

Village of Corrales
Fifth Public Meeting – January 24, 2007
Hydrogeology & Draft Peer Review Report
Questions and Answers

- Q. You were expected to check all contaminants. Why didn't you check Rio Rancho contaminating Corrales?
- A. We did not have any data to substantiate that.
- Q. Do any of these system costs include administrative costs?
- A. We recommend \$150,000 per year for Village administration no matter what is chosen. There are not costs included for accounting and billing. The cost also includes operators, monitoring, etc.
- Q. If you store the effluent water for five months, how will you use it as well as the new effluent?
- A. You could as another alternative send the effluent water to the river for five months instead of storing it in ponds. You would have to have a place to use the water stored for 5 months over winter. You have to justify the value and need or you would not want to spend the capital costs for 5 months of winter storage.
- Q. As high as the water table is in Corrales can you inject the effluent water back into the ground?
- A. Yes, but you have to be careful to do it away from structures as the groundwater will mound.
- Q. The South Valley has had problems with the sewage system backing up into homes. Who pays for the damage cause by that?
- A. Whoever is in charge and responsible for the wastewater system.
- Q. Can you remind everyone that the costs of \$3.5 or \$4 million for the connection of the Business Core in the original PER included 150 homes?
- A. The original PER was looking at a large gravity force mainline. Those costs were too low. It would likely cost \$6 million for that today.
- Q. Please explain why you think a disruption of the riding trails is just as bad as the disruption of Corrales Road?
- A. The riding trails are part of the acequias and that is a potential route for piping if approved by the Conservancy. I'm not going to answer that specifically right now as that would be addressed in the required environmental impact report. I do think it's an important consideration.



- Q. You didn't include any recommendations on new construction?
- A. ATU's would be required in all new construction in the Village. That should be clarified for all Village sectors.
- Q. A lot of your stuff goes to ATU's. There is testing involved with the ATU's and a lot of people that have them are not in compliance. What is the cost to the individual?
- A. I'd estimate that over 90% of the individuals that have installed ATUs in New Mexico were required to by NMED install because they were contaminating groundwater and impacted a drinking water well, their own or someone else's. That's non-voluntary installation and requires periodic sampling. NMED has admitted they have not done a good job in the past monitoring ATUs. Their recent report in December 2007 commits to doing a better job. This is also why we recommend the Village monitor any installed ATUs. If you install an ATU voluntarily, you are not required to sample, only twice per year inspections. However the NMED, and SMA, recommends some sampling should be done.
- Q. If the Village is going to be required to monitor the ATU's how will they be sure they are going to get a company to do the monitoring that will not be out of business in a year?
- A. There are several companies on the NMED approved list that are national and international companies that have been around a while and are not going to be out of business in a year.
- Q. I have four businesses; will I be forced to go to the STEP system? How much will it cost me?
- A. You will be required to install a pump and a flow meter. You are probably looking at an initial cost of \$40,000 for all four businesses. You will also have to pay an impact fee and monthly rates to ABCWUA.
- Q. You mentioned a web site with information on the ATU's?
- A. It is on the NMED web site under Liquid Waste Program information. The link to that site is www.nmenv.state.nm.us/fod/LiquidWaste/.
- Q. You didn't show a comparison to Larkins recommendations?
- A. We did show a comparison in our report.
- Q. You were talking 6 inch pipe and the volume compared to a larger pipe size. If you just take the liquids from the Business Core you don't show the costs?
- A. You will always have to pump the tanks using a STEP system. What you are doing is putting zero wastewater discharge into the groundwater. The Business Core is not fully developed and its hard to estimate the wastewater discharge for the future. It's very dependant on the type of business. Wastewater piping is not like water piping. Wastewater piping has to be sized so that a minimum flow can be achieved to keep the pipe clean. You can not oversize the pipe much as you will lose that required flow.



- Q. What is the 6 inch pipe for?
- A. 50,000 gallons per day from the Business Core. It was in the previous PER and we have agreed with this number. I can't make an estimate of what might be required in the future as it depends on the type of business. Using 50,000 gpd means someday that flow might be reached and you would limit new businesses or have to put in another pipe. The second pipe could go in the same time as the first but easiest if it is the same 6-inch in size.
- Q. The Town of Bernalillo has their own system. Do you know what their system is?
- A. Yes, they have replaced an oxidation ditch with an activated sludge system. They are also treating biosolids with a digester and then running through a belt press.
- Q. What would be the risk or urgency factor going into the future?
- A. We can't say. As we have said previously, the data is hard to collect but there is evidence of concentrations of nitrates above background for a number of years and anoxic conditions east of Loma Larga Road.
- Q. If we were on a federal monitoring program, would we be able to tell?
- A. I have heard that some people in Corrales will only drink bottled water as their well water is not good to drink. People don't wait until water conditions are out of regulatory compliance before they take corrective measures. From all the information gathered up to today, we see it is an issue. NMED has Corrales on it's radar because of this.
- Q. Have there been improvements made in the septic tanks? What about a property on a five acre lot? Is it acceptable to have an exception to the two year need?
- A. Septic tanks are very similar to those of old except that new ones have baffles in them and an effluent filter is commonplace. If a septic tank is on a 5-acre lot within a sector requiring upgrade to ATU that lot should also upgrade as it is contributing to the aquifer and the intent is to reduce the level of contaminants discharging to the aquifer. It may be acceptable to have an exception to the two year need but this is what's recommended and it is an aggressive schedule. There are 388 homes in the area recommended as two year need.
- Q. Your base map seems not up to date. There are 150 homes at the South End. If you have a grouping of 20 one acre lots clustered would you look at that in the same way?
- A. Our base map is from Sandoval County GIS. We will look into the areas you pointed out. We did not see a grouping of small lots with houses in Sector D. Any new construction in any sector would require an ATU.
- Q. What are the health effects of high nitrates?
- A. High nitrates cause what is known as the "blue baby syndrome" in new born infants where it does not allow enough oxygen uptake. It can also cause reproduction issues.

- Q. We have started to see extra houses built on some one acre lots. How will that be handled?
- A. The building of extra homes will need to be decided by the Village. NMED Liquid Waste regulations are based on the number of bedrooms. If they are exceeded more than one ATU should be required.
- Q. People won't drink the water anyway.
- A. Over time the water chemistry will improve, but it will not happen overnight. It will take quite some time.
- Q. How are construction costs based for the future?
- A. Our construction estimates have a 20% cost contingency.