a suspected spill site.

Most of the PWS results in the Panhandle appeared steady or slightly different from the previous year's atrazine values. None approached the MCL for atrazine. Urban pesticide monitoring results indicate a few minor atrazine detects, some very low diazinon detects, and one chlorpyrifos detect. No laboratory analyses were conducted on these samples.

A question and answer period followed, some of which revisited questions addressed in earlier meetings, such as why immunoassay results are higher than laboratory results. This was followed by a brief discussion of how the results could affect the 2008 groundwater monitoring planning process, especially relative to POIs? Will TCEQ continue with the urban monitoring, possibly cutting back on atrazine screening? One comment was that the urban monitoring should continue, and may include laboratory analyses on a small number of samples. One person asked if there were aerial pesticide applicators still working out of the Hale County Airport. Mr. Cherepon did not know for sure at this time, but would find out by the next meeting.

IV. Business Items

Pesticide Management Plan Task Force Pesticides of Interest Determination-Discussion and Approval

Alan Cherepon (TCEQ) had prepared assessment criteria for selecting Pesticides of Interest (POIs) and an initial draft list of POIs, which had been earlier presented to the PMPTF for their consideration. Since the PMPTF had approved the criteria and the list, it was presented to the Subcommittee to discuss and approve. He gave the Subcommittee a verbal summary covering the first meeting of the task force and the main issues.

The POIs and how they are to be selected were discussed in some detail at previous ACS meetings. This process is also addressed in the PMPTF charge. The Co-Chairs of the PMPTF, David Villarreal (TDA) and Alan Cherepon, had discussed earlier the number of pesticides and which pesticides should be included in the list of POIs that Texas can adequately review in 2008. Following the development of this preliminary list of pesticides and the criteria for assessing them, the task force met for the first time on 10/1/07 to finalize the draft criteria and list that was now being presented at this quarterly ACS meeting. The task force meeting was attended by the two co-chairs, Richard Egg (TSSWCB), Joe Peters (TCEQ), and Radu Boghici (TWDB), who was sitting in for Janie Hopkins. The group came to agreement on the list of POIs, as well as a secondary, or optional list to assess, should time and resources allow. They also developed the draft assessment criteria at this time, with the commitment to present this to the ACS for approval.

Mr. Cherepon provided a handout summarizing the primary sources and focus for POIs, and the assessment criteria. He also emphasized that the process would include both surface water and groundwater, and would require input from other programs and agencies to complete a Pesticides Water Quality Issues Report for EPA as a grant deliverable. Ms. Hopkins (TWDB) asked if there was any guidance on this. Mr. Cherepon said there is, and he would send it out to the subcommittee members. The tentative POIs and sources that were presented for consideration were:

- The top four pesticides identified in the USGS Pesticide Synthesis Report of 2006 (malathion, diazinon, chlorpyrifos, and azinphos-methyl -- although there may be limited analytical results for azinphos-methyl)
- The 2005 SFIREG List (TDA can delete the ones not registered in Texas, or even those not sold or used in any quantity.)

- Any of the SFIREG pesticides for which Texas has considerable monitoring data
- The 303d List pesticides (which should also be selected as POCs)
- Consideration of the pesticides which have been detected in waters in Texas, that have high use, and characteristics such as high leachability and solubility
- The Primary List of POIs that includes; atrazine, atrazine degradates DEA and DIA, azinphos-methyl, diazinon, chlorpyrifos, malathion, 2,4-D, prometon, propazine, alachlor, metolachlor, and simazine (13 total)
- The optional or Secondary List that includes; Picloram, Endosulfan, diuron, Dicamba, Bromacil, Carbofuran, DBCP, Acetochlor and its degradates, Glyphosate and its degradates, Aldicarb, pyrethroids, and the legacy pesticides from the 303d List. (The basis for these choices include, but is not limited to, the availability of considerable monitoring data and/or history of use in the state.)

The listing of the POIs was followed by the presentation of the assessment criteria, which included the following:

- Is the pesticide registered for use in Texas?
- How much is applied in Texas, and how widely is it used?
- Does it have characteristics that indicate release and long-term impact to water quality? (solubility/leachability and half-life or persistence in the environment)
- Is it harmful to human health or the environment, are there low benchmarks/high toxicity, and is there potential for affecting endangered species?
- Is it being monitored sufficiently to enable proper assessment?
- Are monitoring results approaching or exceeding benchmarks for human health and the environment?

The task force would also like to attempt to develop a numerical scoring mechanism weighted to specific criteria, to provide a more objective approach. If anyone has ideas or experience related to this, their input would be appreciated. Dr. Villarreal added that, as the Region 6 state representative for the SFIREG Water Quality workgroup, he would ask what other states are doing for this, especially Joe Zachmann (Minnesota) who is the national state chair for this group. Mr. Cherepon added that he would also check with some California contacts on this, as well as the states at the Region 6 Pesticide meeting in November.

A lengthy discussion period followed. Barry Miller (TAGD) asked if the pesticides in our list were priority ranked. They were not. However, EPA had indicated that the states should initially check to see if the pesticides are even registered in their state, and if not, they could be removed from the SFIREG list. One issue with this approach is that several 303d List pesticides and possibly others are either legacy pesticides or have been recently de-registered. Mr. Cherepon indicated that he would check with EPA on this point at the Region 6 meeting. Ms. Hopkins (TWDB) asked/commented that EPA may like to see a flow chart, where if the pesticide is registered then go to B; otherwise, go back to A, etc. Everyone agreed this would be a good tool to include in the POI assessment process.

Another question was whether POCs were more important than POIs. They are, if they are being managed for contaminating water bodies above benchmarks. The POCs are a sub-set of the POIs. The EPA had to begin somewhere to develop a systematic approach to assess and

compare states and regions and to be more accountable to the OMB in demonstrating wise use of federal funds in protecting water quality, human health, and the environment. Mr. Miller asked if pesticides in surface water will need to be addressed. Yes they will, which is why we asked Louanne Jones spoke at the previous subcommittee meeting on the TMDL process and surface water quality programs at TCEQ.

Ed Baker (Syngenta) had some questions and comments related to the POCs and 303d list, stating it is critical to get the terminology correct. Mr. Cherepon replied that the POCs can be synonymous with the 303d list, except the 303d list is only for surface water, and does not address groundwater. Thus, we should not consider the 303d list as the only means of identifying POCs. The overall approach should be considered a starting point, much like the SMP, where initially there were five pesticides to address, and then Cyanazine became de-registered. Now we are considering and including surface water results. Dr. Charles (TDA) said that some history might help in understanding this better. Originally, EPA had a list of 25 pesticides early in the SMP program. They reduced this to five of primary interest. The states objected to the larger list, and a “one-size-fits-all” approach, as many states may not even have some of the pesticides registered or used in any appreciable amount. In 1996, EPA came up with the same five pesticides for the Groundwater Rule and convinced the states to approve the list. When EPA tried to introduce surface water monitoring into the Groundwater Rule, the states objected. Now EPA is trying to press the same thing into the Cooperative Agreement, so that any state that receives federal grant money for water quality is required to develop a list of POIs, POCs, and how many are managed. They want to know what are the pesticides of greatest interest, and how are they being managed, coming at the previous unsuccessful requirements from a different angle. The state can use the 1996 PMP guidance to address which pesticides are most important to Texas.

Dr. Villarreal (TDA) added that he and Mr. Cherepon developed a larger list of potential pesticides to consider and that he had placed them in a spreadsheet. He and Mr. Cherepon then went through the list to choose the ones they felt were of greatest interest and had the greatest likelihood of being sufficiently assessed in 2008. In this process they went from about 150 pesticides down to 40, and eventually down to 13, plus an optional list of about the same number.

Dr. Peters asked if there was a deadline for the list of POIs and POCs and their assessment. Mr. Cherepon said that we could assess around 10 to 12 POIs in time to complete the Pesticide Water Quality Issues Form by the end of FY08. Mr. Cherepon added that the information from the other agencies and programs, especially surface water data, was out of TCEQ’s control, since those programs were outside of the FIFRA authority. All that could be done is to request the data, and if it does not come in from these programs, a statement would be added to indicate that no updated information was available from these programs. He compared this to the Joint Groundwater Report, where TCEQ is at the mercy of other agencies and programs to supply data but could not force them into providing it.

Ms. Hopkins (TWDB) asked if EPA has ever cut programs or budgets with TDA. Dr. Charles began by saying that the program has the 2008-2010 guidance, which requires we address Water Quality initiatives, and that EPA is presently negotiating with the states to find more money for

the program, but there have been no budget cuts for TDA. Mr. Cherepon replied that the TCEQ FIFRA budget has been reduced by some \$600 to \$700 in 2008. Dr. Peters asked the ACS to approve the list and assessment approach as defined by the PMPTF, which they did.

IV. Information Exchange - Status Update

Ambrose Charles (TDA) said there was nothing new on the propazine re-registration monitoring program, stating that the company is working with EPA on this, but there is still nothing final as of yet.

There was nothing new to report on the Barton Springs Pesticide Determinations updates either.

Dr. Peters had nothing new to report on the IPD, except that nearly all the 2006 data was entered into an intermediate database for quality checking and final entry into the IPD. Once completed, he will begin entering the 2007 data.

V. Public Comment

There were no public comments.

VI. Announcements

TDA announced that the Texas Structural Pest Control Board was absorbed into the TDA on September 1st as Structural Pest Control Services.

Mr. Cherepon announced the azinphos-methyl notice to terminate registration appeared in the Federal Register, and that anyone desiring additional information on this could see him after the meeting.

With no further comments or announcements, the meeting was adjourned.

VII. Adjournment

Recorded and transcribed by Alan Cherepon.

Attachments

Slides from the Summary of TCEQ pesticide groundwater monitoring in 2007
Revised PMP Task Force Charge
POI handout

In their afternoon meeting, the decision was made by the Texas Groundwater Protection Committee that the FY08 second quarter meeting of the Agricultural Chemicals Subcommittee will take place on 1/16/08 at 10:30 a.m., in TCEQ Building F, Conference Room 2210.