**AGRICULTURAL CHEMICALS SUBCOMMITTEE MEETING RECORD**

**TIME AND DATE:**
10:30 AM, April 7, 2010

**LOCATION:**
TCEQ, Park 35, Building F, Room 2210, Austin, Texas

**PURPOSE OF MEETING:**
The FY10 Third Quarter Meeting of the Agricultural Chemicals Subcommittee of the Texas Groundwater Protection Committee

**ATTENDEES:**

AGENCIES

Texas AgriLife Extension Service [TAES]
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]

REPRESENTATIVES

| | |
|---|---|
| Joseph L. Peters | Chair, Member, TCEQ, Austin |
| Richard Eyster | Member, TDA, Austin |
| Janie Hopkins | Member, TWDB, Austin |
| Kevin Wagner | Member, TAR, College Station |
| Donna Long | Member, TSSWCB, Temple |
| Bruce Lesikar | Member, TAES, College Station |

AGENCY STAFF

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|---|---|
| Alan Cherepon | TCEQ, Austin |
| Scott Underwood | TCEQ, Austin |
| David Villarreal | TDA, Austin |
| Leslie Smith | TDA, Austin |
| Mark Matocha | TAES, College Station |

INTERESTED PARTIES

| | |
|---|---|
| Ed Baker | Syngenta, Mineola |

**MEETING SUMMARY:**

## I. Opening Remarks

The Chairman of the Agricultural Chemicals Subcommittee, Dr. Joseph Peters (TCEQ), called the meeting to order. Subcommittee member David Van Dresar (TAGD) was not in attendance. Dr. Peters welcomed everyone to the meeting and had the Subcommittee members introduce themselves. The meeting proceeded to the Task Force Reports.

## II Task Force Reports

**Site Selection Task Force:** Alan Cherepon (TCEQ) summarized TCEQ's pesticide monitoring plans in the Chair's absence. Ms. Hopkins, the Task Force Chair, arrived later in the meeting (10:45) and summarized the TWDB groundwater sampling schedule for 2010. The TWDB has just resumed its sampling in March, which will include taking cooperative samples for TCEQ. Sampling will include the Carrizo-Wilcox and Queen City aquifers, and the Edwards-Trinity aquifer, as well as a few wells in several other aquifers. Analyses will include the typical water quality suite. Additionally, the TWDB in cooperation with Texas Parks and Wildlife Department is sampling several springs in the Salado area and in Comal County. Analysis includes isotopes for aquifer model application.

**Education Task Force:** Dr. Bruce Lesikar (TAES), the Task Force Chair, reported that the Public Outreach and Education Task Force had been reviewing the plan/implementation strategy they had developed about two and a half years ago. Areas were prioritized for implementation, and the various tasks and products were identified, including:

- Educational Materials
    - Fact Sheets
    - Presentations
    - Frequently Asked Questions
    - Other
        - Individual Activities
        - Material for newsletter
- Evaluation Strategy
    - Assessing what was proposed
    - Status (what has been completed, on-going, or not done)
    - Determining which activities to remove
    - Proposing and adding new activities

The next meeting of the ETF will be on April 24, 2010.

**PMP Task Force:** Mr. Cherepon (TCEQ) reported that EPA had requested states to provide comments on the Pesticides Of INTerest System (POINTS) database and process. For anyone having comments Mr. Cherepon is collecting them to forward to EPA. Mr. Cherepon had already put together a list of comments since getting the EPA request on April 6, 2010.

- There is a lack of analytical methods for many of the pesticides, and thus they cannot be monitored.
- There is uneven assessment by states, some going through a minimal evaluation process while others do a much more detailed evaluation.
- The assessment procedure is largely unspecified, which is why Texas developed its own flow chart and scoring metric to define a procedure and provide supporting documentation, should a more specified procedure be required at some future point.

Other ideas Mr. Cherepon included are as follows:

- States doing a good job (like Texas) should be rewarded as follows.
    - Giving a year break from doing this
    - Being included in any work group
    - Having someone in the program from EPA headquarters come visit with the state, or at least have a conference call to further discuss program issues
    - Having the EPA lab provide free sample analyses for those pesticides without standard laboratory methods
    - Greater/Any recognition (The program was not even mentioned at the EPA Region 6 Agricultural Committee 2009 Highlights presentation meeting.)
- There should be better federal coordination and cooperation.

Another question EPA asked about the POINTS program was: What would the states like to see done with the data and program? Some suggestions include the following.

- Drop it altogether
- Make it more useful and even across the nation
- Have EPA provide pesticide use data, or at least use estimates, every other year or so, in a resolution fine enough so that possible problem areas can be determined.

Dr. David Villarreal (TDA), as a PMPTF co-chair, complimented Mr. Cherepon for the great job he has done on this. He said the program does not really fit well with Texas, as there are no serious pesticide issues in the groundwater in the state, and few (other than legacy pesticides) in the surface water. Furthermore, Texas has set up a system for pesticide assessment better than most states, and is progressing to the point of running out of pesticides to assess. Dr. Villarreal sits on the SFIREG Water Quality Committee, representing Region 6, which has acknowledged that Texas is ahead of most states. The new mandate, or Phase II, is really to address needs in other states and how EPA could better use the data at the national level. He thinks Mr. Cherepon has come up with some great ideas/comments and would be happy to bring them to the next SFIREG Water Quality Committee meeting, or Mr. Cherepon should voice them at the Region 6 Pesticide meeting in San Antonio later in April. While Texas does not have serious pesticide contamination issues, the program is still beneficial to the state.

The other task forces were inactive and had nothing to report.

## III. An Overview of Cotton-Related Pesticides

Dr. Mark Matocha, a Extension Program Specialist with the AgriLife Extension Service, working with Agricultural and Environmental Safety in College Station, provided a talk on cotton pesticides in Texas. The introduction reminded the subcommittee that for decades, cotton was considered "King", the number one crop in the state, covering large tracts of farmland and bringing in large revenue. Cotton has been grown in as many as 120 counties in 10 areas of the state. Presently the main cotton growing area centers in Lubbock, in the southern Panhandle region. Lesser amounts are also grown in the Corpus Christi and Lower Rio Grande Valley areas. Since pesticides first came on the scene around the 1940s and 1950s, there has been a progression in the chemicals used on cotton. A few have remained in use from decade to decade, but others such as DDT, arsenic acid are no longer in use. The farmers have changed over to integrated pest management (IPM) for the past 20 years. Also, more recently they have transitioned to herbicide tolerant crops, developed through genetic engineering.

Dr. Matocha listed the primary pesticides used for cotton at various time periods of seven to ten years, beginning with 1990. He subdivided the list into insecticides, herbicides, desiccants, defoliants, etc. Texas was slow at making the change to the herbicide-tolerant crops, being conservative in adopting new things in agriculture. As a result, the herbicide used in conjunction with these crops, glyphosate, did not come into large application until the mid- to late-1990s. Dr. Matocha commented that with the herbicide-tolerant crops, there is less application of pre-emergent pesticides.

By 2007, the major pesticides applied to Texas cotton were too numerous to name (roughly five in each category), but he summarized the ones that came to be used year after year, as well as some of the newer ones. These include:

- Trifluralin
- Malation
- Glyphosate
- Ethephon
- Pendimethalin
- Others ( The above are by no means the only pesticides used on cotton in Texas, but it is difficult to get good use data)

During the Q&A session following the talk, there were some questions about how much cotton is exported from Texas, and how much organic cotton is grown here. Dr. Matocha said he was not that knowledgeable about the production side of the crop, being a weed expert, but that Texas had its largest crop harvest on record in 2005. Mr. Cherepon said he had a number of statistics and bits of info from his Web search on cotton, including some issues brought up by environmentalist groups, as well as scientific studies by federal agencies. A couple of incidents of pesticides killing or damaging wildlife or crops were mentioned. Dr. Matocha responded that with many of these Internet sites, it is difficult to prove or disprove what they say, and it is important to know how studies and estimates were based and accomplished.

## IV. Business Items

**None scheduled for this meeting.**

## V. Discussion Items

### Recommendations for Research Topics for the *Legislative Report*

Copies of the previous TGPC *Legislative Report* (*Activities and Recommendations of the Texas Groundwater Protection Committee, Report to the 81st Legislature*) were provided to the subcommittee members to review what was previously recommended, and help in coming up with ideas. Mr. Cherepon said there was not much in the previous *Legislative Report* related to the ACS. He went on to mention some current issues that perhaps could be addressed.

- The NPDES permit for pesticide application in or near water bodies scheduled for implementation by 4/11/11
- Rasberry Crazy Ants found in the Houston area and spreading
- Atrazine re-review by an EPA appointed Scientific Advisory Panel (SAP)

Dr. Lesikar (TAES) commented on the NPDES permits, suggesting there needs to be an educational component to help implement this in Texas. Another subcommittee member added that the Crazy Ant efforts will be losing the use of the household use pesticide product, In & Out (which contains fipronil as the active ingredient) by next April. This has been the most effective pesticide for homeowner use on Crazy Ants thus far. Dr. Villarreal (TDA) added that the cancelation of this product may be partly due to its long half-life or persistence. He also commented that it is too early to say anything about the atrazine re-review. At this point it cannot be predicted whether or not atrazine will lose its registration. Dr. Villarreal's final comment was that, since there are no serious pesticide issues in groundwater, he recommends addressing pharmaceuticals and personal care products (PCPs). His question was whether the ACS should alert the Legislature on this being a bigger issue in the near future, or wait until more information and data is published.

Dr. Lesikar thinks the abandoned well plugging recommendation is a big issue that should remain as a recommendation in the new report. Abandoned wells can be a conduit for contaminants migrating into the groundwater. Education programs continue to be necessary and additional educational materials are still needed, but how this will be managed under the present budgetary concerns remains to be seen.

Dr. Peters summarized the recommendations that the ACS decided should be presented to the TGPC:

- Plugging of abandoned water wells should remain in the report
- Continued support of the Tex*A*Syst program
- An educational program for the NPDES pesticide permitting program
- Groundwater quality through education programs

## VI. Information Exchange

Mr. Cherepon brought up several items to the attention of the ACS, including:

- Meetings of the EPA SAP on atrazine re-review
- Continued articles on research results that studied atrazine impacts on frogs
- Other recent and upcoming EPA meetings

The previous SAP meeting, held from February 2nd to February 5th, was Webcast. It addressed human health and toxicity studies for atrazine. The next meeting is scheduled to be held from April 26th to April 29th and will address atrazine impact on animals and drinking water. Mr. Cherepon commented that he read some of the earlier findings and decisions by EPA on atrazine impacts. One involved an atrazine plant in Louisiana, where the claim was made that the people working and living in the plant had a higher percentage of prostate cancer. However, EPA determined that the apparent higher incidence was likely due to the intense screening effort, and that if as intense a screening were conducted in most other circumstances, a similar result would be obtained. He further compared it to the lowering of detection and quantitation limits for analytical methods and the increasing of monitoring for atrazine which resulted in an increase in atrazine detects in Texas. This would probably occur with any chemical you intensify monitoring for. The majority of detects were trace amounts.

Dr. Villarreal added that the majority of the SAP meeting in February rehashed former studies. The SAP will determine safety factors they use and whether or not to increase restrictions. The SAP will pass their assessment on to EPA, who will then make their decision.

Mr. Cherepon also commented that the newspaper articles on effects of atrazine on frogs are mostly a rehash of Dr. Tyrone Hayes' and his student's studies, and how the findings indicate that atrazine is effecting the sexual traits and causing other health issues with the frog populations they studied. If anyone wants to see these articles, they can see Mr. Cherepon after the meeting.

Mr. Cherepon briefly shared information on some recent EPA meetings. The Region 6 pesticide staff visited with both TDA and TCEQ in March for a mid-year grant visit. The EPA wanted to meet with newer TCEQ staff involved in the FIFRA grant. Mr. Cherepon reported that he showed a Power Point to them from the previous year that provided a history of the FIFRA pesticide program in Texas and the accomplishments made. Additionally, they were provided an update and overview of the Interagency Pesticide Database. This was followed by showing them the immunoassay and field monitoring equipment bought with federal grant funds.

The final item of interest is the upcoming Region 6 EPA/States/Tribes pesticide meeting to be held in San Antonio from April 26-28. If anyone on the subcommittee wants Mr. Cherepon or the TDA to bring up specific issues at this meeting please let him or TDA know prior to the meeting.

## VII. Announcements

Several announcements were made, including the following:

- There will be a USGS presentation on the modernization of the annual water quality data report, on April 8, 2010.
- The Region 6 Pesticide meeting in San Antonio will be held on April 26-28.
- The next SAP atrazine re-review meeting will be held in Washington, DC, from April 26th to April 29th.
- The TCEQ Environmental Trade Fair will take place in Austin from May 4th to May 6th.
- A TCEQ pesticide monitoring trip to the cotton producing counties around Lubbock will take place the week of May 24th.
- The TCEQ pesticide monitoring trip to the Dallas/Fort Worth area will take place the week of June 14th.
- Ms. Hopkins (TWDB) mentioned they have obtained research grant to look at natural and anthropogenic sources of contamination in water and how this impacts water quantity.

## VIII. Public Comment

No public comments were made.

## IX. Adjournment

With no further announcements or public comment, the meeting was adjourned.

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Recorded and transcribed by Alan Cherepon.

In their afternoon meeting, the decision was made by the Texas Groundwater Protection Committee that its FY10 fourth quarter meeting would take place on 07/14/10 at 1:00 P.M., in TCEQ Building F, Conference Room 2210. The Agricultural Chemicals Subcommittee meeting will take place on the same date and in the same room at 10:30 A.M.

## Reference

*Activities and Recommendations of the Texas Groundwater Protection Committee, Report to the 81st Legislature*, SFR-047/08, January 2009, can be found on the TCEQ website at the following web address.

http://www.tceq.state.tx.us/assets/public/comm_exec/pubs/sfr/047_08.pdf