



REGIONAL WASTEWATER RECLAMATION ADVISORY COMMITTEE

Water and Energy Sustainability Center
3035 W. El Camino del Cerro
Training Room

MEETING MINUTES

Thursday, January 19, 2012

Committee Members Present:

Ann Marie Wolf	Barbee Hanson	Armando Membrila
John Lynch	Bob Iannarino	Mark Stratton
Sheila Bowen	Kendall Kroesen	Jackson Jenkins
John Carlson	Amy McCoy	Jeff Biggs

Committee Members Absent:

Brad DeSpain	Rob Kulakofsky
Bill Katzel	

1. PLEDGE OF ALLEGIANCE.

- 2. CALL TO ORDER.** Ann Marie Wolf, Chair, called the meeting of the Regional Wastewater Reclamation Advisory Committee (RWRAC) to order at 7:46 a.m. Veronica Lopez took the roll call.

Ed Curley noted placement of the microphones in the room and also reminded everyone that the tour of the Water and Energy Sustainability (WES) Center would be held at the end of the meeting.

- 3. CALL TO THE AUDIENCE.** There were no comments from the audience.

- 4. APPROVAL OF MINUTES.** The minutes of the December 15, 2011 meeting were approved.

5. COMMITTEE/SUBCOMMITTEE REPORTS.

A. CITIZENS' WATER ADVISORY COMMITTEE (CWAC) UPDATE.

Jeff Biggs, Tucson Water, stated the Committee unanimously voted to approve the Tucson Water Financial Plan at the January CWAC meeting. Mr. Biggs also noted that the plan calls for an 8.3% revenue increase over the next 5-years; however, they do not know what the rate increases will be until the process is completed.

6. DISCUSSION/ACTION.

A. OLD ITEMS/UPDATES

- 1. DIRECTOR'S UPDATE/IN-DEPTH REPORT ON THE REGIONAL OPTIMIZATION MASTER PLAN UPDATE.** Jackson Jenkins presented a PowerPoint and provided a detailed update on the Regional Optimization Master Plan (ROMP). Mr. Jenkins stated

that this is the biggest project for the Regional Wastewater Reclamation Department (RWRD), and also for Pima County, which originally had a budget of \$720 million. Mr. Jenkins provided an overview of topics to be discussed in his presentation.

Mr. Jenkins began his presentation discussing the Ina Road Upgrade and Expansion Project and stated that the primary purpose is to be in compliance with the quality of the effluent that is discharged into the Santa Cruz River. Mr. Jenkins stated that RWRD's intent is to make A+ water and the Master Plan was prepared to comply with the regulatory issues and expand the capacity of the system to meet the 2030 population projections. Mr. Jenkins pointed out that the facility is going from 37.5 MGD to 50 MGD and the existing process is going to the Bardenpho technology. Mr. Jenkins also stated that all of the biosolids will be taken to Ina Road to be processed and ultimately RWRD will need to come up with a utilization of biosolids and biogas plan for that site and the electrical and SCADA systems will need to be updated. To comply with the Department of Homeland Security "designated critical infrastructure" protection, the plant must incorporate a security system to meet criteria. Mr. Jenkins discussed who the consultants, CM@R and contractors/subcontractors are on this project. Mr. Jenkins noted that the regulatory compliance date is January 30, 2014 and the project is over 50% complete. Mr. Jenkins stated that originally the budget that was in place for Ina Road was just over \$300 million dollars, but the current forecast is that it will cost over \$311 million. Mr. Jenkins explained where the \$13 million in extra costs are being spent. Mr. Jenkins discussed what the current issues are on this project and explained that the project completion and schedule compliance is the most critical.

Mr. Jenkins explained that the Plant Interconnect is a 5-mile pipeline between the old Roger Road site and the Ina Road facility to take sewer flow from the Roger Road area to Ina Road because the volume of sewage coming into Roger Road is already at or slightly above the capacity of that facility. Mr. Jenkins stated that the Plant Interconnect will provide operational flexibility of flows and will help during construction to divert flows for the necessary shutdowns and tie-ins. Mr. Jenkins provided a summary of the Plant Interconnect project schedule status, as well as the budget for this project. Mr. Jenkins noted that the final costs were under budget and ahead of schedule.

Mr. Jenkins continued his presentation by discussing the Water Reclamation Campus Treatment Facility and stated that the purpose of this project is to replace the aging Roger Road WRF with a new state-of-the-art facility, and noted that RWRD provides reclaimed water to Tucson Water at the Sweetwater site. Mr. Jenkins went on to say that this will be a new 32 MGD facility and it will have good neighbor amenities. Mr. Jenkins stated that the project procurement method is a Design Build Operate (DBO), it is a County owned system, but a private sector company will operate it for 15 years with the option to renew for 5-year periods. Mr. Jenkins stated that August 14, 2014 is the contract completion date and the project is 23% complete. As part of the contract with CH2MHILL, they are required to hire 75% of their proposed non-management staff from RWRD staff volunteers and 68 RWRD staff have volunteered to be considered for the 11 positions. CH2MHILL plans to be fully staffed by mid 2013.

Mr. Jenkins stated that staff moved into the new Central Laboratory Complex in December 2011 and work is still being done on the landscaping and fencing around the complex, which should be completed by March 2012. Mr. Jenkins stated that the original budget for this project was \$28 million and it was almost \$8 million under budget.

However, the lab will need to be expanded in the future and that money will be put towards the expansion at this time to take advantage of historically low construction costs. Mr. Jenkins stated that RWRD is still negotiating a deal with the University of Arizona (U of A) to lease that property long-term and no final decisions have been made.

Mr. Jenkins explained the Biosolids and Biogas Utilization Master Plan and stated that the final recommendations and Master Plan should be completed this month. Mr. Jenkins stated that RWRD has determined that the disposal method of Class B land application is the most cost effective way to dispose of biosolids and RWRD will continue to use this method. Mr. Jenkins discussed alternative project procurement methods.

Mr. Jenkins discussed the options under consideration for biosolids and biogas. He stated that the bigger issue is biogas and an alternative is to flare the gas, but it is not sustainable and he does not believe it is a viable option, but it something that needs to be considered. Mr. Jenkins stated that various options need to be looked at to clean gas to a pipeline quality and this is the direction we are heading. There are firms that buy this bio natural gas and need the renewal energy credits. Mr. Jenkins stated that since we do not know enough about the premium commercial market process, we are going to contract with an expert to help understand and evaluate this process further. Mr. Jenkins stated that Combined Heat Power (CHP) generation facility is still a consideration but that there are a lot of complications in doing this and may not be economically beneficial. Mr. Jenkins went on to discuss bio compressed natural gas and the potential to phase into fuel for commercial vehicles. Mr. Jenkins noted that there are still some unknown items so with some of the savings from ROMP they have been placed as future projected costs for these projects.

Mr. Jenkins stated that Supervisory Control and Data Acquisition (SCADA) is an important element to the overall project and will combine all of treatment, conveyance and dispatch into a system-wide control/monitoring system.

Mr. Jenkins explained the purpose of the Decommissioning/Deconstruction Program and that the existing Roger Road WRF will be decommissioned and closed in accordance with regulatory requirements. A Clean Closure Plan will be submitted to the Arizona Department of Environmental Quality (ADEQ) for approval and that will be done at a later time.

Mr. Jenkins stated that he wanted to inform the Committee of RWRD's partnership with the Regional Flood Control District (RFCD) and Natural Resources, Parks and Recreation Department (NRPR) for the Linear Park Project. RWRD will be responsible for the design of the park, RFCD will provide the capital cost to construct the park and NRPR will maintain it.

Mr. Jenkins discussed the ROMP budget and noted that the original budget of \$720 million has been reduced to \$660 million. Mr. Jenkins stated that the total ROMP expenses to date are over \$242 million and that approximately 3,000 jobs have been created due to ROMP. Mr. Jenkins concluded his presentation.

Mr. Carlson asked how long these jobs would last. Mr. Jenkins stated that most of the jobs are primarily in construction, but other jobs are being created within other industries that are assisting with the construction during this 3-4 year window.

Ms. Hanson asked what centrate processing means. Mr. Jenkins provided explanation of the centrate process.

Mr. Iannarino asked for clarification if RWRD is providing the funding for the Linear Park Project. Mr. Jenkins clarified that RWRD is responsible for the design of the project only and RFCD is funding the project, although RFCD has not identified their funding source as of yet and are still in the process of finalizing this agreement.

Mr. Lynch asked about RWRD's negotiations with the U of A on the expansion of the Central Laboratory Complex and if the leasing of the expansion would cover the debt service for the period that they lease it. Mr. Jenkins stated that the County Administrator's Office and the Facilities Management Department are still in negotiations on the lease agreement terms.

Mr. Stratton stated that in regards to hauling biosolids, it was a revenue generator because of the value of nutrients and asked if Mr. Jenkins sees a move towards that or is the price for hauling the same as it has been over the last 20 years. Mr. Jenkins replied that it costs over \$1 million a year to haul our biosolids to the land applications and because there is a good agricultural community in the geographic area, the haul is a short distance and it is inexpensive to do so.

Mr. Membrila asked if there is a timeline for the Linear Park Project. Mr. Jenkins stated that there is not a timeline because equipment has to be removed from the Roger Road site and the Roger Road WRF will not shutdown until 2015. Mr. Membrila asked when the design of the park would take place. Mr. Jenkins replied that the design will probably be completed towards the completion of ROMP.

Mr. Carlson asked if sewage would continue to pass through Roger Road. Mr. Jenkins stated that the sewage passes under Interstate 10 and then goes through the interconnect and diverts to the new campus or to Ina Road.

Mr. Iannarino asked if the City of Tucson (COT) has given any indications as to what their plans are for their property north of the new campus. Mr. Jenkins stated that RWRD has had some dialogue with the COT and the State Land Department and continue to discuss what the options are with the 44-acres at Roger Road.

Mr. Lynch asked what the schedule is for the decision on the biogas issue and how it integrates with the overall design and construction of ROMP. Mr. Jenkins replied that the Master Plan Report will be finished and RWRD will get the report at the end of January. An amendment has been made to the contract to hire a gas expert to evaluate and understand the market better. Mr. Jenkins went on to say that RWRD is anxious to get a decision to move forward because in August 2014 and definitely by January 2015, Roger Road will be out of business. All unprocessed biosolids will be sent to Ina Road and the volume of methane that is being produced will be double over what it is today. Mr. Jenkins stated that they are trying to match up the decision of how they will treat and deal with the biogas prior to 2015 and the easiest way is to clean it and put it in the pipeline and hope they can enter into a long-term contract for a premium and 2015 is the target date to get things settled. Mr. Jenkins stated that in the meantime, while RWRD is at the lower gas volume, the old power plant at Ina Road is still being run and although

they could shut it down in July, the old power plant is being utilized because the new thermal boiler system (Central Plant) has not been built yet. The Central Plant should be completed by late 2013 – 2015. Mr. Lynch asked that with the long-term plans of ROMP, if there are plans to use portions of this gas for power onsite. Mr. Jenkins stated that only if RWRD decides to go with a new power plant. Mr. Carlson stated that there is question in the increased standards for treating biosolids and asked if the Town of Marana (TOM) is going to treat their own biosolids and is there a fear of potential contamination of groundwater. Mr. Jenkins stated that RWRD makes Class B biosolids and these are identified in the 503 regulations, which indicates what can be done with Class B biosolids. Mr. Jenkins further explained that one of the disposal methods is agricultural land application which is inexpensive to do, but if the regulations changed stating a change from Class B to Class A, then RWRD would be prepared to do that. Mr. Jenkins continued to say that with the TOM taking over the small treatment facility in north Marana, they are disposing their unprocessed sludge into a manhole by the Ina Road WRF and they are paying Pima County to accept and treat the sludge.

Ms. Bowen voiced her concerns that the Committee may not be involved enough when it comes to reviewing financial issues related to ROMP, such as the \$13 million added to the Ina Road WRF and additional \$8 million to the lab expansion. Mr. Jenkins stated he appreciated her comment and in regards to the \$13 million, these were items that were clearly defined, but were not in the original budget. The decision was made to include these items as they were important to the project. In regards to the savings of \$8 million, this money would be put towards a project that would be a benefit for RWRD in the future. Ms. Wolf asked Ms. Bowen how she suggests this be addressed at future meetings. Discussion ensued regarding how to address and discuss financial matters more in-depth at future meetings. Mr. Jenkins stated that this is the first of in-depth updates on ROMP and suggested that at the next meeting he could discuss in more detail what to do about the biogas/biosolids issue as he sees that as a key topic. Ms. Wolf asked Ms. Bowen and Mr. Lynch if they wanted more in-depth presentations on financial matters at future meetings and Ms. Bowen replied yes, she would like more discussion while decisions are in the process of being made rather than provided a summary after. Mr. Lynch agreed. Mr. Jenkins stated that future presentations/discussions will focus more on key issues and decisions being made rather than just general updates on ROMP.

Mr. Lynch asked, in regards to the warranty issue, if any portion of the problem with the digester lid was attributable to a design issue. Mr. Sherlock stated that there was a pipe that was longer than it should have been and that is one of the reasons why they requested the extended warranty. Mr. Lynch asked for clarification if the additional warranty was on one digester lid only. Mr. Jenkins stated RWRD asked for an additional warranty on both digester lids; as each one goes in service there will be an extended 3-year warranty at no additional cost.

Ms. Hanson asked if there was a problem with ADEQ delaying inspections on the plant interconnect. Mr. Jenkins clarified that when ADEQ reviewed the as-built and the design to determine the capacity of the system, there was one or two sections where the slope was not the same, so rather than argue the issue, which was minor, RWRD accepted the changes and due to the dialogue back and forth it took additional time.

Mr. Jenkins stated there were additional questions the Committee had, to feel free to e-mail them to himself, Mr. Curley or Ms. Lopez and those would get addressed.

2. **MARANA 208 / WRF UPDATE.** Mr. Jenkins stated that he did not have new information to present on Marana and asked if the Committee had any questions. The Committee had no questions.
3. **FY 2011/12 BUDGET / FY 2012/13 FINANCIAL PLAN UPDATE.** Patrick McGee stated that Operation and Maintenance expenses on December 31, 2011 were at \$32.3 million, which is slightly under budget at 43%. Mr. McGee stated that revenue was at \$95.8 million, which is above the budget at 58%.
4. **SYSTEM-WIDE ODOR CONTROL UPDATE.** John Warner, Deputy Director, provided a PowerPoint presentation on the 4th Quarter 2011 System-Wide Odor Control. Mr. Warner noted that the Roger Road WRF was not included on the last fenceline report and pointed out that it is included on this update. Mr. Warner stated that for the 4th Quarter of 2011, only one odor report was received for Roger Road, and this is a good indicator that the treatment processes in controlling the odor is working and he is hopeful this will continue.

Mr. Warner stated that in the last three 4th quarter odor reports, RWRD seems to show a slight trend downward and have more of a handle on controlling odor. Mr. Jenkins and Mr. Warner indicated that typically most complaints are received in the 4th quarter, so to have only one complaint was something to be proud of. Mr. Warner showed a map displaying where the public and private odor complaints were received in 2011. Mr. Warner stated that one trend that has not changed much is the 50/50 percent of odor complaints between public and private sectors.

Mr. Carlson asked if there is a standard on the fenceline that is trying to be met. Mr. Warner stated that the 30 ppb (parts per billion) is the fenceline limit and that limit cannot be exceeded as it is the standard that ADEQ has had set for several years.

Mr. Warner stated that in regards to chemical dosing units, there have been some upgrades at the Rancho del Lago, Distillery Canyon, and Silverado pumpstations and they have made changes on controlling the odor with positive results. Mr. Warner also noted that there is a pilot test that will begin at Arizona Canning and if this works then this will change the chemical nature of the interceptor, as far as the H₂S production and will have very long reaching downstream impact to help control the odors as it comes down through the central part of the city on the route to the interconnect.

Mr. Warner continued by saying there are biofilters being brought in at The Bridges, at 36th and Park area and Tucson Market Place, and also at west Speedway and Camino de Juan, where there has been a long going odor issue and a biofilter is being put in and should be fully operational in 30 days. Mr. Warner stated that a \$280,000 odor control upgrade is currently being done at the Continental Ranch pumpstation and it is almost near completion.

7. **FUTURE AGENDA ITEMS.** Mr. Jenkins stated that if the Master Plan report is available, it will be shared with the Committee at February's meeting. Mr. Iannarino suggested an update on connection fees. Mr. Stratton recommended a brief legislative update and any

impact on the department. Ms. Bowen asked for discussion on items added to ROMP.

Mr. Stratton stated that he wished to thank Pima Association of Governments (PAG) for allowing the RWRAC to utilize their conference room to hold their meetings for the past several years and stated he felt that the Committee should show their appreciation to PAG. Discussion ensued as to whether the decision of the Committee is to permanently change meeting locations to the Water and Energy Sustainability (WES) Center from PAG. Mr. Curley stated that PAG's conference room is reserved for the rest of the year; however, today's meeting and February's meeting is being held at the WES Center for the purpose of giving the Committee an opportunity to evaluate the WES Center and assist with making a determination on whether the Committee wishes to permanently change meeting locations to the WES Center. Ms. Wolf stated the Committee will discuss this issue at the February meeting. Mr. Iannarino suggested an assessment should be made on the amount of department staff that are centrally located downtown and will then have to commute to the WES Center.

8. CALL TO THE AUDIENCE. There were no comments from the audience.

Mr. Curley announced that he will be retiring from full-time employment with Pima County after 33 years at the end of this month; however, he will be returning in March to work part-time. The Committee congratulated Mr. Curley and voiced their appreciation for Mr. Curley's service and how they enjoyed working with him.

Mr. Jenkins reminded the Committee that a tour of the WES Center would be given after the meeting for those who wished to do so.

9. ADJOURNMENT. The meeting was adjourned at 9:10 a.m.