AE Progress Report 11.10.08

#Cuatro Comunidades #Tamara #New Communities #Flow Control Modules

Cuatro Communidades

They have begun preparing the contruction platform for the plant. A lot of excavation is required for the tanks and the land is quite rocky, but they are making progress with about 6 people working. Ing. Serrano is thinking about bringing dynamite to speed up the process. The goal is to be done with excavation the end of this week.



APP contracted a bus to bring 60 residents from the Cuatro Comunidades to Ojojona Saturday 11.08 so they could see the plant. Everyone seemed to enjoy the excursion and it should help build consiousness and enthusiasm in the community.



Tamara

The water board finished construction of the pressure break box 60m befote the plant. We were there Friday 11.07 when they connected it. It seemed to work fine, but the flow from the Manzanal source is intermittent (due to air in the conduction line), which causes the pressure break box to empty at times, reducing flow to the plant. We think they need to install a gate valve at the entrance to the pressure break box to regulate flow in the Manzanal conduction line and maintain it full. They might also need air-release valves farther up in the line.



Carlos said that the sedimentation tank we cleaned and modified a week ago has been functioning well. Carlos, Karin (the Tamara fontanero), Moncho (of the Tamara water board) and Antonio cleaned the other two tanks and modified the entrance pipes in them.

New Communities

Wednesday 11.05 Antonio and John travelled to Jalaca, a community that belongs to the municipality of Talanga. We took measurements of a 30-year-old roughing filter there built by SANAA that is still structurally in good shape and we think could be converted into an AugaClara plant with not very much effort. They also have a round slow-sand filter that could be used as additional storage or maybe even as a finishing filter after the AguaClara plant. They are still using the filters but don't seem to have very good results. At times they say the water leaves dirtier than it enters and it is a costly task to clean the filter. Jalaca recently raised the water tariff from 6 to 30 Lempiras but they think another raise might be difficult. This could be a good opportunity to build a low-cost plant, but we'd need to make sure the small community of 250 houses would be able to adequately maintain and opperate it.



Thursday 11.06 the entire team gave a presentation at the municipal meeting in Villa de San Francisco. We gave our 40-min presentation on the plant to the mayor, the vice-mayor and a lot of the council members. They seemed quite interested in the project. We realized that this sort of presentation, given to the municipal authorities during one of their regular meetings, might be a better way to reach the people who make decisions. Often, we put a lot of effort into organizing a special meeting to talk about the plant and very few people of authority actually arrive.



Flow Control Modules

We've been furthur analyzing the clogging of the chlorine flow control modules. Carlos, the Tamara plant opperator, says that the chlorine flow controller clogs every few days if he doesn't clean it. To clean it he washes the float valve with vinegar. I assume this washes away any buildup or sediment.

We took apart the float valve in Tamara to see how much precipatate had built up inside. Even though Carlos had cleaned it the day before, there was still some visible buildup. After looking at this coating I thought that the CO2 precipitation theory made a lot of sense. However, we also cut one of the hoses that goes from the storage barrel to the float valve in half to look inside. I assume there shouldn't be much air or CO2 arriving in there, but there was still precipitate buildup. The buildup in the hose suggests that the precipitate might form even when the solution is not exposed to air.

