

**AGRICULTURAL CHEMICALS SUBCOMMITTEE MEETING RECORD**

**TIME AND DATE:**

10:30 AM, April 9, 2008

**LOCATION:**

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

**PURPOSE OF MEETING:**

The FY08 Third 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 State Soil and Water Conservation Board [TSSWCB]
- Texas AgriLife Research [TAR]

**REPRESENTATIVES**

- |                  |                              |
|------------------|------------------------------|
| Joseph L. Peters | Chair, Member, TCEQ, Austin  |
| David Villarreal | Member, TDA, Austin          |
| Donna Long       | Member, TSSWCB, Austin       |
| C. Allan Jones   | Member, TAR, College Station |

**AGENCY STAFF**

- |                  |                |
|------------------|----------------|
| Alan Cherepon    | TCEQ, Austin   |
| Scott Underwood  | TCEQ, Austin   |
| Lynne Fahlquist  | USGS, Austin   |
| Chris Herrington | City of Austin |
| David Johns      | City of Austin |
| Kathy Shay       | City of Austin |

**INTERESTED PARTIES**

- |                |                                   |
|----------------|-----------------------------------|
| Ed Baker       | Syngenta Crop Protection, Mineola |
| Danelle Farmer | Syngenta Crop Protection, Austin  |

## **MEETING SUMMARY:**

### **I. Opening Remarks**

The Chairman of the Agricultural Chemicals Subcommittee, Dr. Joseph Peters (TCEQ), called the meeting to order. There were three Subcommittee members not in attendance, Janie Hopkins (TWDB) and Barry Miller (TAGD), and Dr. Bruce Lesikar (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, was not present to provide an update. Alan Cherepon (TCEQ) mentioned that Lynne Fahlquist (USGS) will give an update later in the meeting on their sampling, and that the USGS has provided about 26 samples to TCEQ to conduct immunoassay analyses. These are from the Austin area. Also TCEQ is getting samples from the TWDB, primarily from the Panhandle. TCEQ would shortly be conducting urban pesticide monitoring in Austin, San Antonio, and possibly Houston. The USGS, Barton Springs-Edwards Aquifer Conservation District, City of Austin, Edwards Aquifer Authority, San Antonio Water System, and Bexar Metro Water District are all cooperating in assisting with this effort. Changes from last year include adding 2,4-D and dropping pyrethroids analyses by immunoassay, as well as performing laboratory analyses for about 15-20 additional samples. Furthermore laboratory analyses will be performed using Methods 515 and 622 in addition to Method 525.2. These two methods can analyze for a number of the more common urban pesticides beyond what can be analyzed by Method 525.2 alone. Wells in the Houston or Dallas area may also be sampled if time and resources allow. These results will help in the pesticide assessments for 2008 as required by EPA.

**Education Task Force:** Bruce Lesikar (TCE), the Task Force Chair, was not present to provide an update.

**Pesticide Management Plan Task Force:** The flow chart developed by the Task Force will be addressed under Item IV of the agenda, under "Business Items", later in the program.

None of the other task forces were active.

### **III. Pesticide in Austin Area Groundwater**

Chris Herrington (City of Austin) gave a presentation summarizing pesticide monitoring of groundwater in the Austin area, and Kathy Shay (City of Austin) gave a presentation and provided a handout on the City's Grow Green program. David Johns (city of Austin) was also present to help answer questions.

Ms. Herrington stated that the groundwater monitoring data, on which her presentation was based, came primarily from the USGS and City of Austin (COA), and included sampling results since 1968. The database includes analyses for 218 pesticides, from 73 springs and 40 wells.

Only four percent of the detects were above detection limits. Atrazine and other triazines were most often detected, with prometon, imidacloprid, diazinon, dalapon, and carbaryl also detected over the years. The USGS has also installed 32 monitor wells extending from San Antonio to Sun City, Georgetown. At Barton Springs the USGS collects samples from the springs three times a year, and eleven wells completed in the vicinity of the springs are sampled annually. The pesticides detected likely originate primarily from weed & feed products applied to lawns. A map of the USGS sampling locations along with an accompanying listing of the pesticides for which the samples were analyzed were provided as handouts.

Ms. Shay presented a summary of their Grow Green pesticide reduction program. The program has a goal of reducing the use of landscaping chemicals that can end up in Austin's waterways, instead encouraging homeowners earth-wise gardening solutions. Program components include providing at the point of purchase of pesticides fact sheets developed by Texas AgriLife Extension on gardening basics and problems, and free training for sales staff. The City has also run a program advertisement on local television and has conducted four neighborhood surveys in priority areas, including pre and post surveys to assess any improvement in water quality by the program. The main emphasis is to wean people away from the general broadcasting of weed & feed. Instead, manual weeding, spot treatment with herbicide, and separate application times for herbicides and fertilizers during optimal weather conditions will reduce the amount of pesticides and nutrients that runoff into local surface water and groundwater.

The USGS monitoring data confirmed an increase in pesticide concentrations in local water resources, with atrazine as the most commonly detected pesticide. Fertilizers and herbicides were also shown to require applications at separate times to optimize efficacy and minimize the potential for leaching and runoff. When combined as in weed & feed and applied together, there is an increase in runoff potential.

The presentations were followed by a request for feedback and questions. David Villarreal commented that most homeowners probably don't read the labels on pesticides, typically resulting in applying more than needed. Donna Long (TSSWCB) added that most people don't want to store leftovers, so they apply more than needed to solve this problem. She also summarized a campaign similar to Austin's in the Chesapeake Bay area of Maryland. The main focus was to save the crabs, a large part of the regions culture and food. Adding incentives to landscapers, who could advertise as cooperating with the City of Baltimore, helped in reducing the amount of pesticides being applied.

Danelle Farmer commented that EPA and Syngenta have re-done the frog study for atrazine. Ed Baker (Syngenta) added that Best Management Practices (BMPs) and water conservation would be most helpful in reducing pesticide run-off. Mr. Baker added that fertilizer dates differ for grass types and weather conditions. Furthermore, urban pesticide usage is unregulated. Additional comments included identifying areas more vulnerable to pesticide run-off impacting water, and preparing materials in Spanish, much of which the City is already doing. Alan Cherepon added that many to most spreaders are probably not calibrated for proper spreading amounts, and could possibly be solved by renting calibrated spreaders where people purchase their pesticides.

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

##### **2008 Proposed Flow Chart for Pesticides of Interest**

Mr. Cherepon provided a summary and handout for the review and discussion of a flow chart for how the state may choose and assess pesticides of interest as related and required under the EPA FIFRA grant program for protecting water resources and life from pesticides. A draft chart was presented for input at the previous meeting, and was revised to the present form. There was no further input from EPA Region 6 except that Texas could do what they thought best. The main steps in the chart were summarized, pointing out that the chart attempts to address the various questions on the EPA pesticide water quality report form.

Some discussion followed. Dr. Jones asked how those pesticides without any health or environmental concerns would be assessed. He also asked if we still need to work out any of these details, and whether this still needs to go to conference with EPA. Mr. Cherepon replied that much of these questions and points are well understood, but that some pesticides still have no trigger at present. EPA will still be given the time to review and comment on whatever we develop, and their input, as well as that of other states, will be sought at the upcoming SFIREG and Region 6 meetings in May. David Villarreal added that Texas is ahead of most states on this work and that EPA sets toxicity standards, and that most pesticides will not make it as pesticides of interest or concern. The EPA Environmental Fate and Effects Division (EFED) combine's environmental and human health concerns, including eco-toxicity, with fate and transport, so Texas should consider doing the same. EPA would be hard-pressed to argue against an approach that they themselves use. The Chair suggested that the task force should continue to develop this, especially with input from the upcoming meetings, and report back to the subcommittee at the next meeting.

#### **V. Information Exchange - Status Update**

A USGS representative, Lynne Fahlquist, summarized the groundwater monitoring plans they have for Texas in 2008. Thirty-two monitor wells have been installed in the Austin area, and sampling of those wells has been completed this week. Parallel samples taken in 40 ml vials were provided to TCEQ from these wells for immunoassay analyses. USGS will also sample certain PWS wells in San Antonio this summer. The USGS will be conducting groundwater monitoring in the San Antonio area this spring and have agreed to also collect parallel 40 ml samples for TCEQ to run immunoassay analyses. Dr. Jones asked if the USGS has conducted monitoring or is planning on any monitoring in the uranium areas for establishing water quality. Ms. Fahlquist was not aware of any. Mr. Cherepon mentioned they could check with the TCEQ Public Drinking Water Section and the Radiation Control Team on this. In addition to the samples in Austin, Ms. Fahlquist stated that the USGS will sample 30 wells in the Wilcox Formation between the Trinity and Rio Grande rivers. Mr. Cherepon asked if TCEQ could also get parallel samples for immunoassay analyses from the San Antonio or other monitoring efforts by the USGS. Ms. Fahlquist responded that this would be possible if TCEQ continues to provide the vials.

## **VI. Announcements**

Dr. Jones said a climate change conference is scheduled for 4/27-28/08 at the Capitol. This conference is supported by TAR, Texas State University, and the University of Texas, and will emphasize climatic effects on water supplies. He added that TAR will be testing a small-scale low cost water purification system developed by a private company. The system may have a niche in being lower cost, more efficient, and require less energy than reverse osmosis systems.

Dr. Villarreal updated the subcommittee on the Salt cedar workshop in progress. The USDA, Texas Parks & Wildlife Department of Texas, New Mexico, and Mexico were participating. The focus is on biological control of salt cedar so as to reduce chemical use. However, Dr. Villarreal stated that he believes chemicals are usually used first, followed by biological controls, and then mechanical methods to clear the brush and keep the cedars from coming back.

Lynne Fahlquist said the USGS has two new publications available On-Line. The High Plains study, which is also available in hard-copy in limited supply at the local office. Also, a report on the health based screening levels, for establishing health-based criteria for many of the organic compounds for which the USGS monitors, and that may be applicable to some of the flow chart work being done by the PMP Task Force.

Donna Long mentioned that the TSSWCB Nonpoint Source annual report is now available.

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

## **VII. Public Comment**

No public comments were made.

## **VIII. Adjournment**

Recorded and transcribed by Alan Cherepon.

## **Attachments**

Slides from the Summary presentation of City of Austin, including a map and list of pesticides monitored for by the City and the USGS

Flow Chart for the Assessment of Pesticides of Interest and Concern

In their afternoon meeting, the decision was made by the Texas Groundwater Protection Committee that the FY08 fourth quarter meeting of the Agricultural Chemicals Subcommittee will take place on 7/30/08 at 10:30 a.m., in TCEQ Building F, Conference Room 2210.