

EXHIBIT CC

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OCT 17 2002

EQUUS BEDS GROUNDWATER
MANAGEMENT DISTRICT NO. 2

NARRATIVE

On August 27, 2002 I received an e-mail requesting assistance with a row of trees that had died next to a City of Wichita groundwater recharge demonstration project located southeast of the town of Halstead. A meeting was to be held at the Groundwater Management District No. 2 office in Halstead on August 29, 2002 at 8:00 A.M. I was requested to be at the meeting to discuss the issue and perform a site visit. I called Jim Foster, another Investigator with the Kansas Department of Agriculture to also be present at the meeting.

On August 29, 2002 at about 8:00 A.M. Jim Foster and I met at the GMD No. 2 office located at 313 Spruce, Halstead, Kansas 67056. Also present were Dennis Carlson, a District Forester for the Kansas Forest Service and Michael Dealy, Manager for GMD No. 2. We presented our credentials and offered our business cards to Dennis and Mike. We began with Mike giving us an overview of the project and explaining the problem with the trees to us.

Mike explained that the site located southeast of Halstead was used to recharge water back into the equus beds. The water used for this project was drawn from the Little Arkansas River and piped approximately three miles to the site. Mike explained that Powder Activated Carbon (P.A.C.) was added to the water after it is pumped from the river. When the water reaches the recharge site it goes into a presedimentation basin before being pumped into one of three final recharge basins. Mike said that the water was cleaned up to drinking water quality before being recharged into the ground. Mike went on to explain that there are numerous monitoring wells around the project that are sampled by the United States Geological Survey (USGS) and that the records indicate that there is some atrazine present in the groundwater in small amounts but that no other chemicals they have checked for have been present and that records of all water testing was available if needed.

I asked when the facility was constructed and when did they notice damage to the trees and Mike replied in September 1997 the project was completed and turned over to the city. The trees to his knowledge began to die about 1 ½ years ago (spring of 2001). We then drove to the site for a site visit.

When we arrived we drove to the gate at the center of the project. The project is located at 11414 N 119th St. West in Sedgwick County. We immediately noticed the dead trees to the south of the project. The recharge project was not in operation at the time. I asked how long it had been since the recharge was in use. Mike replied that the city had not run the site in 2001 or 2002. Mike, Dennis Jim and I walked to the south end of the project and walked along the outside of the fence inspecting the tree row. The tree row was Siberian Elms in two parallel rows. Directly south of the recharge project both rows of elms were dead. When we reached the back of the project the north row of elms was dead for about 100 - 150 feet farther but the south row of trees was still alive. The farther east we walked the trees looked better. In the tree row at the east end of the project it appeared that a ridge of soil existed between the rows of trees. I asked Dennis if this was natural and he replied that he has seen soil particles that tree rows slow down through the years fall out and form a ridge in the tree rows.

As we walked back to the back fence of the recharge project the soil ridge ended. As we walked we discussed several other points of the project. Could the water level underground had raised and damaged the root systems of the trees. Mike replied that at any time the water level was about 25 feet beneath the surface. When the project was in operation about 1000 gallons of water per minute was being recharged into the soil and the recharge ponds would barely maintain six inches of water in them because the soil is so sandy in the area. Mike also said that the water level in the test wells never raised by more than six to twelve inches, which would have

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kept the water level far below level of the feeder roots of trees.

Mike asked about the possibility of agricultural chemical damaging the trees. To the north and east of the recharge was milo and soybeans were planted south of the tree row. I explained to Mike that I felt an agricultural herbicide like atrazine, (commonly used in corn and milo) could not have been applied at a high enough rate to damage the trees without doing damage to the crops and if crops would have been damaged our department would probably have been notified.

Also in the tree row was new growth of trees mainly elms and hackberrys. These elms were about 8-10 feet tall. Dennis Carlson took out a saw and cut several of the young trees and estimated their age at 3-4 years. When we arrived back near the road at the west end of the row we observed one siberian elm that was still alive. As we looked around it there also appeared to be a ridge of soil to the north and east sides of it. At this point Dennis, Jim and I all agreed that we felt there had been a soil sterilant type herbicide applied to the recharge site that might have moved off target with heavy rainfall and ended up killing the trees, with the soil ridges at the east end and by the road protecting the trees that were still alive.

Dennis Carlson also made several other points about the dead trees:

1. There were no fire scars on the trees.
2. If a natural cause would have damaged the trees there would be resprouting. There is none.
3. The volunteer trees cut are 3-4 years old. All undergrowth is the same size.
4. Possibly a herbicide 3-4 years ago. The dead trees had the small twigs broken off and the bark was falling off. This would indicate that the trees had been dead several years.

Mike Dealy asked us whether a product like this could have been applied to the tree row intentionally and we agreed that it could have been, but would be impossible to confirm. Mike asked whether soil samples could confirm what kind of herbicide had been used. I told Mike that since we all felt it had been so long and the soil was very sandy, that the herbicide was likely gone and we would not be able to find it in a soil sample.

We then walked into the soybean field on the south side of the tree row. The soybeans appeared to be Roundup Ready soybeans, the weeds appeared to have been sprayed. As we walked along the row we observed much the same as the north side of the row. When we reached the back edge of the recharge site the elms started to have a few live limbs in them and then gradually returned to normal.

I asked Mike who all would have been to the site to look at the trees and who from the water department for the city maintains the site. Mike told us that a city forester had been out to look at the site about a year ago and that Gerald Blain, the Water Projects Supply Manager, and Rich Robinson, who worked at the water department field office near Halstead would have the most knowledge about maintenance at the site.

Mike then asked how he could receive a copy of my report and I advised him to call the KDA Topeka office and request a copy after the case is reviewed and closed out. Dennis Carlson said that he would send to me a copy of his report. Jim and I thanked Mike and Dennis for their time. They then left the property.

I proceeded to take several photographs of the site and the tree row from the north and south sides. Shortly thereafter we left the site. I then drove to the City of Wichita Water Dept. field office located 2 miles west and 2 miles south of Halstead. When I arrived I did not find anyone at the facility. I then left the area.

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On September 3rd I spoke with Rich Robinson by phone. I first asked Rich if he had been with this project for all five years and he said yes, since it had been built. We then discussed when Rich had noticed the trees dying and Rich thought he remembered the trees dying about 2 years ago. I asked Rich what herbicides had been applied to the site through the years. Rich replied that no herbicides, including Roundup had been applied to the site. It was their standard practice to mow and string trim the fencelines. Rich said that USGS had recommended that no herbicides be applied to the site since there was monitoring wells present, to mow and trim only. Rich went on to say that it meant string trimming the inside of the recharge ponds and hand pulling the weeds sometimes. I also asked Rich whether a herbicide had been applied by the original contractor and he said to his knowledge none had been applied.

I then tried to talk to Gerald Blain. I was informed that he would be out of the office for the week but that a message would be left for him to call next Monday. I talked to Tim Martz, the City of Wichita Superintendent for Parks and Recreation. Tim said that Craig Steward, the city arborist or Jim Smith, the General Supervisor had been out to look at the trees. He would have Craig give me a call.

On September 4th I spoke with Craig Steward. Craig said that Jim Smith had been out to the site a little over a year ago. Jim told him that he felt a soil type herbicide had been applied to the trees killing them.

On September 9th I spoke with Gerald Blain. Gerald said that he remembers trees dying about two years ago in the summer of 2000. He said that after the trees started looking bad that they died within about two weeks.

In conclusion, from the evidence seen and the individuals talked to, the trees appeared to have been killed by a soil sterilant type herbicide anywhere from two to four years ago, depending on the source of the estimate. No respondent has been identified as having made the application of herbicide in the case.

Shawn Hackett
Shawn Hackett
Investigator
Kansas Department of Agriculture

9-9-2002
Date

Attachments:

Site Diagram - 2 pages
Photographs - 8
letter from Dennis Carlson, Kansas Forest Service - 2 pages
letter from Michael Dealy, Manager, GMD No. 2