

PNM  
REC 91

Memo to the file 11/14/91

From: Joseph Kennedy

RE: Meeting with PNM to discuss Corrective Action Directive at Person Station Facility.

In attendance were:

Name	Title	Phone
Laurie Chisolm	Manager, environmental services	848-2015
Ron Johnson	Sr. Environmental Scientist	848-2998
Gary Richardson	Metric Corporation	828-4300
Joe Kennedy	NMED, WRS III	827-4300
Bruce Swanton	NMED, Supervisor	827-4300
Steve Alexander	NMED, WRS II	827-4300

Ron: Our objectives are the same but our methods are different.

Gary: Ron will bring final document up next week with revisions. Their most significant differences are: Locations of wells and number to define the limits of the plume. He described the site using a large areal photo circa 1987. Indicated an estimated plume areal extent of rather limited size. Proposed a set o wells of about 200-300 ft spacing in a phased approach. Proposed 3 wells between 8 and 6 and 8 and 5 on the edge of an arroyo near dirt road and west of borrow pit road. They would use auger with continuous cores using CME rig. 3 1/4 in. hollow stem auger collecting 2-3" cores. 5 ft. sampler with split tree. They want to use MCLs instead of MDLs for vertical extent of plume.

Wells would be developed and sampled immediately. IF MCLs are exceeded in any well, they would then decide where to put the next well. He proposed keeping tight communication (weekly) so as to avoid any problems. In other words, a very flexible, contingency type approach.

Joe: What will you use as your background well?

Gary: Well 7.

Ron: We have asked owner of East property about access to drill wells (Clifford). He said he would like to know of proposed wells. Probably no problem.

Joe: There is more than one plume we are chasing. Our concern is that three wells won't provide adequate characterization of the aquifer.

Gary: we see this as a dispersion plume, not advection.

Joe: If we agreed on this, I would need to see a well put in near well 6, NE of PNM property.

Gary: the plume has "matured" and is shrinking as far as the MCL limits. This is evidenced by the soil gas surveys taken in 1985 and 1990.

Also, the water table in the area is dropping, especially since the farmers in the area to the west have quit irrigating since 1985.

We want the water table wells to be screened at 5 up and 15 down. Want top cluster wells to be 15' screened. Deeper wells to be at 30-40, and 50-60'. Want a phased approach: decision to put in the next deeper well in the cluster based on the MCL being exceeded or not in the existing well.

Do we need vertical gradient information for its own sake?  
Can we move North cluster even farther north.

We suggest a double cased, rotary drilled well for the deeper wells. The proposal will include containerizing of muds prior to sampling analysis. Development water will go to the sewage treatment plant. We would like to put it in the cooling tower basins if at all possible and let them evaporate.

In the deep wells, we would rotary drill 5' at a time and circulate up the samples so as to get better samples.

Joe: Could a reverse circulating bit be used so that we could get better samples.

Gary: There is only one rig in ABQ that can accommodate a reverse bit and it is huge.

Gary: As far as the sample logs are concerned, could we use the University of Oklahoma procedure. This is widely accepted. We will send Joe a copy of the documentation.

We also would like to propose only one of the well clusters you have perscribed. We will put in deeper wells for every water table well we drill that encounters contaminants above the MCL limit. Our approach is a simple way to define the MCL edges and the bottom side of plume.

We also object to the piezometers because piezometers in the source area could open up a conduit for the contaminants, if there are any.

Joe: we need these as indicators of deeper flow zones, not only gradient, but also the direction of gradient.

Ron: Is it necessary to sample for appendix IXs in every well. We would rather sample for SW-846 8240.

Bruce: I am concerned about too few wells and will probably advise Joe to keep the conservative plan.

Gary: I would like to see a definite number for vertical extent of plume rather than MDLS.

Joe: I would like to wrap up with my feeling of needing to define the different pathways of groundwater since it cannot be determined by the few wells they are proposing. I reiterate what Bruce said about conservative well placement and using MDLS for vertical definition.