

AGRICULTURAL CHEMICALS SUBCOMMITTEE MEETING RECORD

TIME AND DATE:

10:30 AM, October 21, 2004

LOCATION:

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

PURPOSE OF MEETING:

The FY05 First Quarter Meeting of the Agricultural Chemicals Subcommittee of the Texas Groundwater Protection Committee.

ATTENDEES:

AGENCIES

Texas Department of Agriculture [TDA]
Texas Commission on Environmental Quality [TCEQ]
Texas Water Development Board [TWDB]
Texas Cooperative Extension [TCE]
Texas Agricultural Experiment Station [TAES]
Texas Alliance of Groundwater Districts [TAGD]

REPRESENTATIVES

Steve Musick	Chair, Member, TCEQ, Austin
Ambrose Charles	Member, TDA, Austin
Janie Hopkins	Member, TWDB, Austin
Bruce Lesikar	Member, TCE, College Station
Allan Jones	Member, TAES, College Station
Barry Miller	Member, TAGD, Gonzales

AGENCY STAFF

Joe Peters	TCEQ, Austin
Alan Cherepon	TCEQ, Austin
Lynne Fahlquist	USGS, Austin
Michael Hare	TDA, Austin
Richard Eyster	TDA, Austin

INTERESTED PARTIES

Ed Baker	Syngenta Crop Protection, Mineola
Donna Long	DLS Technologies, Inc.

MEETING SUMMARY:

I. Opening Remarks

The Chairman of the Agricultural Chemicals Subcommittee, Mr. Steve Musick (TCEQ), called the meeting to order. He welcomed everyone to the meeting. Two Subcommittee members were absent: Jeff Isler (TSPCB), and Kevin Wagner (TSSWCB). After these preliminaries, Mr. Musick proceeded to the Task Force Reports.

II Task Force Reports

Site Selection Task Force: The Task Force Chair was represented by Janie Hopkins (TWDB), who provided a brief summary of work the TWDB will attempt to perform before the end of the calendar year. The TWDB will continue with the cooperative monitoring program, primarily in counties where few or no samples have been collected. The TWDB does not expect many more samples, as irrigation has mostly ended. The TWDB will then begin sampling again around March, concentrating on the Gulf Coast aquifer. Ms. Hopkins also said the USGS will do some sampling of PWS wells in the San Antonio area along the Balcones Fault Zone, and may be sampling some Bexar Metro PWS wells. This is one of the systems that has an atrazine detection, and the USGS may be able to pull samples for TCEQ to do immunoassays for atrazine and metolachlor. Ms. Hopkins also said she had a response from Dr. Scott Senseman at Texas A&M, who says their lab can analyze for atrazine and metolachlor metabolites, and being a research facility, they may be able to give the TCEQ/ACS a break on cost, but would possibly want to use the data to produce research papers. Alan Cherepon (TCEQ) will do a presentation on monitoring activities and the proposed FY05 monitoring plan as Item III on the agenda, immediately following the Task Force reports.

Education Task Force: The Task Force Chair Dr. Bruce Lesikar (TCE), reported that Dr. Dana Porter (TCE, Lubbock) and Dr. Monty Dozier (TCE, College Station) continue to work on educational curriculum and outreach materials which include addressing atrazine issues in the Panhandle. He will provide an update on this later in the agenda. Montey Dozier conducted a water well screening and plugging event in Comanche County in late September, and in Webb and adjacent counties in October.

No other Task Forces had anything new to present.

III. Business Items for Discussion and Possible Action **Summary of FY04 monitoring & the Proposed FY05 Monitoring Plan**

During the introduction of business items, Mr. Musick drew everyone's attention to a letter handout from John Ward (EPA), which addressed recent issues of environmental lawsuits by environmental groups trying to force applicators to get permits to apply pesticides. He asked everyone in the Subcommittee to be aware of this issue, which would require substantial changes for pesticide applicators, should permits be required.

Alan Cherepon followed by providing slide and summary handouts and a presentation on pesticide monitoring activities of FY04, and the proposed FY05 Monitoring Plan. Only the top two tasks were accomplished from the FY04 monitoring plan. This included cooperative monitoring for atrazine and metolachlor, and on-going monitoring of Public Water Supply systems with atrazine detects. Mr. Cherepon mentioned that the other tasks were not addressed due to lower priority status, such as low detections, scattered locations that could not be cluster sampled, and expense and time issues. Mr. Musick asked why prometon wasn't added to the lab analysis. Mr. Cherepon replied that the lab was not set up to do this analysis, and that it would require additional lead time and money to add that analyte to the existing suite of pesticides presently analyzed for.

Under task one, 452 wells were sampled in the cooperative monitoring, with only 10 samples having atrazine detections >0.3 ppb. The highest detect was in Carson county, where the same well had 1.29 ppb atrazine and 1.44 ppb metolachlor. Most of the wells sampled were in the Panhandle region, or directly south. Two maps were presented; one of sample locations for 2004, and one showing all sample locations for the first 5 years of the cooperative monitoring program.

The ongoing monitoring of PWS systems with atrazine detects included the 5 systems already investigated, and 4 other systems in the Panhandle region. Slides of atrazine concentrations by immunoassay analysis since 1999 were presented for Friona, Tulia, Plainview, Hereford, and Dimmitt. Most of these demonstrated a decrease of atrazine concentrations in 2004, as well as a possible cyclical character to the graphs. The apparent cycles appear to be highs in the summer, and lows in the winter. Some points brought up previously included locations of wells, sources, and what may be the cause for the cyclical nature of the graphs. Several suggestions were made, including graphing rainfall, pumping volumes, and lab versus immunoassay results in an effort to determine why the pattern. The most recent results did not plot on two of the graphs for some reason, but a table of these results was provided in the handouts.

Additional details were provided for the Hale County Airport in Plainview. Four new monitoring wells were installed by the new contractor for Miller Flying Service, who is addressing a leaking underground storage tank problem. One of the new wells, #18, has a badly damaged well pad, which may have been run over by a tractor or something else. Wells 4 & 6 had atrazine and pentachlorophenol concentrations above the MCL for each. Notices were sent out to the appropriate people. The TCEQ Superfund team conducted a site investigation in late August to determine whether it would become a Superfund site or not, due to the mixed waste and high detects near a PWS well system. Results were not yet available. Someone asked if there were any supply wells at the airport. Mr. Cherepon replied that there are no records or reports of any existing at the airport.

Some discussion followed, focusing on what would cause the apparent cyclical nature of the high atrazine concentrations in summer or spring, and lower values in the winter. Rainfall and pumpage data should at least be graphed, as well as lab versus immunoassay results. Someone also asked whether the Bexar Metro well that had an atrazine detect was in the Edwards aquifer,

but it was not known. TCEQ records should provide the answer.

Item II of the FY04 Monitoring Plan was the on-going PWS system monitoring of selected wells with atrazine detects. TCEQ sampled 55 wells, sending 22 of these in for lab analysis. There were no appreciable changes except for a decrease in atrazine concentrations, and as mentioned above, two monitoring wells in Plainview exceeded their MCL for atrazine and pentachlorophenol. This raised questions about the potential source for pentachlorophenol, a wood preservative, and how it could migrate into the groundwater. Mr. Musick and Ms. Fahlquist (USGS) commented about the increased head in the underground tank envelope may have been a driving mechanism, and that the subsurface materials are very heterogeneous, and there could be a perched water table.

The second part of the presentation summarized the proposed FY05 Groundwater Monitoring Plan for pesticides. The plan There are four tasks, with the first three similar to the previous year; Cooperative monitoring, on-going monitoring of PWS, and recent detects in PWSs. Cooperative efforts will concentrate on counties with little or no well coverage in previous years, and those areas in the Gulf Coast aquifer with previous detects. The on-going monitoring had the PWSs prioritized, but after discussion, it was decided to move the City of Amarillo up to the number three slot, since TCEQ plans on screening their entire system. Dr. Jones (TAES) asked if there are any plans or guidelines as to when TCEQ would stop sampling the PWS systems in the Panhandle. Mr. Cherepon said that as long as there are inconsistent concentrations from year to year, and concentrations are relatively high, the TCEQ would continue monitoring those wells with the highest concentrations, on an annual basis. A consistent decrease in concentration is the standard used to determine when to cease monitoring a well. Numerous wells have already been deleted from the initial list of wells scheduled for monitoring. Mr. Musick added that the TCEQ also plans to review and interpret the monitoring data that has been amassed during the past five years, and to assess the direction the ACS wants to take, as well as prioritizing work for the following year. This work will include updating and reporting on the Interagency Pesticide Database. The third task is to try and monitor/verify detects in specific wells in PWS systems with recent detects of atrazine. This will include the Bexar Metro system near San Antonio, and two others that have yet to be confirmed. The TCEQ Public Drinking Water Section will be contacted to see if they have plans to re-sample these systems before any definite plans are made. Efforts will be made to coordinate any re-sampling efforts. The fourth task is screening the City of Amarillo's water supply system by immunoassay analysis, with only the wells having the highest atrazine detects being sampled for lab analysis also. Mr. Musick asked for specifics about existing data in the system. Mr. Cherepon said there was only one well at present, with atrazine concentrations near 1 ppb, and some propazine has also been detected.

Mr. Musick reviewed the proposed plan, and discussed possible tweaks to the plan by the subcommittee. Tasks I and II didn't require much change, only a review that counties with sparse coverage would be targeted, and that the City of Amarillo would be moved up to the C position of on-going PWS systems. Also, the Fresh Water Supply Corporation would be combined, at least in name, with the Hereford wells, since they likely have the same source. The monitoring of newer detects in PWS systems would be coordinated with both the USGS and the

TCEQ Public Drinking Water Section, who will also keep the subcommittee abreast of any new detects.

Additional comments and discussion followed. Dr. Jones commented that the atrazine and propazine concentrations were close in numerous wells, and wondered if the lab analysis was actually getting interference from each of the analytes. This was followed by someone questioning whether the immunoassay results should be described as atrazine or triazines, since we are getting interference for a good amount of what we are calling atrazine (mostly metabolites and propazine). Should the Subcommittee look at whether the lab method or lab has a problem with identifying between atrazine and metolachlor. Mr. Musick added that the only regular lab issue was matrix interference, as we are using a drinking water method. The method should be looked into for more details on interference. Mr. Baker said that propazine was likely applied on cotton, which was out of compliance with label use, and hadn't been sold for about ten years, and that the last Section 18 on the product was about 8 years ago. It was odd that we are even getting detections. Mr. Cherepon added that there wasn't even an MCL or HAL for propazine. Mr. Hare (TDA) suggested we review the data to see if atrazine and propazine concentrations mirror each other (do they increase or decrease together). Mr. Musick suggested we study the propazine issue further to try and answer these questions.

With the minor tweaks and suggestions addressed, the subcommittee unanimously decided to approve the plan with the above changes included.

IV Information Exchange

Bruce Lesikar (TCE) provided a brief update on the TCE educational efforts in the Panhandle. The materials are being developed by Dana Porter in Lubbock, and Montey Dozier. There are three focus areas in the curriculum development; awareness of atrazine detections in groundwater, regional BMPs, and how to treat water to remove atrazine, once it is present. The TCE is developing a resource notebook/handbook for the county agricultural agents to address these items. The TCE is also developing educational resources for the county agricultural agents to use at meetings and training events, who requested they be placed on CDs to make them more portable and for wider distribution. Some presentations have already taken place in Lubbock.

V. Public Comment

Mr. Miller (TAGD) asked if maybe someone from the TCEQ Superfund Section could provide an update or presentation on the Hale County Airport investigation for the next ACS meeting. Mr. Musick couldn't promise anything, but thought they should be able to at least provide a summary for the subcommittee, but will check with them.

Mr. Miller also asked what do the states like Nebraska or Kansas do with data they may have on propazine and atrazine, and could someone check on this to see if they have addressed this issue of interference during the analysis.

VI. Announcements

The Texas Plant Protection Conference will be held in College Station on 12/8-9/04.

Mr. Musick announced that on 11/18-19/04, a groundwater quantity/sustainability meeting will take place at the Capitol in Austin.

Mr. Musick also announced that the Perchlorate study by Texas Tech University was completed. They found such widespread distribution was likely due to atmospheric deposition and soils, with a potential link to irrigation to mobilize the downward movement into the groundwater. There may also be a link to certain fertilizers, as well as formations.

Ms. Fahlquist announced that the USGS will be sampling PWS wells in the San Antonio area in FY05.

The High Plains Symposium will take place in Lubbock from 12/7-9/04, and will focus on playa lakes and their impact on the aquifer.

The decision was made by the Texas Groundwater Protection Committee that the FY05 second quarter meeting of the Agricultural Chemicals Subcommittee will take place on 1/13/05 at 10:30 a.m., in TCEQ Building B, Conference Room 201A.

VII. Adjournment

Recorded and transcribed by Alan Cherepon.

Attachments

Summary of Groundwater Monitoring in FY04

FY05 Proposed Groundwater Monitoring Plan

Presentation slides for the FY04 monitoring summary and FY05 Proposed Monitoring Plan

Letter from John Ward, USEPA on permitting of pesticide application issue