

## **AGRICULTURAL CHEMICALS SUBCOMMITTEE MEETING RECORD**

### **TIME AND DATE:**

10:30 AM, October 12, 2011

### **LOCATION:**

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

### **PURPOSE OF MEETING:**

The FY12 First Quarter Meeting of the Agricultural Chemicals Subcommittee of the Texas Groundwater Protection Committee

### **ATTENDEES:**

#### AGENCIES

Texas AgriLife Research [TAR]

Texas Commission on Environmental Quality [TCEQ]

Texas Department of Agriculture [TDA]

Texas State Soil and Water Conservation Board [TSSWCB]

Texas AgriLife Extension Service [TAES]

#### REPRESENTATIVES

Joseph L. Peters

David Villarreal

Kevin Wagner

Richard Egg

Mark Matocha

Chair, Member, TCEQ, Austin

Member, TDA, Austin

Member, TAR, College Station

Member, TSSWCB, Temple

Member, TAES, College Station

#### AGENCY STAFF

Alan Cherepon

Kristine Uhlman

Rusty Ray

TCEQ, Austin

TAES, College Station

TSSWCB, Temple

#### INTERESTED PARTIES

Ed Baker

Albaugh Inc., Mineola

## **MEETING SUMMARY:**

### **I. Opening Remarks**

The Chairman of the Agricultural Chemicals Subcommittee, Dr. Joseph Peters (TCEQ), called the meeting to order. Subcommittee members Mr. David Van Dresar (TAGD) and Ms. Janie Hopkins (TWDB) were 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:** Mr. Alan Cherepon (TCEQ) provided the update for the absent Ms. Hopkins (TWDB), the Task Force Chair. The TWDB sampled just over 500 wells in FY11 and plans on monitoring approximately 350 wells in the spring and summer of 2012. Aquifers scheduled to be sampled include:

- Ogallala Aquifer
- Dockum Aquifer
- Edwards-Trinity (High Plains) Aquifer

Additionally, the draft 2012 groundwater pesticide monitoring plan has been provided to subcommittee members to review and provide feedback prior to next meeting, when it will be considered for approval.

**Education Task Force:** Mr. Cherepon (TCEQ), a co-chair of this Task Force, reported that the Public Outreach and Education Task Force had no items related to pesticides. Dr. Matocha (TAES) the other co-chair also had nothing directly related to groundwater and pesticides to report.

**PMP Task Force:** Mr. Cherepon (TCEQ), a co-chair of this Task Force, reported that in 2011, the Task Force will assess the five remaining pesticides from the original list of 57, using EPA's **Pesticides Of INterest Tracking System (POINTS)** application and database. Since the laboratory does not analyze for these, the assessment will be based on chemical characteristics, use, and toxicity. While researching these pesticides on the Internet, the pesticide dimethenamid, on EPA's EMCI Chemical References website only provides a link to the Environmental Defense Fund website, not providing information on their own website. Mr. Cherepon asked if anyone else had noticed this, or had comments, and that he would also ask about this at the EPA Region 6 pesticide meeting on 10/13/11.

Co-Chair Dr. David Villarreal (TDA) commented that Mr. Cherepon is doing a good job with these assessments. He added that his agency needs to know whether EPA plans on continuing with the POINTS program so that TDA could anticipate the need to allocate specific staff time for the program. Mr. Cherepon said he hopes to get an answer on this at the upcoming Region 6 meeting, but that many states have not completed their assessments yet. As for Texas, he doubted we would be doing any further work on this

for 2012. Dr. Villarreal also asked whether Mr. Cherepon needed TDA to provide chemical information on the remaining five pesticides individually or as a group. Mr. Cherepon replied that since EPA has grouped these pesticides, he saw no reason to split them out, and that it would be sufficient to provide general characteristics for the group rather than individual pesticides.

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

### **III. Drought Impacts on Groundwater Resources in Texas**

Ms. Kristine Uhlman (TAES), the Project Coordinator for the Texas Well Owner Network, provided a Power Point presentation on drought impacts to groundwater in Texas. The major areas addressed included:

- How drought conditions affect contaminants in the groundwater
- Tritium and Carbon 14 age-dating of groundwater
- Possible adverse effects on groundwater from lowering the water table

Ms. Uhlman applied information from her prior experience in Arizona to Texas' present situation. There was some general discussion of findings and applications to drought and groundwater as applied to private wells. Where these wells are clustered, their cones of depression tend to overlap, and though the water table tends to wax and wane seasonally, in certain aquifers there is a general downward trend in depth to water. The bigger issue is convincing people to conserve water. She initially conducted a well owner survey to get an understanding of people's knowledge level about their water supply. The survey indicated that about half the people didn't feel there was a water shortage, and some didn't know whether they were on well water or where their water came from.

Ms. Uhlman's program used tritium and C14 to determine relative age of the aquifer waters, indicating whether it was fairly young water being recharged relatively quickly by surface water and precipitation, or older water that is not recharged very quickly or at all. Following some details about tritium and C14, she found the best way to make people understand groundwater was to compare it to checking and savings accounts. Groundwater that was dating as younger is recharging faster, and can be compared to the checking account, where you have withdrawals by pumping and deposits by recharge. The older groundwater aquifers are comparable to savings accounts, where the water in them is more fixed, and does not change as often or as much. When you draw it out by pumping, it may either take a long time to replace it, or it may never be replaced. Educating people by this example has been the most effective way of getting them to conserve.

Ms. Uhlman received a number of questions. One asked by Dr. Villarreal (TDA) was whether the speaker knew anything about the effort to implement a national private well owner monitoring program. Ms. Uhlman said she did, as a member of the Board of Directors for the National Ground Water Association. The main problem with the effort is that most states exempt private well owners from regulatory program requirements.

Some minor changes in groundwater regulation are occurring, notably in New Jersey and Indiana. Dr. Villarreal asked if the drought has caused an increase in the drilling of private wells. Ms. Uhlman responded that the weak economy has had a greater impact, keeping the number of new wells lower than expected during a drought.

One other issue related to droughts and groundwater involved the water table dropping below the top of the well screen. One problem that this can cause is an increase in sediment in the well water. Private well owners have called Ms. Uhlman saying they have sediment in their well water, and Ms. Uhlman explained that the cause was turbulent flow into the well bore caused by a drop in the water table. The drop in the water table concentrates the flow into the well bore into a smaller area, thus inducing the turbulent flow. The turbulent flow stirs up sediment, and one problem with sediment is that it can result in the pump burning out.

Another problem with falling water tables is the potential change in the chemistry of the groundwater, usually caused by the increased presence of oxygen. One of the more serious examples of this is in arsenopyrite rich aquifers, where the introduction of oxygen, when the water table is lowered, causes the arsenic to be mobilized, thus introducing or increasing dissolved arsenic in the water.

#### **IV. Business Items**

There were no business items taken up at this meeting.

#### **V. Information Exchange – Status Updates**

##### **Propazine Monitoring in Texas**

Mr. Ed Baker, representing Albaugh Incorporated, a pesticide manufacturing company out of Iowa, provided a Power Point summary of the company's groundwater monitoring program in Texas since 2008. The original manufacturer and registrant, Ciba-Geigy, dropped the propazine registration some years ago due to economics, since the cost of the requirement by EPA to conduct water monitoring in order to keep it registered was not justified by the market. However, in 2007, Albaugh Incorporated picked up the registration to manufacture and sell the pesticide and planned the required monitoring program based upon the atrazine monitoring program. The surface water monitoring included was conducted from 2008 to 2010 for propazine, atrazine, and the top three atrazine degradates. Simazine was later added as well. Four sites in western Texas were initially chosen, with a fifth site added later in San Patricio County. The sites included:

- Lake McKenzie, NE of Plainview
- White River, east of Lubbock
- Miller's Creek, south of Munday and Seymour
- Lake Stamford, 60 miles north of Abilene
- Calallen Pool, near Calallen, San Patricio County

Information used in choosing the sites included sales data (proprietary) and crop histories for sorghum and corn. The same laboratory in Florida used for the atrazine monitoring program was used for this program. Initial sampling intervals were weekly from May to August and every two weeks during the other months of the year. The weekly interval was shifted to occur from March to June in 2010. Propazine results were all non-detects except for one trace detect in Lake Stamford in 2010, and two trace detects in Calallen. The strange thing with the atrazine results was that it was only detected in the finished samples, but not in the raw samples. Another inexplicable oddity was the 2010 atrazine results for Calallen Pool in that they were nearly all the same throughout the year with only minor variations. Neither of these could be explained. After three years of non-detects in the west Texas sites, EPA allowed the sampling to end in those areas. Only the San Patricio site remains on the sampling schedule.

In other information sharing, Dr. Villarreal asked if anyone knew anything about a petition to ban atrazine. Mr. Cherepon replied that his opinion is the environmentalists behind this are fishing for reasons to get atrazine removed from the market, as one of many ongoing efforts related to the most popular pesticides. He added that Dr. Hayes work in California on frogs has caught the attention of the present administration. Environmental groups are suing the EPA in order to get what they want through the judicial system since they have met resistance in the legislative process.

Mr. Cherepon mentioned that the EPA Region 6 pesticide meeting begins on 10/13/11 in Dallas. The above issue is one of several issues that he plans to bring up at the meeting. Other items include the NPDES Pesticide General Permit, finding a link to the Environmental Defense Fund website on an EPA pesticide chemical data website, new QAPP guidance, and whether EPA will continue with the POINTS pesticide assessment program.

Dr. Villarreal mentioned several items TDA had for the EPA regional pesticide meeting. TDA has new staff to attend these meetings, who need to see how things are done, make contacts, and interface with EPA staff. The most important items are the NPDES permit and TDA's concern that endangered species are being used as a tool to force restrictions. Because of its pervasiveness and its impact on industry and revenue, even the Comptroller has determined that it needs to be addressed soon. TDA is also interested in the future of the POINTS pesticide assessment process, whether it will continue, and if so, how much time they need to allot to it. But Dr. Villarreal commented that TCEQ seems to be on top of the situation, and TDA will wait to see what Mr. Cherepon has to tell them after the meeting.

## **VI. Announcements**

No announcements were made.

## **VII. Public Comments**

There were no public comments made at this meeting.

## **VIII. 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 FY12 second quarter meeting would take place on 1/18/12 at 1:00 P.M., in TCEQ Building F, Conference Room 2210. The Agricultural Chemicals Subcommittee meeting will, therefore, take place on the same date and in the same room at 10:30 A.M.

## **Attachments**

Minutes from the 7/20/11 Agricultural Chemicals Subcommittee meeting  
Draft Proposed FY12 Pesticide Monitoring Plan  
FIFRA Grant 2011 End-of-Year Report/Self-Assessment  
South Texas Pesticide Sampling Summary Report  
Panhandle On-Going Pesticide Sampling Summary Report  
2011 Cooperative Monitoring Report