CAYUCOS SANITARY DISTRICT AND CITY OF MORRO BAY
WASTEWATER TREATMENT PLANT TECHNICAL
ADVISORY COMMITTEE

Cayucos Sanitary District
Committee Members:
Robert B. Enns
Bud Mchale

City of Morro Bay
Committee Members:
William Peirce
Betty Winholtz

MINUTES

DATE: Tuesday, July 10, 2007, 1:00 p.m.
PLACE: Veterans' Memorial Building
209 Surf Street
Morro Bay, CA 93442

CALL TO ORDER AND ROLL CALL
Robert Enns called the meeting to order at 1:15 p.m., Tuesday, July 10, 2007.

Morro Bay committee members present: William Peirce and Betty Winholtz
Morro Bay staff present: Bruce Keogh, Susan Slayton, Rob Schultz, Bruce Ambo
Cayucos committee members present: Robert Enns and Bud McHale
Cayucos staff present: Bill Callahan and Nancy Martin
Visitors: David Stringfield, Carollo Engineers

A. PUBLIC COMMENT
There were no public comments.

B. DISCUSSION OF CAPACITY AND FLOW RELATED LANGUAGE IN THE JPA AS IT RELATES TO THE WWTP UPGRADE
President Enns introduced the item and asked Keogh for an update. Referring to his handout relating to flow data, Keogh reported that Carollo Engineers used five years of average flow data for design criteria for the Wastewater Treatment Plant upgrade. Data from 2001 was dropped because two different flow meters were used during that time, and figures from 2006 were added. Morro Bay's total projected flow remained the same; however, Cayucos saw an increase of between .01 and .02 mgd, approximately 10,000 gallons/day that Keogh indicated is not a significant change in the figures and will not affect the upgrade going forward with a projected total flow of 1.47, rounded to 1.5 mgd.

In Table 3.13, Total Projected Influent Flows, Keogh reported that the upgrade is being designed using the Peak Seasonal Dry Weather Flow (PSDWF), when there is the highest organic level in the influent as well as greater volume due generally to tourism (June through August). Enns pointed out that the table shows figures greater than 1.5 for Average Daily Maximum Monthly Flow (ADMMF) for the years 2015 and forward and

asked if those figures should be of concern. David Stringfield (Carollo Engineers) answered that a 1.5 mgd designed plant will be able to handle additional flow during short periods, especially by using oxidation ditches. However, the quality of the sludge will be affected if there is a prolonged period (two to four months) of high flows. He added that the effluent will not be affected and will remain of high quality. Keogh stated that the ADMMF can also be affected by winter weather, e.g. an unusually wet month.

Enns asked for clarification on Table 3.1, Flow Contributions from Morro Bay and Cayucos. It shows an increase in the percent of total for Cayucos, with Cayucos at 28% and Morro Bay at 72% in 2006, with a five-year average of 25%/75% respectively. Keogh answered 28%72% should be used, referring then to Tables 3.11 and 3.12, Projected Influent Flows at build-out. Projected flows for Cayucos are 0.42 PSDWF (mgd) and Morro Bay are 1.05 PSDWF (mgd). Keogh indicated that capacity should be based on those figures.

Winholtz felt the population projections are too high for Morro Bay and that the City will not meet projected build-out as quickly as projected. Keogh stated he thought it would be shortsighted for the upgrade to be designed based on current population, and that the engineer's projected build-out is based on information provided by the City.

Peirce asked if the build-out figure of 12,500 for Morro Bay is a viable number. City Manager, Brue Ambo, recollected that the build-out figure includes expected peak tourist season (and maximum dry weather flow) at capacity, a figure consistent with other City planning documents.

Winholtz pointed out that the City General Plan shows build-out at 12,200 and added that Table 3.11 lists population of Morro Bay at 10,785 in 2007, a figure she says is overstated by 500. She asked if Morro Bay, therefore, will be assuming a greater percentage of costs associated with the treatment plant.

Keogh answered that Winholtz is referring to a cost apportionment issue. He stated that regardless of the capacity of the treatment plant, maintenance and operational costs of running the plant are based on flow. Cayucos District Manager, Bill Callahan, interjected that the treatment plant is being designed to ensure there is adequate capacity at build-out during the peak tourist season.

Ambo offered to gather more information for further discussion and better understanding of costs associated with capacity versus flow. Winholtz asked how population projections were arrived at and how they will influence the cost.

Rob Schultz, City Attorney, indicated Winholtz could challenge the population projection of 12,500 through the City; that the matter is a City issue and does not concern Cayucos.

The plant is being designed according to projected capacity of 1.47 total PSDWF (mgd), with Cayucos at 0.42 PSDWF (mgd) and Morro Bay at 1.05 PSDWF (mgd), the figure

rounded up to 1.5 mgd, with 0.03 mgd to be allocated to either community as an amendment to the current JPA which will be updated to apply to the upcoming upgrade.

Enns asked for questions from committee members regarding capacity issues. Schultz presented Paragraph 14 of the JPA Agreement which states:

14. Future Modifications, Replacements and Enlargements: No relocation, reconstruction, alteration to, addition to, or replacement of any portions of the wastewater treatment plant shall occur without the prior written approval by Morro Bay and Cayucos. Unless otherwise agreed to by the parties, the cost of such an agreed to reconstructed plant will be allocated based upon the capacity rights agreed to at the time of reconstruction.

Schultz stated that the capacity rights rather than ownership are the basis of construction costs and pointed out that both communities have expressed uncertainties. Some City Council members have questioned the accuracy of projected figures used to determine capacity rights and thus, Morro Bay's percentage of that capacity. Cayucos, he stated, could argue that some components of the upgrade are expenses related to rehabilitation/maintenance rather than new construction, and that those costs could be based on flow (described in Paragraph 6 of the JPA Agreement).

Schultz stated that if the upgrade project requires expanding the footprint of the plant, and if the expansion involves property owned solely by Morro Bay, allocation of costs and division of ownership would have to be addressed. He added that he does not advocate the City and the District jointly owning property that is not associated with the treatment plant. He indicated it would not be in the best interest of Morro Bay to expand the footprint of the plant to include a portion of the Morro Bay RV Park and that there are other jointly-owned properties that could be utilized.

Enns asked for any further questions from committee members. Winholtz expressed continued uncertainty with capacity versus ownership for allocation of costs for the upgrade and of projected build-out for Morro Bay. Schultz referred to Paragraph 14 of the JPA, which states that the cost for reconstruction of the plant will be based on capacity unless otherwise agreed to by both parties. Capacity rights will be locked in for 50 years when decided and agreed upon. Enns stated that the District will be responsible for 28.6% of the cost for the treatment plant upgrade and Morro Bay 71.4%, based on projected influent flows at build-out.

Schultz indicated he and District Counsel, Tim Carmel, expect to revise/update the JPA to reflect current conditions.

Enns pointed out that in the JPA there are inconsistencies in the ownership and capacity rights in the outfall, as well as a jointly-owned trunk line, and he and Keogh agreed the figures need to be consistent throughout the document. The item will be looked into.

C. DISCUSSION OF POTENTIAL SITE LOCATIONS RELATING TO THE WWTP UPGRADE
Enns asked for input from committee members.

Peirce recommended the project to be designed using the existing footprint but, if necessary, to utilize jointly-owned properties. McHale and Winholtz concurred.

Keogh reported that if the oxidation ditches are to be located within the footprint of the existing plant, 50% of the sludge beds will be removed. The ability to dry solids will be diminished, increasing hauling costs due to the increased volume of liquid. He indicated the engineers recommend retaining the sludge beds and expanding outside the footprint. However, odor issues must be addressed in considering potential sites.

With odor issues to be considered and businesses on the proximity of the existing plant, committee members suggested locating the sludge drying beds offsite. Keogh stated it can be done; however, there will be costs associated with permitting, site prep, and with transferring the material to a location for drying or composting. With the uncertainty of the future of hauling to the central valley, Enns and Peirce both recommended continued effort to consider means to handle the waste locally.

Committee member McHale departed at 2:10 p.m.

D. DISCUSSION OF ALTERNATIVE DISINFECTION METHODS FOR THE WWTP UPGRADE
Enns asked Keogh to introduce the item for discussion.

Keogh reported on the issue of the toxicity of trihalomethanes (THMs) and possibilities for limiting formation of THMs and chlorine bi-products during the disinfection and dechlorination process. Trihalomenthanes (a component of halomethane) are formed when disinfectants are exposed to organic materials. Disinfection requirements are more stringent for inland fresh water discharge as opposed to marine discharge because of the toxicity of THMs.

Referring to a letter from Doug Coats (Marine Research Specialists) Keogh reported that Sodium Hypochlorite or chlorine gas is the most cost effective means for disinfection. 14 years of data from semi-annual sampling show THMs (Chlorodibromomethane and Dichlorobromomethane) were detected in only 7% of effluent samples from the plant and showed a maximum concentration of 1.4 and. 0.8 parts per billion (ppb), respectively. The limit specified in the NPDES Discharge Permit is 1,152 and 830 ppb, respectively. With the upgrade there will be less organics in the waste stream and the concentration of THMs will decrease. Additionally, with ocean discharge THMs are quickly broken down into inert forms.

Winholtz asked if UV disinfection process costs would be greater than Sodium Hypochlorite. Keogh stated that both processes would have ongoing M&O costs. David

Stringfield reported that energy costs for UV are considerably greater than with costs for purchasing chemicals.

Enns indicated he is comfortable with the current and proposed method of disinfection. Stringfield pointed out that the concrete structures for chemical disinfection can, at a later date, be fitted for UV. Peirce concurred with Enns.

E. CONSIDERATION OF SCHEDULING AND AGENDA ITEMS FOR THE NEXT SUBCOMMITTEE MEETING
- Morro Bay & Cayucos population projections
- Disinfection methods and water recycling/reclamation
- Layout and land use for upgrade
- Composting

F. ADJOURNMENT
The meeting was adjourned at 2:35 p.m.

Minutes recorded by: _____
Nancy Martin