



## **SAN MIGUEL COMMUNITY SERVICES DISTRICT**

### **EQUIPMENT & FACILITIES COMMITTEE MEETING SUMMARY NOTES**

*For Thursday, July 14, 2016 – 12:00 noon*

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**I. Called to Order at 12:00 p.m. by Chair Kalvans.**

**II. Pledge of Allegiance**

**III. Roll Call – Director Kalvans – Present  
Director Reuck – Present**

**Other Persons in Attendance:**

**Jordan Garbayo—County Energy Watch Specialist,  
Aron Kardashian, San Miguel Garbage Company,  
Tamara Parent, District Staff—Operations Coordinator**

**IV. Oral and Written Communication - None**

**VI. AGENDA**

**1. Consider and Discuss a Presentation for On Bill financing to purchase new aerator motors for Machado WWTP as energy efficiency replacement equipment.**

This item was a request to discuss informational presentation about On Billing Financing process and procedures of capital equipment purchase at the WWTP facility. General Manager (GM) introduced the written report and discussed the background information related to the recent Energy Audit done for District facilities reviewed by the Board of Directors approximately two months ago.

The Committee was advised that the WWTP aerator motors for WWTP facility is significant factor for energy efficiency replacement as well as operational efficiency. Replacement of aerator motors, in the near term, can be achieved through various options, including: capital purchase with District Board authorization; use of loan financing at market rate interest; funds or loans available through state and/or federal programs; use of available state or federal grants; or by on bill financing by a PG&E/CPUC program.

All of these options have various contributions by the District, which represent an “out-of-pocket” payment with interest. State and federal grants can be a funding source with a match contribution to a grant amount. Typically, matching funds will be 25% but can be, depending on the type of grant and source, up to 50% matching dollars contributed by the District.

As discussed in presentation, on bill financing does not have a structural debt obligation like a commercial or governmental loan. On bill financing uses PG& E energy efficient component that finances a capital purchase of items like the WWTP aerator motors when there has been a Large Audit report prepared, such as the District’s, showing a need for equipment replacement.

Jordan Garbayo from County Energy Watch Program was asked to provide additional information about the On Bill Financing mechanism that potentially can be used by the District in purchasing needed aerator motors. He discussed the need to look at using the method of Preponderance of Evidence to support “early retirement” claim of motors as a means of realizing energy efficiencies in WWTP operations.

Director Kalvans asked staff and Mr. Garbayo to reply to the question of “What are disadvantages to using OBF method to replace the motors?” Mr. Garbayo replied that there are challenges to the Preponderance process due to its requirements for detailed explanation to support an “early retirement” in realizing energy efficiencies in operations and to address the tie-in to OBF repayment since OBF is a zero interest program. OBF needs to structure as an incentive, customized to specific operations, such as SMCS D. The Preponderance path is the clearest means to state the energy efficiencies to be realized for the PG&E/CPUC program.

A chief component for PG &E/CPUC is whether or not an agency has completed a Very Large Energy Audit and is working toward action steps that implement recommendations. SMCS D has such an Audit and has begun implementation even with this current and any further discussions by Committee and/or the Board. These would be documented in a statement to PG &E/CPUC for their consideration in an OBF method of purchasing the aerator motors.

The simple payback, as Mr. Garbayo points, could be structured for a 3.9-year term at 0% interest that would be done through monthly billing to the District. Annual cost savings (\$/yr) would be an estimated \$36,700 with a purchase cost of \$168,000. The estimated incentive for early retirement and improved energy efficiency is \$22,692.

GM pointed out that these estimates were revised, as requested by the Board’s discussion previously, and directly tie-in to satisfying the Preponderance criteria for incentives as well as a short pay-back period. Ideally, the District should consider the purchase of submerged aerator motors in ponds #3 & 4 with fine pore

bubble diffusers that can increase the interfacial area of smaller bubbles. An oxygen transfer of 15% could be realized through this equipment. This bubble mixing process is desired for sufficient mixing to disperse dissolved oxygen (DO) in the system. Mixing is often a reason for aeration energy usage rather than oxygen demand.

The use of OBF would allow the District to achieve these results, improve energy efficiency and improve overall system operations by a more desirable oxygen mixing operation.

Director Reuck had questions about the OBF program details, specifically how likely is it that the District can use this program?

Mr. Garbayo replied that there is a lot of paperwork to be done but some important steps have already been done, specifically the Very Large Audit. He indicated that the next steps will be for the preparation of an RFP to prepare engineering documents in support of an OBF request by the District. He states that County Energy Watch is ready to assist with this effort in conjunction with District GM and staff. He also stated that a part of documentation will be to conduct a “test-in” which is PG&E’s verification of energy usage by the facility but this work is done later in the process.

GM indicated that District is already working with Mr. Garbayo and Mr. Griesser at County Energy Watch.

Director Kalvans asked if the Committee should review OBF documents and/or other further actions prior to making a recommendation to the Board. GM replied that the Committee can request this information be brought back to Committee for review before going to the Board.

There were no further questions or comments. Committee agreed, unanimously, to have the RFP and other OBF documents brought back to the Committee prior to forwarding any recommendation to the Board.

Chair Kalvans thanked Mr. Garbayo for attending and to continue working with staff. He is generally supportive of the approach. Direction given to GM.

**2. Consider and Discuss a presentation on potential organic recycling facility related to WWTP operations and potential opportunities for public-private partnership.**

This item is a request to consider and to discuss the potential for organic/food waste recycling facility related to WWTP operations and the potential opportunities for public-private partnership. General Manager (GM) gave a summary of written staff report and supportive documents in the report.

GM spoke about the April 1<sup>st</sup> State law requiring organic/food waste recycling operations. This item is requesting Committee discussion and direction to staff for follow-up work needed prior to a Board recommendation being given.

GM spoke about reasons for this proposal discussion being the opportunity for new solid waste operations that can also benefit the WWTP operations. GM outlined 4 specific District goals that should be used to guide discussions and future decisions.

GM spoke about the potential use of anaerobic digestion to process food waste and organics that presently are a part of the wastewater stream from non-residential and residential sources. This organics and food waste processing can provide 2-3 products for other revenue or beneficial use, specifically CNG for vehicle fuel or power to motors; compost materials from sludge processing for sale to commercial vendors (fertilizer companies or to others) and carbon credits to be available to others requiring AB 32 Climate Change emission reduction credits as an offset to their operations.

GM explained the Zero Waste Energy (ZWE) facility as a scalable operation based on modules that can be begin with small volumes of food and organics waste stream processing. GM indicated that research shows similar ZWE operations in Oxnard, South San Francisco and Monterey (Marina) California which uses an anaerobic digestion process producing the 3 products described above.

GM also described the number of meetings that have already occurred with San Miguel Garbage owners about this approach and discovered their knowledge and experience with this type of recycling facility was very detailed. Staff had also recently met with Bill Worrell, SLO Integrated Waste Management Authority, who also had working knowledge about ZWE processes. Mr. Worrell indicated a desire to provide resources to the District in pursuit of this type of project.

GM pointed out that the Staff Report shows sample information about costs associated with the set-up and operation of a 20,000 to 25,000 ton/yr recycling facility. Also discussed what has been happening in SLO County with no indication that northern SLO County areas, municipalities or others are aware or performing any analysis about such a recycling facility. GM indicated that the written Staff Report provides further information about State law requirements for now and in the immediate future for such recycling opportunities and additional information about ZWE facilities.

GM asked that the Committee hold discussions and give direction to staff at conclusion of this requested item.

Chair Kalvans asked Aron Kardashian, San Miguel Garbage official to provide any comments or input for discussions by the Committee,

Mr. Kardashian thanked the Committee for opportunity to speak and also thanked staff for launching this effort. He is aware of the ZWE operations in Monterey and South San Francisco and described his knowledge and experience about those facilities. Mr. Kardashian also spoke about the State law requirements and the importance of what is being attempted for this type of recycling facility.

He stated that he is aware of what Kamogas in City of SLO is attempting to do with residential food waste recycling for gas generation and composting. He stated that he is aware of why the City is focused on residential food waste recycling instead of non-residential.

He discussed the importance of waste stream volume for any recycling facility as the key. He believes that the feedstock of food waste and organics should be mixed, perhaps along percentage lines. Feedstock may, if deemed suitable, include grape residues from winemaking processors. He stated that he was in agreement with the written report in terms of the potential sources that could be captured.

He has met with District GM and staff to discuss and brainstorm about this type of facility and to share knowledge/experience. He believes that this would be an important step for the District to be forward looking but also entrepreneurial in an approach to the benefit of District ratepayers and facility operations. He hopes to continue working cooperatively with District leadership and staff on this concept.

There were a number of questions by Committee members about various costs for solid waste hauling, price of CNG per gallon and power that might be estimated from gas generation. Mr. Kardashian indicated that price of CNG is relatively stable at about \$2.50 per gallon and generally remains near or at that price locally. He stated that a one ton truck hauls 7 tons of waste. A recycling facility initial operational volume of 15 tons per day would mean 2 truckloads to a facility location but ultimately a facility should be designed and sized for up to 25,000 tons per year. He spoke about an initial operation ideal volume being about 75-80 tons per day.

He is aware that there are state and federal grants to assist with setting up and initially operating these types of facilities. Such facilities should be able, in short time periods, show that fees can sustain and operate the facility while producing the 3 products for sale or use that the GM described.

Mr. Kardashian also stated that this new legislation went into effect in April and very little attention has been given to it, except for the residential program that will launch in south county later this year. He knows that the new law tightens the mandated requirements for more food/organic waste recycling beginning in 2017 and continues until 2021 to capture a planned 100% of this waste stream from landfill disposal. The federal government has plans for a similar effort in near future because of concerns about methane gases emitted from such waste stream sources, food and organics.

GM stated that the ZWE facility, smallest one, can process 5,000 tons per year for the Monterey facility which also sells power to the adjoining WWTP facility. South San Francisco began their operations approximately 1 year ago and is currently operating at maximum capacity that has caused them to look for other places to send the excess waste stream.

Committee commented that this type of forward looking project has merit for further investigation and asked GM to bring this item back once there was more detailed information about site specific costs and projected revenues and more detailed answers to the listed questions on page 3 of written staff report.

**3. Review of State Office of Technical Assistance Grant process for a planning and design study leading to expansion of existing WWTP operations and facilities.**

GM gave a brief presentation about the grant process for seeking a technical assistance grant from State Office of Technical Assistance (OTA) as described in written staff report.

GM described how the classification of disadvantaged community allows for the assistance being offered by OTA and its partner, Rural Communities Assistance Corporation (RCAC) who is under contract with the State for this type of assistance.

GM reviewed the criteria for grant assistance and the type of application materials and information needed that are described in the written report to the Committee. The relevance to the E & F Committee is the involvement and knowledge about the grant assistance process to respond appropriately and timely to equipment and facility information or operational questions during this grant process.

An important component to the grant assistance application is support projected costs by showing how the District would employ the use of Prop 218 process for any future needed rate increases that may be necessary for plant operations and debt repayment.

The projected costs for the planning and design study are estimated to be slightly less than \$500,000 which is the maximum amount that can be awarded by OTA to an agency for this work.

Chair Kalvans expressed concern about committing to doing a Prop 218 process when there has been past opposition to any rate increases. GM explained that the OTA is asking the District to provide information about how ongoing operational cost and debt obligations, if any, can be sustained over time. There is no requirement to “obligate this or future Boards to increasing rates”.

RCAC will prepare the grant application, at no cost to the District, based on data and information provided by the District. A checklist of data and information needed has been provided to GM.

Director Reuck commented that he is glad to see this item moving forward after the recent Loading Study was received by the Board a couple of months ago. He knows the plant has to be expanded and thinks that this informational report should be shared with the Board simply as an informational report.

Chair Kalvans agreed and requested a future update and/or review of a grant application be provided to Committee. GM indicated that an update will be provided.

**VII. COMMITTEE COMMENTS:**

Director Reuck stated that this meeting had been very productive in his opinion and pleased to see that District is looking forward, not just being reactive.

Chair Kalvans asked GM to get a report on Vehicle Replacement Assessment to Committee as quickly as possible.

Committee discussed next meeting briefly but only determined that the 3<sup>rd</sup> week in August was the best timeframe. GM indicated that a mid-August date with a noontime start will be provided to Committee for their selection.

Chair Kalvans adjourned meeting at 2pm.

Submitted by:  
Anthony Kalvans, Chair  
Equipment & Facility Committee

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