

AGRICULTURAL CHEMICALS SUBCOMMITTEE MEETING RECORD

TIME AND DATE:

10:00 AM, May 16, 2002

LOCATION:

TNRCC, Park 35, Building F, Room 3202A, Austin, Texas

PURPOSE OF MEETING:

The FY02 Third Quarter meeting of the Agricultural Chemicals 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 Alliance of Groundwater Districts [TAGD]
Texas Structural Pest Control Board [TSPCB]
Texas State Soil and Water Conservation Board [TSSWCB]
Texas Cooperative Extension [TCE]
Texas Agricultural Experiment Station [TAES]

REPRESENTATIVES

Steve Musick	Chair, Member, TNRCC, Austin
Ambrose Charles	Member, TDA, Austin
Janie Hopkins	Member, TWDB, Austin
Barry Miller	Member, TAGD, Gonzales
Murray Walton	Member, TSPCB, Austin
Donna Long	Member, TSSWCB, Temple
Monty Dozier	Member, TCE, College Station
Bill Harris	Member, TAES, College Station

AGENCY STAFF

Jeanette O'Hare	TDA, Austin
Deborah Danford	TDA, Austin
Joe Peters	TNRCC, Austin
Alan Cherepon	TNRCC, Austin
Abiy Berehe	TNRCC, Austin
Lynne Fahlquest	USGS, Austin
Ed Baker	Syngenta Crop Protection, Mineola
Richard Bowers	TAGD, Dumas

MEETING SUMMARY:

I. Opening Remarks

Steve Musick (TNRCC) called the meeting to order and welcomed every one to the meeting. All members or their representatives were in attendance. Dr. Monty Dozier was there for Dr. Bruce Lesikar, TCE, and Dr. Bill Harris for Dr. C. Allen Jones, TAES. Following introductions, Mr. Musick proceeded to the Task Force Reports.

II Task Force Reports

Site Selection Task Force: The Task Force Chair, Ms Janie Hopkins (TWDB), provided a handout map of where the TWDB is presently sampling. The aquifers being sampled include the Carrizo-Wilcox and Yegua-Jackson. Through the Cooperative Monitoring agreement the TWDB catches an additional sample at each of their sampling sites and sends it to TNRCC for atrazine a metolachlor immunoassay analysis. The map included an outline of the area underlain by both aquifer groups. Except for three to four very low metolachlor detects, there have been no other atrazine or metolachlor detects thus far, out of the over 100 samples analyzed for this area. The TWDB plans on continuing with the cooperative monitoring effort with the TNRCC. A question was asked, whether any samples had been collected in the Brazos River area. Ms. Hopkins replied that the TWDB hasn't sampled the Brazos River area, since they have had some difficulty securing well samples in this area in the past. She also mentioned the TWDB may not be sampling in August due to depletion of their travel budget. A final question for Ms. Hopkins concerned the potential sources of metolachlor in the East Texas Region, since there is no extensive cropland in the region. Ms. Hopkins mentioned possible applications on right-of-ways as one potential source, but since these would have discontinued many years ago, it is not a very likely source.

Mr. Alan Cherepon (TNRCC) reported on TNRCC staff collection and analysis of samples from the Hale County Airport from 3/19/02 to 3/20/02. Samples included 14 airport monitoring wells and three nearby Plainview Public Water Supply (PWS) wells. Two well samples and two QA/QC samples were also sent to Syngenta's lab in Greensboro, North Carolina. These samples were analyzed for pesticides and petroleum product to determination possible interference. The petroleum present was the result of a leak of airplane fuel from a former underground storage tank.

A preliminary verbal report of analytical results from Syngenta indicates considerably lower concentrations of atrazine and metolachlor than obtained by TNRCC immunoassay results. The preliminary verbal report also indicated a considerably lower atrazine concentration for Plainview PWS well 16 than the TNRCC immunoassay results or LCRA lab results. This may be because the analytical method used by Syngenta is different than the one used by LCRA. Immunoassay results also confirmed the presence of atrazine, with all airport monitoring wells having atrazine detects. A lesser number of wells also had metolachlor detects. The main area of metolachlor concentration is located in the area of the pump island and flying service office. The main area of high atrazine concentration appears to be in the same area, but also extending beyond the runway to the south. A final report awaits receipt of the Syngenta lab report. A question was raised concerning the origin

of the airport wells. Mr. Cherepon answered that the wells are monitoring wells related to a former leaking underground storage tank. These wells are the nearest ones to Plainview PWS well 16, which has the highest atrazine concentrations of all PWS wells in the area.

(Item IV below also falls under SSTF purview)

Education Task Force: Dr. Monty Dozier represented the Task Force Chair for Dr. Bruce Lesikar (TCE), who was unable to attend the meeting. Dr. Dozier mentioned that abandoned well closure education events in Angelina County and Gray County are scheduled for mid-summer. Dr. Dozier and Dr. Baumann are also conducting BMP education related to atrazine use at two sites. Mr. Musick mentioned that additional FIFRA funds are available from EPA for education, which could probably be used by TCE.

The BMP Task Force: The Task Force Chair, Dr. Joe Peters (TNRCC), requested continued review and input of regional BMP sources for possible use in the Panhandle Region (Item V on the agenda was covered at this time, due to the limited discussion required for this issue). Mr. Baker (Syngenta) reportedly provided some comments that will be incorporated into the Panhandle regional BMP document.

State Management Plan Task Force: The Task Force Chair, Dr. Ambrose Charles (TDA), had nothing new to report. He did say that the final risk assessment document still had atrazine as a Class C chemical (not a likely human carcinogen), and therefore there was no real change thus far. Mr. Musick summarized the concurrence of the Texas Generic PMP. He reiterated that this plan would be useful in developing any future pesticide-specific plans. He also mentioned that EPA is considering inclusion of surface water in the Final Rule for the program. Murray Walton (TSPCB) mentioned that the public comment period for the atrazine revised risk assessment will end on 7/5/02. Mr. Musick added that he had a copy of the 5/6/02 Federal Register notice and the website address where it can be found. He can be contacted for further information on this.

Data Evaluation and Interpretation Task Force (DEITF): Since at the present time there are no outstanding charges of work for the DEITF, Dr. William Harris, representing the Task Force Chair, Dr. Allan Jones (TAES), had nothing to report.

III. Source Water Assessment and Protection Update

Sean Ables of TNRCC's Source Water Assessment and Protection (SWAP) Team provided an update on the SWAP program. TNRCC has until 5/31/03 to assess all Texas Public Water Supply (PWS) systems. They are waiting on USGS beta software, which will be used to store and recover their program data. The system is being tested by entering the recent perchlorate detects in area of Midland and Levelland. Several Potential Sources of Contamination (PSOCs) exist for this area, including an old armory and naval training station in Midland, an old bombing range and fireworks distribution center in/near Levelland, the Permian salt beds, as wastes from oil field related activities.

The SWAP Team has seven computers, as well as GIS and other software, devoted to the program. Prior to 9/11/01 they had planned to place the maps and location information on the TNRCC Website, but will omit this part of their program due to Homeland Security efforts. On the website, there will be links to various data sets, including the Consumer Confidence Reports (CCRs) and locations of landfills, underground storage tanks, industrial waste, airports, cemeteries, specific businesses, such as dry cleaners. Other agency databases, such as oil and gas well data and other applicable Railroad Commission data, will also be linked.

Presently, the SWAP Team is in the location verification stage of data proofing, using aerial photos and topo maps in this effort. Some 230 standard compounds, such as metals, volatile organic compounds, etc., are included in the database, plus several others that are anticipated as being important to the program. Each will be integrated with a PSOC map and well capture zone area to allow for a rating of high, medium, or low susceptibility to contamination. TNRCC is working with the USGS on how best to factor in different PSOCs and BMPs to take into account the potential volume of potential contaminant present, as well as including an attenuation factor to compensate for distance of the potential contamination from the PSOC. TNRCC is also standardizing and improving the GPS latitude/longitude collection method and electronic location data submittal method, in an effort to improve accuracy, reproducibility, and reduce human error in data transfer.

Only two questions were voiced during the question and answer time. Ms. Hopkins wanted to know who decided on not including the location data/maps on the TNRCC website in the interest of Homeland Security. The TWDB databases are already available on their Website and include location data, such as latitudes/longitudes, well owners, and addresses. Mr. Musick said that EPA has been getting more concerned with the Homeland Security issues, however, this decision was made by TNRCC, probably with EPA's concerns in mind. Another question asked was whether high school photo and science labs are included in the database, since they are notorious for dumping considerable amounts chemical waste into sinks, which feed directly into city drain systems, and eventually into rivers and creeks. Mr. Ables said these are not as yet included, but they are still tweaking the system, and will probably be considering these.

IV Plainview and Hereford SSTF Work Plans

Mr. Cherepon (TNRCC) provided a summary of draft plans for work necessary in completing charges to the DEITF. The SSTF has reviewed and approved the additional investigation activities recommended by TNRCC for pesticide monitoring in several wells in Hereford and Plainview. Additional data on PSOCs and wells are to be gathered; another sampling trip is to be made this summer, prior to the end of the fiscal year; and charges will be prepared for the DEITF.

There were some comments from TDA and TWDB staff. TDA said that no records existed for aerial applicators before 1985. Furthermore, none of their staff had any recollection of an aerial applicator at the Hale County Airport. They offered to assist in the investigative efforts by providing a region inspector to help in gathering some of the missing information on past pesticide applicators and dealers in the area. Ms. Hopkins, the SSTF Chair, had several questions. What purpose would the surface water sampling serve, which program initially detected the atrazine in these two systems,

and what is the significance of five out of the seven contaminated wells in Hereford being located along the creek? Mr. Cherepon replied that previous surface water samples in Hereford have resulted in low atrazine detects by immunoassay method, and could be indicative of a potential source. The initial atrazine detects in both Plainview and Hereford PWSs were discovered by the TNRCC Public Drinking Water monitoring program, through which the atrazine was first detected in samples collected from specific distribution system points-of-entry (POEs). Five of the seven wells with atrazine detects in Hereford being located along the creek indicate several possibilities. The atrazine may have migrated along the creek near the wells. The age of the wells in question are mostly 35 to 45 years old, making them likely candidates for well integrity problems. The city park and a golf course are both located along the creek and near the wells, also making them PSOCs.

Mr. Musick directed attention back to Plainview, and whether there are any PSOCs associated with these wells. The nearest ones to PWS well 16 are the cemetery across the street, the municipal landfills and creek behind the cemetery, and a golf course further upstream and to the west. However, the airport monitoring wells indicate that all wells at the airport have atrazine detects, as well as that several also have metolachlor detects. The cemetery wells, on the other hand, have indicated little or no atrazine. This makes a very strong argument for an airport-related source. The preliminary analysis results by Syngenta indicate considerably lower atrazine concentrations than TNRCC immunoassay results or LCRA lab results on Plainview PWS well 16. This may be the result of using a different analytical method developed by Syngenta.

A question was raised about the groundwater gradient at the airport. The water levels from the monitoring wells indicate a weak gradient radiating away from the area of the former tank/present pump island area. There seems to be a slight gradient toward Plainview PWS well 16. There is a drainage ditch that carries runoff from the airport pump island area and nearby hanger areas directly downhill into a low lying area where PWS well 16 is located. Other facilities located at the airport include another air service, a Texas Air National Guard office/facility, one pesticide dealer (probably related to the cattle industry). Fallow fields and some probable abandoned wells lie to the west.

Hereford has seven wells with atrazine detects greater than 0.3 ppb, five of which are located along the draw. Four of these wells are older than 35 years old. A park and golf course are also located adjacent to these wells. The remaining two wells are located near a former aerial applicator airfield facility, with adjacent croplands.

Presently there are no areas with concentrations near the MCL to concern the subcommittee. The subcommittee will continue to concentrate on educational efforts and voluntary BMPs for the present. Someone asked whether the subcommittee should establish atrazine testing areas. Mr. Musick said that wasn't necessary at present due to the aforementioned reasons. Another question asked whether there were any pesticide retailers or applicators near the Hale County Airport in Plainview. Mr. Cherepon answered that TDA has already provided a database printout of these for both sites. The only one near the airport was possibly across the other side of the airport, near the main entrance. This retail location appears to be abandoned, and the sign indicated it was likely related to the cattle industry. A final question asked was how atrazine could migrate toward

Plainview PWS well 16 to the north of the airport when regional groundwater flow is to the southeast. Messrs. Musick and Cherepon said the airport monitoring wells indicate a different local gradient, with a pattern appearing to radiate away from the pump island. There is an abrupt change in stratigraphy, based on driller's logs, which indicates possible differences between the shallow and deeper groundwater gradients. There are also topographic and pumping factors that may affect local gradients. Mr. Musick encouraged the subcommittee to read the work plans and to provide comments and questions as soon as possible, prior to field activities.

V. Panhandle Regional BMPs

The BMPTF Chair, Dr. Peters (TNRCC), provided a brief summary earlier in the meeting.

VI. Public Comments

There were no public comments made at this meeting.

VII. Announcements

Debborah Danford (TDA) had several announcements for TDA.

- C The pesticide operators and management meeting took place from 4/8/02 to 4/9/02, in San Antonio. Agenda items included cancellation of chlorpyrifos, how this cancellation will affect small business owners, comments on labels and drift, and the Certification & Training Assessment Group (CTAG) activities. There were three issue papers that came out of a preparation session in late April or early May. These issues included the change of the 50-50 grant match to an 85-14 grant match; the establishment of a minimum age for applicators and a proctored exam for all applicants; and funding cuts without a proportional decrease in the amount of work required by EPA
- C The State's FIFRA Issues Research and Evaluation Group (SFIREG) meeting is scheduled to take place from 6/22/02 to 6/24/02 in Washington, D. C.
- C The Association of American Pesticide Control Officials (AAPCO) summer meeting will be held in Kansas City from 8/7/02 to 8/8/02.
- C An invasive riparian plant meeting will be held at the Capitol on 5-23-02.
- C The Agriculture Resources Protection Authority (ARPA) meeting will be held on 6/3/02 at TDA's office in the Stephen F. Austin Building.
- C Donnie Dippel was nominated to the national invasive species committee.

Dr. Harris said the TWRI was looking at developing a working relationship with the USGS for modeling groundwater in the EL Paso area with cooperation from all states in the area (N.M. and AZ). They are also working on groundwater use and management in the Ogallala (High Plains) Aquifer in the Amarillo area. They are also in the preliminary planning stages for a meeting or conference in November or December that will address research and education on water in Texas.

Dr. Dozier said the TCE is holding three conferences for small water suppliers in Austin, Midland-

Odessa, and Corpus Christi. The subject matter will address bacteria detection and regulations, source water, and pesticides.

Murray Walton (TSPCB) provided an update on his agency's Urban Water Initiative grant from EPA. The work involves monitoring of Barton and other nearby springs for pesticides. The first round of sampling was completed on 4/2/02, with no pesticides detected thus far. The results are in contrast to previous USGS results which indicated an atrazine presence. Also, a pesticide use survey for licensed applicators in Travis and Williamson Counties indicates no potential source for atrazine from these potential users.

Ms. Hopkins announced that the TWDB hopes to continue with the cooperative atrazine and metolachlor monitoring program. The TWDB will present this program to the legislature to ensure continued funding for the future.

Donna Long (TSSWCB) mentioned that her agency is continuing work in surface water and on atrazine issues, especially monitoring in lakes and reservoirs like Aquilla. They are also working with TWRI on establishing a library on the identification of e coli. This work also includes TNRCC, the Texas Farm Bureau, the City of Waco, and the Brazos River Authority. Other activities include phosphorous work with TWRI and ARS, and project development for 2003.

Barry Miller (TAGD) commented on the most attended meeting of the TAGD, with 75 members present. With all the groundwater districts in place he hopes they can do a better job of protecting groundwater.

Mr. Musick made several meeting announcements.

- C The National Water Quality Monitoring Council Conference took place in Madison, Wisconsin from 5/19/02 to 5/24/02, with TNRCC presenting a paper on the Texas cooperative pesticide groundwater monitoring program.
- C The Methods and Data Comparability Board will meet in Annapolis from 6/11/02 to 6/14/02. This group works at standardizing field monitoring and lab methods.
- C Colorado State University is hosting a conference on ambient water monitoring network design, in Ft. Collins, in June.
- C The EPA Region 6 Groundwater Meeting will be held in Oklahoma City from 6/18/02 to 6/20/02.
- C The American Water Resources Association Groundwater/Surface Water Interaction Conference will be held in Keystone, Colorado from 7/102 to 7/4/02.
- C The National Ground Water Management Districts Association meeting will be held in Breckenridge, Colorado from 6/11/02 to 6/14/02.

Mr. Cherepon commented on the High Plains Conference in Amarillo, which took place from 4/1/02 to 4/3/02, and which was organized and sponsored by the High Plains Foundation and the Texas Cooperative Extension. The major point of interest at the meeting involved the difference in results between the USGS Panhandle monitoring program and the cooperative monitoring program of the

TWDB, HPUWCD#1, and TNRCC. USGS results indicate no real detection or pattern of atrazine occurrence, while the cooperative program's results clearly support a concentration of atrazine detects in the central Panhandle. The likely reason for this discrepancy is the different goals of the two programs. USGS well coverage was about two wells per county, compared to about 22 wells per county for the cooperative program, and the well selection criteria was different also.

Mr. Musick also mentioned that EPA has cut next year's TNRCC's FIFRA grant by 50%. He is yet unsure on how this will impact the upcoming fiscal year's activities. He will continue to update the ACS on this issue.

Lynne Fahlquest (USGS) announced the Texas Water Monitoring Conference will be held at the Pickle Research Center in Austin from 9/9/02 to 9/11/02.

The decision was made by the Texas Groundwater Protection Committee that the FY02 fourth quarter meeting of the Texas Groundwater Protection Committee meeting will be held July 25, 2002.

VIII Adjournment

Recorded and transcribed by Alan Cherepon.

Attachments

-SSTF Draft Work Plans for Plainview and Hereford

ATTACHMENTS