

**AGRICULTURAL CHEMICAL SUBCOMMITTEE MEETING RECORD**

**TIME AND DATE:**

10:00 a.m., November 28, 2001

**LOCATION:**

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

**PURPOSE OF MEETING:**

The FY02 First Quarter meeting of the Agricultural Chemical Subcommittee of the Texas Groundwater Protection Committee.

**ATTENDEES:**

**AGENCIES**

Texas Department of Agriculture [TDA]  
Texas Natural Resource Conservation Commission [TNRCC]  
Texas Water Development Board [TWDB]  
Texas State Soil and Water Conservation Board [TSSWCB]  
Texas Structural Pest Control Board [TSPCB]  
Texas Cooperative Extension [TCE]  
Texas Agricultural Experiment Station [TAES]

**REPRESENTATIVES**

Steve Musick	Chair, Member, TNRCC, Austin
Donnie Dippel	Member, TDA, Austin
Janie Hopkins	Member, TWDB, Austin
Donna Long	Member, TSSWCB, Temple
Murray Walton	Member, TSPCB, Austin
Bruce Lesikar	Member, TCE, College Station
C. Allan Jones	Member, TAES, College Station

**AGENCY STAFF**

Jeanette O'Hare	TDA, Austin
Ambrose Charles	TDA, Austin
Deborah Danford	TDA, Austin
Joe Peters	TNRCC, Austin
Alan Cherepon	TNRCC, Austin
Abiy Berehe	TNRCC, Austin

## INTERESTED PARTIES

Ed Baker	Syngenta Crop Protection
Dave Lawson	Syngenta Crop Protection
Pat Havens	Dow Agro Sciences, Indianapolis, Indiana
Ray Brinkmeyer	Dow Agro Sciences, Indianapolis, Indiana

## MEETING SUMMARY:

### I. Opening Remarks

Steve Musick (TNRCC) called the meeting to order by welcoming everyone to the meeting, and brought attention to the agenda. Item VII will be postponed until follow-up monitoring is completed. This was followed by the Subcommittee members introductions. Barry Miller, Texas Alliance of Groundwater Districts, was the only member not in attendance. (Note the representative change for the TSSWCB, which is now Donna Long). The record of the previous meeting was brought up for changes, and since there were none, it was approved. Mr. Musick then proceeded to the Task Force Reports.

### II. Task Force Reports

**Site Selection Task Force:** The Task Force Chair, Janie Hopkins (TWDB), summarized groundwater monitoring activities of the TWDB in the Gulf Coast, Hill Country, Seymour, and several Minor aquifers, completed during 2001. The TWDB collected samples in the following:

- 566 samples in the Gulf Coast aquifer
- 40 samples in the Ellenberger-San Saba aquifers (Hill Country)
- 48 samples in the Hickory aquifer (Hill Country)
- 57 samples in the Woodbine aquifer (East Texas)
- 18 samples in the Nacatoch aquifer (East Texas)
- 30 samples in the West Texas Bolsons
- 11 samples in the Bone Springs-Victorio Peak aquifers (West Texas)
- 18 samples in the Igneous aquifer (West Texas/Davis Mtns.)
- 8 samples in the Rita Blanca (Panhandle region)
- A total of 890 samples

Ms. Hopkins noted these numbers are different than those TNRCC conducted immunoassay analysis on, as not all landowners were amenable to having pesticide analysis being conducted on their well water. She also mentioned the TWDB was able to get more sample analyses this year due to the lower cost for lab analyses (\$330/sample), and they would also be getting additional Hill Country samples from about 180-200 cooperators in the region, per year.

Next year, the TWDB will sample the Carrizo-Wilcox aquifer (about 400 + wells), the Queen City-Sparta aquifer (200 + wells), and the newly designated Minor Aquifer, the Jackson. These aquifers trend along the inland portion of the Gulf Coast, and the TWDB will try to keep at about 700

samples per year, and continue to coordinate cooperative monitoring with TNRCC for immunoassay analyses of the samples where landowners are open to this work.

(Items V and VI also fall under SSTF purview, but were addressed as separate items in the agenda).

**Education Task Force:** Chair, Dr. Bruce Lesikar (TCE), summarized the various agricultural chemicals related educational efforts:

- Dr. Dana Porter (TCE) conducted training for County Extension Agents and a few Groundwater Conservation District Managers in District 2 in Lubbock, which included water resources, conservation, and quality issues;
- Non Point Source (NPS), wellhead protection and applicator safety/ protection issues were addressed in presentations in Burnet, Johnson, Milam, Falls, and in other Counties;
- Dr. Montey Dozier (TCE) has been working on watershed sampling and well plugging of abandoned wells in various locations, and wellhead protection, water well screening, and water quality for homeowners in Parker, Wise, Jack, Victoria, Robertson, Gray, Oldham, and Haskell Counties;
- Numerous other presentations by both Doctors Porter and Dozier in various locations, similar to above subject matter.

**The BMP Task Force:** The Chair, Dr. Joe Peters (TNRCC), presented a summary of regional BMP sources for possible use in the Panhandle Region (handout provided). Five sources were listed;

- NRCS Handbook of BMPs
- North Carolina Water Resources Institute
- University of Illinois Extension Websites; 50 Ways Farmers Can Protect their Groundwater, and 60 Ways Farmers Can Protect their Surface Water
- Dr. Montey Dozier (TCE), Tex-A-Syst materials
- Dr. Paul Bauman (TCE), various Extension program materials

Steve Musick requested the Task Force complete by the next quarterly meeting the BMP compilation, source identification, and determination of the best way to present this material for the Panhandle region. Ed Baker (Syngenta) mentioned Ciba Geigy(Syngenta) made a brochure for atrazine in the Blacklands region, and volunteered to assist the Task Force in developing one more applicable to the Texas Panhandle, rather than using more general BMPs from N.C., or Illinois. Dr. Jones (TAES) also volunteered to have the TAES publish the finished product, as it might come across more positively to the intended audience if this did not come directly from a regulator agency. Mr. Musick said we could add the findings in our Panhandle monitoring later on. Dr. Lesikar said that Alan Cherepon (TNRCC) has already provided some of this material to Dr. Porter for use in her training efforts.

**State Management Plan Task Force:** There was nothing new to report on the Final Rule. Donnie Dippel (TDA) commented that the SFIREG meeting will be held next week in the Washington, D.C. area. Mr. Dippel said they would be providing/getting additional information on the PMP through Arty Williams (EPA). Mr. Musick suggested the ACS should consider providing input from the

Subcommittee now, for Mr. Dippel to relay to Ms. Williams. Mr. Dippel replied that it would be better to wait and see what Ms. Williams had to say first.

**Data Evaluation and Interpretation Task Force (DEITF):** The Chair, Dr. Allan Jones (TAES), was present, but since there were no charges of work to the DEITF, and none were outstanding, no update was needed.

### **III. Picloram Groundwater Sampling Project Report**

Dr. Pat Havens of Dow Agro Sciences, Indianapolis, Indiana, presented a report on the Picloram program, concentrating on the results relevant to Texas. The Picloram Project was a multi-state study to determine if earlier use of the pesticide had impacted the groundwater in high use and vulnerable areas. Picloram was primarily used as a noxious weed herbicide on grazing land, of which Texas was the state with the highest use. The two year field study was conducted by Stone Environmental, Vermont, and directed by Dr. Havens.

They received cooperation from all states. The initial project presentation to the Agricultural Chemicals Subcommittee was in May 1997, sampling began in 1999, and was completed in August 2001. Optimum groundwater sampling wells were those less than 30 feet deep, with none deeper than 60 feet. Analyses included both immunoassay method, with confirmation of positive detects by laboratory gas chromatography-mass spectroscopy (GC-MS), all conducted by Dow Agro Sciences. Twelve sampling events included analysis by immunoassay at each site. A total of 16 sampling sites were located in Texas. Only one quantifiable detect in 12 sampling events at each of the 16 sites occurred in Texas, in Wise County. The amount detected was 0.9 ppb, which was near the detection limit of 0.8 ppb (Maximum Contaminant Level for Picloram is 500 ppb). Nationwide, only nine out of 95 sites had detects, and 28 out of 1051 immunoassay analyses. Seven of the nine sites were from one area in North Dakota.

The study results indicate product stewardship in protecting groundwater resources. Since the study was conducted over a wide range of use patterns, soil types, and climates, general Picloram product use does not appear to pose a threat to groundwater resources.

### **IV. FY01 Interagency Pesticide Database Report**

Dr. Peters (TNRCC) provided a handout and summary on updates to the Interagency Pesticide Database (IPD) during the 2001 Fiscal Year. The following highlights were included:

- Previous data from 1927-1995 were from 12 agencies, and included analyses for 16,000 analyte analyses, 7000+ samples, with 13 confirmed detects of a small number of pesticides
- New data between 6/93 and 1/01 were from four sources (USGS, TWDB, TNRCC, and Ciba-Geigy/Syngenta), 289 wells, 4111 analyte analyses, and 19 confirmed detects (18 atrazine, 1 metolachlor)
- The cooperative ambient groundwater monitoring in the Panhandle totaled 654 analyte (atrazine) analyses from 619 wells, with 23 detects (confirmation monitoring not yet

- completed)
- Data from 2001 cooperative monitoring in the Gulf Coast, Hill Country, Seymour/Blaine, and several minor aquifers will be added this year

One question from the Subcommittee addressed access to the database. The IPD is not yet accessible on the Website, it is in Paradox software, and could be sent to those requesting it on an as needed basis. However, the user must understand the limitations of the data, which include a growing number of immunoassay results for atrazine and metolachlor, as well as some old data with limited or no Quality Assurance/Quality Control (QA/QC).

## **V. FY02 Proposed Monitoring Plan**

Alan Cherepon (TNRCC) provided handouts and a summary of the monitoring accomplishments for FY01, and the monitoring options for FY02. Most of the first six items on the FY01 plan were completed, which included ongoing post-investigation monitoring at Friona, Tulia and Dimmitt, additional monitoring at Plainview, Hereford and Dumas, and 17 out of the 22 wells with atrazine detects >0.3 ppb from the Panhandle Cooperative ambient monitoring project that were re-sampled.

The FY02 proposed monitoring plan were generated by TNRCC, reviewed by the Site Selection Task Force, and submitted to the ACS for approval. Activity highlights include:

- Cooperative ambient monitoring efforts continue between the TWDB and TNRCC;
- Compile data for Plainview and Hereford PWS systems and prepare charges for the DEITF;
- Monitoring 12 wells at the Hale County Airport in Plainview, either in December or January, for the purpose of verifying the source of atrazine at this location; [4 of these wells were previously sampled, and contained Dense Non-Aqueous Phase Liquid (DNAPL), possibly related to a leaking underground storage tank at the airport];
- Ongoing monitoring at the various PWS systems are in order of priority, with the ones at the bottom possibly not being addressed until summer or next fiscal year;
- Sampling of the five wells yet to be re-sampled, having atrazine detects >0.3 ppb during the Panhandle cooperative monitoring project;
- Possible cooperative monitoring with USGS, should they get authorization to do so ( the main interest is to determine the relative percentages of immunoassay atrazine as parent atrazine, metabolites, and other triazines, with secondary importance being the extension of ambient coverage in Texas).

The Chair asked for comments or questions, and since there were none, he requested the Subcommittee adopt the FY02 Monitoring Plan as is. The Plan was adopted, and will be implemented during the fiscal year.

## **VI. Gulf Coast & Hill Country Aquifers Cooperative Atrazine and Metolachlor Monitoring**

Alan Cherepon (TNRCC) provided a handout with a map summarizing the atrazine and metolachlor screening of groundwater for the Gulf Coast Aquifer. Cooperative monitoring in Texas continued

with the TWDB collecting the samples, and TNRCC analyzing them by immunoassay.

- 10 sets of analysis were run from 3/22/01 through 7/23/01
- 356 well samples, 16 duplicates and 17 field blanks were analyzed for atrazine and metolachlor by immunoassay method
- 39 counties were sampled, with most detects in the counties immediately south and west of Houston
- There were four atrazine detects (with two of these in field blanks) and eight metolachlor detects (with one of these in a field blank)
- All detects, except for one of the atrazines, were below 0.1 ppb, and one well had a detect of both atrazine and metolachlor, all very low concentrations that would likely be non-detects by lab analysis
- Problems include three detects in field blanks, 20 samples frozen and broken (not analyzed), and 15 metolachlor/13 atrazine samples exceeding holding times
- No followup sampling anticipated, due to higher concentrations and priorities in the Panhandle region

Mr. Cherepon provided a handout of the sampling summary of the Hill Country, Seymour/Blaine and various minor aquifers. Highlights included the following:

- Hill Country/Seymour/minor aquifers sampled from 7/7/01 to 8/23/01;
- 38 individual wells sampled in the Hill Country region, in the Lipan, Hickory, and Ellenberger-San Saba aquifers, and analyzed for atrazine and metolachlor by immunoassay method;
- Two duplicates, two field blanks (no detects in blanks);
- Six atrazine detects, all <0.3 ppb, five in Tom Green County, and one in Concho County;
- One Metolachlor detect, Mason County, 0.64 ppb.

Others, sampled from 8/11/01 to 9/18/01:

- 58 wells/67 total samples analyzed for atrazine and metolachlor by immunoassay method;
- Four duplicates, five field blanks (no detects in blanks);
- 13 wells sampled in Seymour/Blaine aquifers;
- 25 wells in West Texas Bolsons (also Bone Spring-Victorio Peak and Igneous aquifers);
- 20 wells from Woodbine and Nacatoch aquifers;
- No detects.

## **VII. Public Comment (Original item VII deleted from Agenda)**

There were no public comments at this meeting.

## **VIII. Announcements**

Janie Hopkins mentioned the Conference on the West Texas Aquifers, hosted by TWDB, will be held the week of 12/3/01 in Alpine, Texas. A field trip is included.

Jeanette O'Hare (TDA) mentioned the Texas Range Society is having their meeting and field day in Odessa on 10/10-12/01. A field trip will be held on the 10<sup>th</sup> to see the salt cedar control program study area on the Pecos River, and the brush control seminar will held on the 11<sup>th</sup> and 12<sup>th</sup>.

Alan Cherepon mentioned the Plant Protection Conference will be held in Corpus Christi 12/3-5/01. TNRCC will provide a table display of pesticide monitoring in Texas, the Pesticide Management Plan, Groundwater Protection Committee and the Agricultural Chemicals Subcommittee.

Donnie Dippel (TDA) mentioned 4 meetings;

- SFIREG meeting, 12/3-4/01, Arlington, Virginia
- Texas Turf Grass Association Conference, 12/19/01, Ft. Worth
- Texas Aerial Applicators Association meeting, 1/10/02, Corpus Christi
- Texas Agricultural Industries Association meeting, 1/20/02, Arlington

The decision was made by the Texas Groundwater Protection Committee that the FY02 second quarter meeting of the Agricultural Chemicals Subcommittee will take place on February 21, 2002 at 10AM, in Building F, Room 5108 (5<sup>th</sup> floor). The Texas Groundwater Protection Committee meeting will follow at 1PM, but will be in Conference Room 2210.

## **IX. Adjournment**

Recorded and transcribed by Alan Cherepon.

## **Attachments**

- BMP Task Force Charge for Central Panhandle region
- Picloram Project presentation slides
- FY01 Interagency Pesticide Database report
- TNRCC's FY01 groundwater monitoring summary report
- SSTF's options for FY02 Monitoring Activities (FY02 Monitoring Plan)
- TWDB & TNRCC map of Aquifers sampled for cooperative monitoring of atrazine and metolachlor, and TNRCC summary reports
- BMPTF Charge for Compilation of Central Panhandle Regional BMPs