JOINT MEETING
CITY OF MORRO BAY AND CAYUCOS SANITARY DISTRICT
WASTEWATER TREATMENT PLANT
(UNDER JOINT POWERS AGREEMENT)

Cayucos Sanitary District Board of Directors:
Robert Enns, President
Bud McHale, Vice-President
Harold Fones, Director
Shirley Lyon, Director
Michael Foster, Director

City of Morro Bay City Council:
Janice Peters, Mayor
Carla Borchard, Vice-Mayor
Noah Smukler, Councilmember
Betty Winholtz, Councilmember
Rick Grantham, Councilmember

AGENDA

MEETING DATE:
9:00 a.m., Wednesday, June 16, 2010

HOSTED BY:
City of Morro Bay

MEETING PLACE:
Studio Room
Community Center
1001 Kennedy Way
Morro Bay, CA 93442

CALL TO ORDER AND ROLL CALL

PUBLIC COMMENT PERIOD
Members of the audience wishing to address the governing bodies on Morro Bay-Cayucos Wastewater Treatment Plant (WWTP) business matters may do so at this time. By the conditions of the Brown Act, the governing bodies may not discuss issues not on the agenda, but may set items for future agendas. When recognized by the Chair, please come forward to the podium and state your name and address for the record. Comments should be limited to three minutes.

A. NEW BUSINESS

1. Discussion and Consideration of Alternative Delivery Methods for the WWTP Project
Recommendation: provide direction to staff
2. Discussion and Consideration of Establishing a Value Engineering Process for the WWTP Project
Recommendation: provide direction to staff
3. Discussion and Consideration of Alternative Wastewater Treatment Processes for the WWTP Project
Recommendation: provide direction to staff
4. Discussion and Consideration of a Construction Design Report (CDR) Proposal from PERC Water and/or Others
Recommendation: provide direction to staff

B. OLD BUSINESS

1. Schedule Next Joint Meeting and Agenda Items

ADJOURNMENT - (Next meeting will be hosted by the Cayucos Sanitary District)

Copies of staff reports and other public documentation relating to each item of business for this meeting are available for inspection at Morro Bay City Hall at 595 Harbor Street and the Cayucos Sanitary District at 200 Ash Ave. A copy of this packet is available from the City of Morro Bay for copying at Mills Copy Center and from the Cayucos Sanitary District for a copy and duplication charge. Any person having questions regarding any agenda items may contact Bruce Keogh, Wastewater Division Manager (City of Morro Bay) at 772-6261 or Bill Callahan, District Manager (Cayucos Sanitary District) at 995-3290.

Materials related to an item on this Agenda submitted to the Morro Bay/Cayucos Wastewater Treatment Plant Joint Powers Authority after distribution of the agenda packet are available for public inspection at; Public Services Office at 955 Shasta Avenue, Morro Bay, CA 93442; Morro Bay Library at 625 Harbor Street, Morro Bay, Ca 93442; Mills/ASAP Reprographics at 495 Morro Bay Boulevard, Morro Bay, CA 93442 during normal business hours.

Agenda No. 1

Date: June 16, 2010

STAFF REPORT

MORRO BAY-CAYUCOS J.P.A.

WASTEWATER TREATMENT PLANT

To: Honorable Mayor and City Council, City of Morro Bay
Honorable President and Board of Directors, Cayucos Sanitary District

From: Dylan Wade, PE - Capital Projects Manager
Rob Livick, PE/PLS – Public Services Director

Date: June 15, 2010

Subject
Discussion and Consideration of Alternative Delivery Methods for the WWTP Project.

Recommendation
This Department recommends that the Council and District Board consider the options and provide direction to staff.

Fiscal Impact
The project ownership and operation as well as the project delivery method can have a significant impact on overall rates. To date staff has not been tasked with analyzing any proposed project except the one currently being pursued. Depending on which project ownership or delivery methods the board elects to pursue staff could investigate and attempt to prepare the appropriate financial analysis. Due to the highly variable nature of some of the ownership methods and their related contracts staff might have to have a negotiated contract to review prior to preparing an accurate analysis

Discussion
There are three methods that are commonly used for the ownership and operation of wastewater utilities these methods include:

- Public ownership and operation
- Public Private Partnerships (PPP) – Gov. Code 5956
- Privatization – Gov. Code 54250

Under the various ownership arrangements there are also a number of potential project delivery methods. At this time in California there are a number of delivery methods being used. Some of these project delivery methods include:

- Integrated Project Delivery
- CM at Risk

- Job Order Contracts
- Lease/Lease Back Contracts
- Development Agreements
- Traditional Design Bid Build
- Design Build

Cities in the State of California can only use the project procurement methods that are authorized in Section 22000 of the Public Contracts Code. Currently the final two delivery methods on the list are the methods available to Cities in California. In order to better understand the recent discussion that the board has been having in regards to project delivery methods we will review these two delivery methods and then compare the pros and cons in relation to each other.

Project Delivery Methods

Design Bid Build(DBB) Public Contracts Code 20160-20174 and 22010-22020
Under the design bid build delivery method a firm is retained by the public agency to perform the design of a facility. These types of professional services are required to be made with,"Selection by a state or local agency head for professional services of private architectural, landscape architectural, engineering, environmental, land surveying, or construction project management firms shall be on the basis of demonstrated competence and on the professional qualifications necessary for the satisfactory performance of the services required." (Gov Code 4526).

The MBCSD is currently using the DBB process to deliver its wastewater treatment plant project. In order to make this type of qualification based selection the City and District used an RFP process where qualifications were solicited from the various firms. In the case of the WWTP project MWH Inc was found to be the most qualified firm proposing. Once the determination was made that MWH presented the most qualified team then the City and District negotiated the exact scope and fees to perform the work. At the completion of the design process, MWH will have produced a set of plans and specifications (bid documents) that should meet the requirements of MBCSD. These documents are sent out to bid through a public bidding process. At conclusion of the bidding process the lowest responsible bidder is awarded the contract to complete the work. This is when firm estimates for the cost of the project will be known. Based on the most recent update to the project schedule the project will go out to bid in 2012. One common modification to this process is to prequalify the parties that are able to bid on the project. This allows the Owner some ability to screen the bidders based on their qualifications prior to selecting based solely on price. Another approach available is the multi prime approach in which the Owner Contracts with a CM for design who then lets out multiple prime contracts to the construction trades whom the CM then manages. DBB is the project delivery methodology anticipated in the eight year time schedule.

Design Build (DB) Public Contracts Code 20175.2 and Assembly Bill 642 2008
Design Build is defined as "a single party responsible for the design and construction of the project." Up until 2008, only City's in two counties had this option available to them. Assembly bill 642 allows up to 20 Cities to build wastewater projects in California with a value over 2.5M

to pursue the DB delivery method. In order to pursue DB, the MBCSD would be required to submit an application to the State once we have completed the environmental work for the project (Notice of Determination).Currently this task is scheduled to occur in December of 2010. MBCSD if granted approval by the State would then follow a four step process to pursue DB. These four steps as outlined in the law are:

- Prepare a preliminary/conceptual design. These are usually a 30% design level.
- Prepare an RFP to solicit bids on the project
- Develop and adopt a prequalification process to prequalify bidders based on specific criteria.
- Develop and adopt a project ranking criteria to evaluate the design build teams.

This process would allow MBCSD to weigh criteria other than just price to select the team that will design and build the process.

There are both pro's and con's to each of these methods of project delivery relating to retaining public ownership and operation of the WWTP. With the DBB since the design engineer is not the same party as the party constructing the project, the Owner can be caught between two competing parties, the designer and the builder. The Owner retains risk for the plans and specifications being correct, and has a risk of price escalation occurring between the time that design starts and bids are awarded. The Contractor selected to build the project with DBB is awarded that contract based solely on price without regard to their qualifications. The DB process offsets some of the cost escalation risk and the design liability risk by having the bidding process occur earlier in the life of the project, and by having a single entity manage both the design and construction. The DB delivery method can also lead to time savings because the construction may begin prior to design being completed. The change from a DBB to a DB process effectively trades types of risk with DB the project Owner has much less control over the ultimate project quality, but gains both an earlier understanding of the potential project costs while mitigating design risk by transferring design responsibility. The State of California has intentionally delayed adoption of DB because there are unique projects risks associated with it, but MBCSD could make a decision to pursue this delivery method any time after receiving filing the NOD.

Project Ownership and Operations Methods

Public Private Partnerships (PPP).

In order to encourage PPP's government code section 5956 was put into place. This allows governments to transfer ownership or lease property to a private party to design, construct, and operate certain types of infrastructure for a period of up to 35 years. While this law was intended to encourage private investment in infrastructure, it precludes receiving project financing through the State Revolving Fund. This section of the code allows tremendous flexibility in how projects are both acquired and ultimately delivered, but all of them would loosely be classified as DB, since a single entity would be responsible for both the design and construction of the project. The primary selection criteria for a PPP is the demonstrated competence and qualifications for the study, planning design, operation, maintenance repair of the proposing party for the proposed facility. This type of selection criteria would lend itself to an RFQ or RFP process to select the design build partner. Then MBCSD would negotiate with the selected partner both the scope of

work and the allowable fees to be collected. The law allows the Design Build Operate Finance partner to collect their costs plus a reasonable profit; however the law is silent on to what a reasonable profit is. This type of negotiated contract could include any number of either positive or negative clauses that would impact the long term rate stability for MBCSD. For example MBCSD could assign responsibility for permitting the project to the selected partner and then the costs for the project would increase importantly. Additionally MBCSD could assign liquidated damages on failure to comply with NPDES permits, could assign responsibility to the An interesting thing about this project approach is that the costs for construction and the operation can be shifted around. For example the PPP partner and MBCSD could negotiate to keep construction costs artificially low by increasing the fees collected over the operating period. This type of ability for cost shifting, coupled with specific language in the law regarding rate increases that is not consistent, could potentially run afoul of proposition 218 requirements. To the knowledge of staff there are no court cases that provide president on the rate structure ramifications of the PPP code section. MBCSD could alleviate potential problems by modifying how rate increases occur, or by retaining control of that rate setting process. The law allowing PPP's was intended to include operations only, but some agencies have used it as a method of performing DB by making the operating period very short. MBCSD could pursue using Design Build Operate Finance as replacement for the DB method for project delivery, but costs and constraints for this approach would be determined through negotiating the contract. Certain construction related project risks will remain with the Owner and cannot be wholly transferred to the PPP.

Privatization

Privatization of a WWTP can be achieved through California Government Code sections 54250-54256. In privatization the ownership of the facility is completely and permanently transferred to a private entity. In fact, the State of California has many private water companies. Under this process it must be shown that there is a public benefit in the process, i.e. cost savings. These types of agreements are awarded solely on price and must have the approval of the Public Utilities Commission. MBCSD could pursue this option, but it is a complicated and costly legal and financial process estimating the costs of which is beyond the scope of this discussion.

Schedule

Based on our current progress with the permitting for the DBB process, it is not likely that there would be a time savings by going with an alternate delivery method. This is based on switching from the DBB approach to the DB approach. While the DB approach can shave some time from the construction window, it adds a significant number of new policies that would have to be adopted, and it would require time for the State to review. Switching project delivery methods will require a significant investment of time. To go through the DB RFQ, Prequalification and Selection policies, and the negotiation processes will add 6-9 months of work to staff's current work load. Furthermore the DB requires much more work to get to the 30% design because in order to control quality risks, greater specificity must be used. This effort could occur simultaneous with the environmental and permitting process as well as with the policy discussions but it will likely exceed available staff resources.

Pursuing an alternative ownership and operation strategy would likely take as much time as negotiating revisions to the Joint Powers Agreement. Indeed pursuing a radical change in how we own and operate the facilities could cost the project significant time because this would likely be an iterative process between the City, the CSD, and our selected project delivery partner.

The time schedule demonstrates that we are well behind schedule on the permitting process, while detailed design could begin prior to completing the permitting process, it is not recommended. Any changes and mitigations that come from the permitting process can have a significant impact on the details of the design of the facility. These two work tasks if we can meet the time schedule attached exactly will enable the project to meet its completion milestone. Because of the interrelation between scheduled tasks any deviation from this schedule will likely result in a failure to meet the compliance time schedule.

Conclusion

Staff recommends maintaining the currently proposed project delivery method of DBB. Additionally, staff recommends a prequalification process to reduce the risk of having a disreputable contractor. If the Board elects to pursue DB, the contract with MWH would have to be significantly modified to prepare DB documents rather than the traditional bid documents that we have currently contracted for. Impacts to the project schedule will be discussed under separate heading, but for the switch between DB and DBB there would be little probable time savings.

The Board of the MBCSD has been consistent in its message to date; tertiary treatment as quickly as possible. To change from this direction this late into the process will lead likely preclude meeting the compliance time schedule. From all available information there are not any savings cost savings that would offset that risk. Furthermore all of the time and resources that would of necessity be invested in switching delivery methods will detract from the necessary tasks of completing the environmental review process and the design of the facility. Because of the limited resources available to MBCSD, and the high costs for switching delivery methods staff cannot recommend changing courses at this time.

If the Board desires investigating a change to the ownership and operating structure that ties Morro Bay and Cayucos together, staff requests additional time to perform financial and feasibility analysis necessary to pursue that course of action.

Agenda No. 2

Date: June 16, 2010

STAFF REPORT

MORRO BAY-CAYUCOS J.P.A.
WASTEWATER TREATMENT PLANT

To: Honorable Mayor and City Council, City of Morro Bay
Honorable President and Board of Directors, Cayucos Sanitary District

From: Rob Livick, PE/PLS - Public Services Director
Bruce Keogh, Wastewater Division Manager

Date: June 15, 2010

Subject:
Discussion and Consideration of Establishing a Value Engineering/Peer Review Process for the WWTP Project

Recommendation:
This Department recommends that the Council and District Board consider this report and provide direction to staff.

Fiscal Impact:
The cost of providing a peer review to review the method of wastewater treatment at the current level of design would range from $20,000 - $30,000.

Summary:
At the June 10, 2010, JPA meeting, there was a request for information on the Value Engineering (VE) and Peer Review Process and their roles within the upgrade project. This staff report is intended to provide background information on these two processes.

Background:
Recent JPA meetings have contained discussions concerning alternative WWTP technologies and delivery methods for upgrading the plant. It appears that the Council, District Board, and the public are struggling with how to conduct a valid and equitable comparison of the adopted upgrade project utilizing the oxidation ditch with tertiary filtration and other potential proposals. The Council and District Board are searching for analytical tools that provide them assistance with this analysis. During those discussions there has been questions regarding both the VE and the Peer Review process. The following discussion provides background information on the VE and Peer Review process.

Discussion:
Peer Review:

- Peer review is a generic term that is used to describe a process of self-regulation by a profession or a process of evaluation involving qualified individuals with the related field.

- Peer review methods are employed to maintain standards, improve performance, and provide credibility.
- Value Engineering is a subset of Peer Review.

Value Engineering:

- VE is a systematic approach to identifying a projects functional and value objectives.
- The goal of VE is to optimize the conceptual, technical, and operational aspects of a project.
- VE encourages the design of cost effective projects and may include the substitution of alternative designs.
- VE is often conducted at the 30% design phase and includes review of both capital and life-cycle costs.
- VE is not currently required for SRF funding, and recent discussions with SRF staff have confirmed that VE is not required as a condition for SRF funding.
- VE can be performed by civil engineering firms, local firms would have the expertise to perform.
- Staff estimates a VE would take approximately 6 weeks to complete

Both Peer Review and VE can be performed by civil engineering firms, local firms would have the expertise to perform. Staff estimates a VE would take approximately 3 weeks to complete

Comparisons of Treatment Technologies to Date:

During the development of the upgrade project, the oxidation ditch with filtration and MBR treatment technologies have been analyzed and contrasted on numerous occasions:

1) The facility Master Plan and Amendment #1 to the FMP included a comparison of tertiary treatment alternatives utilizing both capital as well as life cycle costs for the two treatment technologies. The outcome of those analyses was that the City and District adopted the recommendation of the oxidation ditch with filtration as the preferred treatment technology.
2) During the RFP for Design Services, five respected engineering firms reviewed and evaluated the adopted treatment project. All five firms concluded that the activated sludge/oxidation ditch with filtration had the lowest capital and life cycle costs.
3) Staff provided the Council and District Board with a VE study conducted by Black & Veatch for the City of Paso Robles for there proposed upgrade wastewater treatment plant upgrade project. That study compared a Biological Nutrient System (a version of an activated sludge project) to an MBR. The outcome of that study was that Black &Veatch recommended the BNR over the MBR due to lower capital and life cycle costs.

Conclusion:

The Board of the MBCSD has been consistent in its message to date; tertiary treatment as quickly as possible. From all available information there are no significant savings in cost savings that would offset that risk. If the Board does desire some form of additional

Peer Review/VE the time is of the essence and the Council and District Board should provide that direction to staff.