

MINUTES OF THE SAN ANTONIO WATER COMPANY
PLANNING, RESOURCES, and OPERATIONS COMMITTEE
May 24, 2016

An open meeting of the Planning, Resources, and Operations Committee (PROC) of the San Antonio Water Company (SAWCo) was called to order at 2:57 p.m. on the above date at the company office located at 139 N. Euclid Avenue, Upland, California. Committee members present were John Gerardi, Will Elliott, and Tom Thomas. Also in attendance were Pete Hall with MIH, Inc., SAWCo's General Manager Charles Moorrees, Assistant Manager of Administration and Finance Teri Layton, and Administrative Specialist Kelly Mitchell. Mr. Elliott presided.

1. Recognitions and Presentations – None.
2. Additions-Deletions to the Agenda – Mr. Moorrees added a presentation by Ms.Layton regarding Chino Basin Watermaster to the agenda.
3. Public Comments – None.
4. Approval of Committee Meeting Minutes:
 - A. ***Regular Committee Minutes of January 26, 2016*** – Mr. Thomas moved and Mr. Gerardi seconded to approve the meeting minutes of March 22, 2016. Motion carried.

Mr. Ryan Shaw with the City of Ontario entered the meeting at 2:59 p.m.

5. Planning and Operational Issues:
 - A. ***Well 31 Pilot Treatment Plant*** – Mr. Moorrees advised the committee that SAWCo's Well 31 experiences high levels of Dibromochloropropane (DBCP's) as a result of past citrus irrigation practices. Well 31 levels of DBCP's exceed the maximum contaminant level (MCL) and cannot be blended with Cucamonga Basin Well 2 like Wells 3 and 24 currently are.

Staff visited the MIH pilot plant in Ontario roughly a year ago and staff was impressed with the results and little waste generated. Staff had previously looked into various ways of treating water with high contaminant levels but found them to be cost prohibitive with considerable waste produced. MIH, Inc.'s treatment plant has recently been approved by the State Department of Drinking Water in concert with Evoqua which incorporates the tail end system of filtration and disinfection. SAWCo was asked to consider a pilot plant at Well 31 in Cucamonga Basin.

Although SAWCo is interested in biological treatment it delivers 'raw' water to its entity shareholders regardless of its contaminants. In order for SAWCo to deliver entitlement to its shareholders something needs to be done about the levels of contaminants to allow entity shareholder to receive Cucamonga Basin water for domestic consumption.

Steve Corrington entered the meeting at 3:01 p.m.

Rosemary Hoerning entered the meeting at 3:02 p.m.

Mr. Moorrees also spoke of the fact that developing an interconnect with Cucamonga Valley Water District (CVWD) at Hummingbird Lane by Well 31 so that SAWCo can treat CVWD and SAWCo wells is part of SAWCo's Water Master Plan.

Mr. Hall, inventor of the Hall Reactor, described the pilot treatment plant. The system does not produce any foul smell. The only byproducts of the system are nitrogen gas, water, and dead bacteria. If not controlled, sulfate in the water will attract bugs which will create a hydrogen and sulfate (rotten egg) smell.

CVWD has approached Mr. Hall about building a pilot treatment plant at their facility. SAWCo's Well 31 is in the same aquifer as CVWD's wells. Mr. Hall recommended cost sharing by the parties benefiting from the pilot; CVWD, SAWCo, and the City of Upland.

Mr. Hall then explained how the pilot treatment plant will bring the raw water to current drinking water standards. Regulations require turbidity to be .3 and 4 log reduction of bacteria in order to be considered drinking water. The biggest variable in cost of the water produced is the electron donor which puts the hydrogen at the correct level. The higher the concentration of nitrate the more the electron donor is required, increasing the cost. The range could go anywhere from \$100 per acre foot (AF) to \$200/AF depending on how high the nitrates are in the water to start.

There was continued discussion on the pilot treatment plant including costs, funding, entity participation, sampling, etc.

Mr. Thomas moved and Mr. Gerardi seconded to continue the process of looking into the pilot treatment plant at Well 31 with participation from CVWD and the City of Upland. Motion carried.

- B. Edison Pond Expansion Study** – Mr. Moorrees advised the first draft of the Edison Pond Expansion Study by Canon Engineering was submitted at the last PROC meeting. The intent is to reduce the bulking effect in the surface water collected from the San Antonio Creek so that less water is discharged. Reduction in turbidity to 20 NTU's or less is expected.

Mr. Moorrees recommended the committee receive and file the final Edison Pond Expansion Study report.

Mr. Thomas moved and Mr. Gerardi seconded to approve the General Manager's recommendation. Motion carried.

Greg Ripperger with Civiltec Engineering entered the meeting at 3:38 p.m.

- E. "Draft" Urban Water Management Plan** – Mr. Ripperger summarized the Urban Water Management Plan (UWMP) with the committee. The purpose of the UWMP is to protect water supply and is required by the State of California. There

is a lot of redundancy in the report due to SAWCo being a shareholder company as well as supplying domestic and wholesale water.

Mr. Thomas questioned the validity of the data on page 13 that stated between the years of 1957-2015 there was a maximum of 40 inches of rainfall. Mr. Ripperger stated the precipitation data was taken from a Pomona weather station. The committee advised rainfall data should be taken from the San Antonio Dam for a more accurate account of the amount of precipitation during any given year. Mr. Ripperger advised he would update the numbers to reflect San Antonio Dam rainfall data and also make reference to the location of the data for future reference.

The committee discussed water projections for the next five years.

Mr. Thomas inquired about import water and whether any agreements are in place or will be in place with nearby agencies to receive water in an emergency. Ms. Hoerning stated that would need to be discussed with those agencies and isn't something that is necessarily put in an UWMP. Mr. Moorrees mentioned the emergency connections SAWCo already has in place with bordering agencies as well as projects listed in the Water Master Plan to make additional connections in the future. Mr. Thomas requested the documents in regards to emergency water use with agencies SAWCo has a direct connection to be brought to the committee in the future for review.

Mr. Moorrees asked the committee to receive and file the final draft UWMP and make recommendations for the Board and Public Hearing as appropriate.

Mr. Thomas moved and Mr. Gerardi seconded to recommend scheduling the Public Hearing to adopt the UWMP to take place at the next Board Meeting. Motion carried.

Mr. Ripperger exited the meeting at 4:01 p.m.

- C. ***Tunnel Water Quality*** – Mr. Moorrees advised SAWCo continues to get bad bacteria samples from the Tunnel before chlorination. The environmental engineer recommended chlorinating the Tunnel over a long period of time. Matt Chlor chlorinated the Tunnel at 20 gallons per hour for 33 hours but resulting samples show positive for bacteria albeit non e-coli fecal.

The Department of Drinking Water (DDW) recommended taking samples daily for two weeks. A memorandum will be submitted to the State of California for final decision on the disposition of the Tunnel. In anticipation of DDW requiring SAWCo to treat the Tunnel water before delivery into the domestic system they are looking into moving the MIOX System from the Forebay to Shaft 6 for 4 log inactivation. Staff will present DDW's final decision as well as any requests for funds to implement the decision to the Board.

Mr. Thomas moved and Mr. Gerardi seconded to receive and file the update on the Tunnel water quality issue. Motion carried.

F. Chino Basin Watermaster Update – Ms. Layton shared a PowerPoint presentation on the Safe Yield Agreement and the Desalter Replenishment Obligation and how it affects the service agreements SAWCo has with shareholders.

D. Water Service Agreements – Mr. Moorrees gave a brief history on the water service agreements SAWCo has or had with the City of Upland, Monte Vista Water District, and the City of Ontario.

Mr. Thomas commented the reason for creating service agreements was they helped balance the cash flow and avoided majority shareholders from going into the second tier rate. He stated that though legal counsel advised differently he felt SAWCo should still offer service agreements, however, they should be audited quarterly.

Ms. Layton remarked the selling point to the San Antonio Heights shareholders in regards to the service agreements was that there was going to be a stable monthly income. If SAWCo enacts another service agreement with the understanding it will be audited and the agreement will change accordingly it is unfair to other shareholders and defeats the purpose of creating stable monthly income.

Mr. Thomas suggested changing the amount of usage charged each month to something less than entitlement. Ms. Layton felt that was something that could be looked into. Mr. Moorrees offered the idea of majority shareholders leasing the shareholdings they do not use to other entity shareholders.

It was agreed that SAWCo will look at the water service agreements with the water rates study currently taking place.

6. Planning and Operational Update -

A. *Project Status Report* –

- **Holly Drive Reservoir Design** – Kick off meeting was held.
- **Water Rates and Fees Study** – Going to the AFC for recommendation on June 7th and to the Board for award on June 21st.
- **Water Master Plan Update** – Still in process. Should be completed by the end of the year.
- **Basin 6 Desilting** – Noise study is near completion. Once that is completed the Environmental Report will be available for review.
- **Cucamonga Crosswalls Project** – Waiting for the approval of the haul route by the City of Upland and the Army Corps of Engineers waiving the 404 permit requirements. Army Corps is now requiring a nationwide permit which takes a minimum of 60 days to acquire.

7. Basin Issues and Updates

A. *San Antonio Canyon Watershed* – The 12th Annual Clean Up Day is scheduled for Saturday, July 9th.

B. *Chino Basin* – Nothing new to report.

C. *Six Basins* – A Board meeting is scheduled for the following day.

Ms. Layton exited the meeting.

6. Planning and Operational Update

B. *Facility Update* –

- **Res 7** – Listed in the Water Master Plan, SAWCo will look at replacing the reservoir.
- **Well 19** – Potential Rehabilitation of this Cucamonga Basin well.

8. Committee's Comments and Future Agenda Items: – Mr. Thomas requested exploring the emergency connections and formal agreements with those entities that have access to import water.

Adjournment: –The meeting was adjourned at 4:47 p.m. Motion carried.

Assistant Secretary
Charles Moorrees