

**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
Harold Fones, Vice-President
Shirley Lyon, Director
Michael Foster, Director
Dan Chivens, Director

City of Morro Bay City Council:

William Yates, Mayor
Noah Smukler, Vice-Mayor
Carla Borchard, Councilmember
Nancy Johnson, Councilmember
George Leage, Councilmember

AGENDA

MEETING DATE:

6:00 p.m., Thursday, November 10, 2011

MEETING PLACE:

Multi-Purpose Room, Community
Center
1001 Kennedy Way
Morro Bay, CA 93442

HOSTED BY:

City of Morro Bay

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. All remarks shall be addressed to the governing bodies, as a whole, and not to any individual member thereof. This governing body requests that you refrain from making slanderous, profane, or personal remarks. Please refrain from public displays or outburst such as unsolicited applause, comments, or cheering. Any disruptive activity that substantially interferes with the ability of this governing body to carry out its meeting will not be permitted and offenders will be requested to leave the meeting. Your participation in JPA meetings is welcome and your courtesy will be appreciated.

A. CONSENT CALENDAR

Unless an item is pulled for separate action by the City Council or Cayucos Sanitary District Board, the following items are approved without discussion

A-1 MINUTES OF SEPTEMBER 8, 2011 JPA MEETING

Recommendation: Approve as submitted

A-2 WWTP OPERATIONS REPORT THROUGH SEPTEMBER, 2011

Recommendation: Receive and file

B. OLD BUSINESS

B-1 STATUS REPORT ON UPGRADE PROJECT AS OF NOVEMBER 1, 2011

Recommendation: Receive the Status Report and direct staff accordingly

B-2 CONSIDERATION TO DISCONTINUE THE CONCEPT OF BRINE DISPOSAL AT THE WWTP

Recommendation: Following consideration of this item, that the Council and District Board direct staff to postpone further work on this activity until the WWTP Coastal Development Permit has been issued.

C. NEW BUSINESS

**C-1 PRESENTATION AND DISCUSSION REGARDING STATUS OF DRAFT ALTERNATIVE SITES
EVALUATION PHASE 2 – FINE SCREEN ANALYSIS**

Recommendation: Receive presentation by consultant regarding the Alternative Sites Evaluation Phase 2 – Fine Screening Analysis; Council and Board discussion regarding same; Authorize staff to submit the Phase 2 – Fine Screen Analysis to the California Coastal Commission.

C-2 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. In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Public Services' Administrative Technician at (805) 772-6261, or the Cayucos Sanitary District at (805) 995-3290. Notification 24 hours prior to the meeting will enable the City and District to make reasonable arrangements to ensure accessibility to this meeting.

Materials related to an item on this Agenda submitted to the City of Morro Bay or the Cayucos Sanitary District after distribution of the agenda packet are available for public inspection at the scheduled meeting.

Foster stated the public comments he has heard in the meetings have been helpful and have influenced his opinion on the way this project is going and thanked the public for taking the time to come.

A. CONSENT CALENDAR

1 MINUTES OF AUGUST 11, 2011 JPA MEETING

MORRO BAY MOTION: Smukler made a motion to approve the Consent Calendar. The motion was seconded by Borchard and passed unanimously (5-0).

CAYUCOS MOTION: Lyon made a motion to approve the Consent Calendar. The motion was seconded by Chivens and passed unanimously (5-0).

B. OLD BUSINESS

1 STATUS REPORT ON UPGRADE PROJECT AS OF SEPTEMBER 1, 2011

Recommendation: Receive the Status Report and direct staff accordingly

Dennis Delzeit presented the status report and announced a workshop to receive public input on the Rough Screening Analysis will be held on September 19, 2011 at the Cayucos Veterans Hall at 6pm.

Yates opened up Public Comment and hearing none closed Public Comment.

Smukler discussed with Delzeit the timeline for the public's information including the fine screen analysis which will be brought to the November JPA meeting.

Foster expressed discomfort with idea of this study proceeding through the fine screen analysis until the Board has had the ability to approve the rough screen analysis. Foster questioned whether there is a need to have an October JPA meeting in order to have adequate time to review the rough screening material presented tonight. JPA Board members discussed with Delzeit the merits of having an October meeting in addition to the Public Input Workshop. The comments received on the Rough Screening will be incorporated prior to presenting the Fine Screening Results analysis. It was agreed to listen to the Dudek presentation later on the agenda before making a decision regarding a potential October JPA meeting.

2 DISCUSSION AND CONSIDERATION OF A PROPOSAL FROM CENTRAL COAST WATER TREATMENT DBA: CCULIGAN INDUSTRIAL (CCWT) FOR BRINE DISPOSAL

Keogh presented the staff report and stated the Regional Water Quality Control Board staff is supportive and would like the City and District to apply for a low threat waste discharge general permit.

Board members discussed:

- The monitoring reporting requirements
- Whether the JPA Board should approve new outside sources of brine or if should be a staff decision.
- The fee schedule and whether there should be a minimum annual fee. Foster stated support for a minimum annual fee and to get a fixed commitment.
- The potential for liability exposure in case of a noncompliance issue

Smukler stated the public should see we are taking a look at each and every additional source on our outfall which should give the public confidence of the Board's action. He also stated new sources should be approved by the Board with annual reports.

MORRO BAY MOTION: Yates moved the Council direct staff to work with the Regional Water Quality Control Board (RWQCB) to develop a low threat discharge permit for brine disposal; and direct staff to continue discussions with CCWT and to develop a fee schedule for brine disposal.

The motion was seconded by Johnson and passed 4-1. Smukler opposed.

CAYUCOS MOTION: Lyon moved the District Board direct staff to work with the Regional Water Quality Control Board (RWQCB) to develop a low threat discharge permit for brine disposal; and direct staff to continue discussions with CCWT and to develop a fee schedule for brine disposal.

The motion was seconded by Foster and passed 4-0.

C. NEW BUSINESS

1 PRESENTATION AND DISCUSSION REGARDING STATUS OF DRAFT ROUGH SCREENING ALTERNATIVE SITES EVALUATION

Recommendation: Receive presentation by consultant regarding status of Draft Rough Screening Alternative Sites Evaluation; Council and Board discussion regarding same.

Delzeit introduced the representatives of Dudek, the consulting firm which prepared the Rough Screening Evaluation. April Winecki, project manager of Dudek presented an overview of the Draft Rough Screening Analysis and explained the different criteria considered in evaluating each of the alternative sites. The fatal flaws analysis dismissed six of the 17 potential sites. Three sites are being recommended to move forward to the fine screening analysis.

Winecki explained the next step will be to compile public comments and stressed this is a draft and is intended to be revised based on comments received. The scope of work does not include another meeting.

Discussion continued between Dudek representatives April Winecki, Alison Evans and Bob Ohlund and the JPA members regarding:

- The public process and whether all parties have been properly noticed. Smukler stressed the importance of emailing anyone who had submitted a comment on the project considering the significance of the project.
- The Chevron property and why the property was split into two different sites (#15 and #5). Winecki clarified the property split is due to how the site was identified based on public input received. Smukler expressed concern to Winecki regarding the Chevron site evaluated as two sites, when it should be presented as a contiguous site and to re-do the rough screen analysis to see if a revised analysis would increase its rating score.

Yates and Smukler discussed the merits of evaluating the Chevron property as one parcel. Mayor Yates stated consensus would be needed from two other Board members then questioned if the Chevron site is selected to move forward to fine screening, then why not other properties. Smukler emphasize the importance of getting the rough screen analysis done right.

Winecki suggested moving forward with the fine screen analysis and including the Chevron property in its totality (sites 5/15) in order to get a higher level of analysis.

Further discussion continued with Dudek regarding the components of what the fine screen analysis would include: whether the treatment process is part of the analysis; the economic analysis; the ESHA area. Dudek clarified that the California Coastal Commission staff report did not find any ESHA concerns related to the existing site - an environmental analysis was done, and none were found on the existing site's parcel. The ESHA analysis is an all or nothing approach regarding whether to move forward.

Foster expressed concern regarding an all or nothing approach which could introduce a bias especially when comparing a 150 acre parcel to a 7 acre parcel. He stated several excellent candidates are being eliminated as a result and it is important to find a way to adjust for that.

Foster stated that in terms of an economic analysis, despite Dudek's attempt to quantify power costs; it is hard to calculate the potential for flood and tsunami insurance. Insurance will be required as a condition of loan and the ramifications of building on the cost could be significant.

Mayor Yates called for a 10 minute break and the meeting resumed at 740pm.

Foster asked Dudek why the existing site was not eliminated as a fatal flaw. If the criteria were applied consistently among the 17 sites, then the existing site would not have made the cut due to non-compliance with the California Coastal Act.

Foster also addressed the following concerns:

- The need for refinement of the ranking system before proceeding to a fine screening analysis. The rating and ranking system is favorable or unfavorable to various sites, some of which did not make the list.
- The issue of water reclamation and land use. Foster stated the fatal flaw analysis of prime agricultural land should be reconsidered. Adding water as a resource to prime agricultural land increases the value of the agricultural land.
- The importance of elected representatives as the decision makers. Foster stated he would like the opportunity to see the Phase I in its more final version before proceeding to Phase II.

Chivens asked for clarification regarding the process for negotiating with private property owners for property sales.

Lyon asked regarding the actual hard costs of the different sites and what the timeframe would be if the site was changed to a different location.

Dudek replied to both Chivens and Lyon that more of these details will be provided in the fine screening report.

Enns noted this is a draft report and a rough screening and noted many of the comments tonight appear to be focused on specific details that he would expect to see in the fine screening not at this stage.

Mayor Yates opened Public Comment period:

- Al Barrow, resident of Los Osos, discussed alternative energy sources and different technologies that could be used. Also, Mr. Barrow asked if a site tour has been done for the public, Water Board, and the Coastal Commission.
- Lee Johnson, resident of Morro Bay, addressed the need to pay attention to details and make sure the criteria is correct even though it is only a rough screening.

Mayor Yates closed Public Comment period.

Further discussion continued regarding doing additional analysis of the Chevron site. Dudek confirmed that they would look at sites (5/15) combined.

Delzeit stated an extra meeting is not included to approve rough screening analysis, but the JPA does have the option to add an extra meeting to the Dudek contract.

Cayucos members agreed to stick with the schedule and let Dudek lead the way.

Morro Bay members also agreed to stick with the schedule. Smukler asked for clarification regarding when the final draft of the rough screen analysis will be released. Delzeit replied the analysis will be presented at the November 10th meeting.

ADJOURNMENT

Mayor Yates adjourned the meeting at 8:18p.m.

Minutes Recorded by:

Cindy Jacinth, Morro Bay Public Services Dept.

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: Bruce Keogh, Wastewater Division Manager

date: November 3, 2011

subject: WWTP Operations Report through September, 2011

recommendation:

This Department recommends this report be received and filed.

fiscal impact:

None

summary:

Attached find copies of the Morro Bay-Cayucos Wastewater Treatment Plant monthly reports, from July 2011 to September 2011 and the WWTP flow summary, through September 2011. This information updates the item from the August 11, 2011 meeting.

The City of Morro Bay-Cayucos Wastewater Treatment Plant

MONTHLY OPERATIONS SUMMARY

JULY 2011

Flow for the month of July averaged 1.408 Million Gallons per Day (MGD). Removal of suspended solids ranged from 83.7 % to 95.9 % for the month, with an average removal of 91.8 % for the month. BOD removal ranged from 75.3 % to 89.7 % for the month, with an average removal of 84.4 % for the month. Rainfall for the month was 0.0 inches. For the month of July, the plant was in compliance with the discharge and receiving-water limitations specified in the NPDES discharge permit. Other than normal operations and maintenance, the following items are noteworthy:

The following items are noteworthy concerning the upgrade project for the wwtp:

- Public outreach workshops were held on June 27 and 28 to receive comments to ensure conduct of a thorough and balanced alternatives analysis to prepare additional studies required by staff at the California Coastal Commission.
- The public comment period deadline for the rough screening alternative sites evaluation closed on July 15. Public comments were received through the project website online submission form, as well as in hard-copy written, emailed and/or faxed formats. Staff from Dudek have complied the comments and will provide topical responses to all comments received in an appendix to the rough screening alternative sites evaluation report.
- Staff from Dudek is currently working on the draft rough screening alternative sites evaluation. The draft rough screening alternative sites evaluation is scheduled to be presented to the JPA at the September 8, 2011 meeting.
- A meeting with Coastal Commission staff has been scheduled for August 25 in Santa Cruz. The meeting will be attended by Dudek, MBCSD staff and the project manager.

On July 18, staff from Perrys Motors installed main influent pump #3. Staff pulled influent pump #3 on July 12 because of a leaky seal. Staff from Perrys Motors picked the pump up on July 13 and performed the necessary repairs prior to installation of the pump.

During the month of July, plant staff continued with efforts for protection of critical plant facilities against moderate flooding. This project is designed to protect critical buildings and equipment in the event of moderate flooding at the plant. During July, Doug Allred Construction completed the construction of flood walls at the motor control centers (MCC), maintenance shop, and administration building. The flood walls will protect the buildings while still allowing access into the MCCs. Staff are continuing with the installation of flood gates on some doors of the MCCs, and raising equipment as necessary to get above a flood elevation of thirty inches.

On July 22, staff attempted to perform a video inspection of the effluent launder and associated discharge piping on primary clarifier #1. They were able to video a portion of the effluent launder box and butterfly valve, but visibility within the discharge piping was

limited due to standing water within the pipeline. Staff is developing a strategy to lower the standing water and complete the video inspection process.

On July 26, staff from San Luis Powerhouse performed the quarterly maintenance and inspection on the emergency auxiliary generator; they noted that the oil pressure sending unit had a small oil leak. They ordered the appropriate replacement parts and will install them upon arrival. No other problems were noted during the inspection.

On July 14, staff from Titan Industrial installed a new oxygen sensor on the atmospheric monitoring system used to monitor the headworks influent channel screening area.

On July 6, staff discovered and replaced a faulty sump pump used to supply sample to the Wallace and Tiernan Micro 2000 total chlorine residual analyzer.

On July 26, staff replaced the ferric chloride chemical dosing pump with a rebuilt pump. The existing pump was leaking from the diaphragm.

On July 13, staff replaced the sight glass and associated piping and valving for the sodium hypochlorite chemical storage tank.

On July 1, staff replaced the water trap on the digester gas system for digester #2. They also installed a new sight glass and associated valving. The existing trap was badly corroded and not cost effective to repair.

On July 11, staff installed a backflow preventor on the water line used to supply water to the seals for the biofilter recirculation pumps at the interstage pumping station.

On July 26, staff replaced the oil pressure switch on instrument air compressor #2. They also reset the high and low cutoff set points on the pressure switch.

The following reports were submitted to the appropriate agencies:

- The Discharge Monitoring Forms (DMR) for June 2011

The following reports were submitted to the CIWQS electronic reporting system:

- The June 2011 Monthly Monitoring Data
- Second Quarter Receiving Water Survey, June 2011

On July 18, laboratory staff received notice that they had acceptable results for Water Pollution -196 Performance Testing (WP – 196). WP-196 is an annual testing program that the laboratory is required to participate in as a component of the labs certification through the Environmental Laboratory Accreditation Program (ELAP).

On July 22, the plant received an order of ferric chloride instead of ferrous chloride. Plant staff will be using ferric chloride on a trial basis to determine if ferric can be used to enhance settling in the primary clarifiers. Historically the plant has used ferrous chloride to control hydrogen sulfide in the digester gas. Ferric chloride will perform a similar role in controlling hydrogen sulfide, but should also enhance settling in the primary clarifiers.

During July, plant staff continued to investigate possible solutions to the struvite problem that has been noted at the plant. Plant staff began a sampling program for phosphates in the collection system. Phosphates can be a critical component in the formation of struvite. Struvite, which is crystal like material, appears to be building up in the discharge piping of the digesters. Staff is concerned that the crystal like material will build up in the discharge piping of the digesters, and potentially impact the hydraulic capacity of those pipelines. Plant staff is currently in contact with various vendors and other treatment facilities in an attempt to correct the problem.

On July 27, Mr. Bruce Keogh toured the South County Sanitation Districts wastewater treatment plant as part of a peer review process of the Districts operations. Mr. Kamil Azury and Mr. Brad Haggeman are the other members of the peer review team. The peer review team will be providing recommendations to District staff on ways to improve and enhance the Districts administrative and operational procedures.

The National Estuary Program Volunteer Monitoring Program continued analysis of bacterial samples collected from throughout the watershed in the laboratory at the plant. The volunteers are using space provided in the lab by plant staff.

The permanent household hazardous waste collection facility (PHHWCF) at the plant continued to be well used by the public. Between twenty and fifty participants are using the facility each Saturday.

Bruce Keogh
Wastewater Division Manager
Lab/C/Bruce/Monthlys/July 2011

The City of Morro Bay-Cayucos Wastewater Treatment Plant

MONTHLY OPERATIONS SUMMARY **AUGUST 2011**

Flow for the month of August averaged 1.243 Million Gallons per Day (MGD). Removal of suspended solids ranged from 90.9 % to 95.1 % for the month, with an average removal of 92.7 % for the month. BOD removal ranged from 79.8 % to 88.0 % for the month, with an average removal of 82.8 % for the month. Rainfall for the month was 0.0 inches. For the month of August, the plant was in compliance with the discharge and receiving-water limitations specified in the NPDES discharge permit. Other than normal operations and maintenance, the following items are noteworthy:

The following items are noteworthy concerning the upgrade project for the wwtp:

- On August 25, representatives from Dudek, Morro Bay, and Cayucos met with staff from the California Coastal Commission in Santa Cruz to discuss and review the administrative draft rough screen evaluation and to discuss the project schedule.
- On September 1, the draft rough screening alternative sites evaluation report prepared by Dudek was released for public review and comment. The draft rough screening alternative sites evaluation is scheduled to be presented to the JPA at the September 8, 2011 meeting.
- Beginning September 1, the public comment period began for the draft rough screening alternative sites evaluation and the upcoming fine screen analysis. The deadline for public comments is September 30. Public comments will be received through the project website online submission form, as well as in hard-copy written, emailed and/or faxed formats. Staff from Dudek will compile the comments and will provide topical responses to all comments received in an appendix to the rough screening alternative sites evaluation report.
- A public outreach workshop will be held on September 19 to receive comments on the draft rough screen analysis and the upcoming fine screen analysis to ensure conduct of a thorough and balanced alternatives analysis to prepare additional studies required by staff at the California Coastal Commission.

During the month of August, plant staff continued with efforts for protection of critical plant facilities against moderate flooding. This project is designed to protect critical buildings and equipment in the event of moderate flooding at the plant. During August, plant staff made preparations for improvements to the administration building to protect the building in the event of moderate flooding. The improvements are scheduled to be completed in September by Doug Allred Construction.

During August, staff from Alpha Electric worked on the following:

- They completed the installation of a float system in the main influent channel that can be used to control the main influent pumps in the event either the ultrasonic or bubbler system used for level control in the influent channel become inoperative.

- They installed new wiring and control circuits for the atmospheric gas monitors at the headworks.
- They installed a switch and cover on the utility panel door of the main auxiliary generator switch gear so that the Operators do not have to open the panel to perform routine generator testing.
- They replaced the amperage and volt meters on the control panel of the switch gear for utility power and the emergency auxiliary generator.

On August 19, two new grit bins were delivered from the manufacturer. After inspection, it was determined that the new grit bins were not coated properly and would have to be returned to the manufacturer for corrective action. Staff also had the manufacturer make minor modifications to the grit bins to optimize their performance at the plant. The repairs are expected to take several weeks to perform. The new grit bins will replace the existing bins that are extremely corroded and have required major repair work over the past several years to remain operational.

On August 9, staff from San Luis Powerhouse installed two new oil pressure sending units on the emergency auxiliary generator. They noted that one of the oil pressure sending units had a small oil leak during their quarterly inspection of the emergency auxiliary generator on July 26.

On August 5, staff replaced the sight glass and associated piping and valving on the ferric chloride storage tank.

On August 5, staff replaced the sight glass and associated piping and valving on the sodium bisulfite storage tank. Staff discovered significant amounts of sodium bisulfite crystals within the piping resulting in a partial blockage of the piping. They also discovered some crystalline debris in the bottom of the tank. Staff is consulting with the chemical distributor for sodium bisulfite for possible solutions to prevent crystallization within the piping and storage tank.

On August 23, staff replaced the pressure and vacuum relief valves on all three digesters. The pressure and vacuum relief valves are replaced annually as part of the operation and maintenance program for the digesters.

On August 2, lab staff discovered a fault with the oven used to dry samples. They replaced the unit with the back up oven and consulted the manufacturer about possible corrective actions. Staff ordered a new oven after it was determined that the existing oven was not cost effective to repair.

On August 18, staff from Harbor Electric installed new pressure switches on instrument air compressors numbers 1 and 2. They had noted a faulty high pressure cut off switch during an inspection on August 10.

The following reports were submitted to the appropriate agencies:

- The Discharge Monitoring Forms (DMR) for July 2011
- The Semi-Annual DMR forms for July to December 2011

- The Annual DMR forms for January to December 2011

The following reports were submitted to the CIWQS electronic reporting system:

- The July 2011 Monthly Monitoring Data
- July 2011 Semiannual Effluent Sampling Chemistry and Bioassay Analyses Results

During August, plant staff continued to investigate possible solutions to the struvite problem that has been noted at the plant. Struvite, which is crystal like material, appears to be building up in the discharge piping of the digesters. Staff is concerned that the crystal like material will build up in the discharge piping of the digesters, and potentially impact the hydraulic capacity of those pipelines. Plant staff is currently in contact with various vendors and other treatment facilities in an attempt to correct the problem.

During August, the Public Services Department mailed out the Utilities Newsletter for the City of Morro Bay Public Services Department to all residents of Morro Bay. The mailer included updates on the plant upgrade, information and best management practices for the proper disposal of pharmaceuticals, fats, oils, and greases (FOG), and the proper disposal of cat litter.

On August 31, Mr. Dave Bierman was promoted to a Grade II Operator position. He received his Grade II Wastewater Operator certification from the State Water Resources Control Board Office of Operator Certification on July 26, 2011.

On August 26, Mr. David Williams retired from his position as a Grade II Operator at the plant. The City will be conducting a recruitment to fill his position.

On August 3, Mr. Les Girvin, Mr. Steve Aschenbrener, and Mr. Steve Sibley attended an eight-hour CPR/ First Aid class sponsored by MedicFirst.

The National Estuary Program Volunteer Monitoring Program continued analysis of bacterial samples collected from throughout the watershed in the laboratory at the plant. The volunteers are using space provided in the lab by plant staff.

The permanent household hazardous waste collection facility (PHHWCF) at the plant continued to be well used by the public. Between twenty and fifty participants are using the facility each Saturday.

Bruce Keogh
Wastewater Division Manager
Lab/C/Bruce/Monthlys/August 2011

The City of Morro Bay-Cayucos Wastewater Treatment Plant

MONTHLY OPERATIONS SUMMARY

SEPTEMBER 2011

Flow for the month of September averaged 1.109 Million Gallons per Day (MGD). Removal of suspended solids ranged from 91.8 % to 92.8 % for the month, with an average removal of 92.2 % for the month. BOD removal ranged from 75.7 % to 90.5 % for the month, with an average removal of 82.3 % for the month. Rainfall for the month was 0.0 inches. For the month of August, the plant was in compliance with the discharge and receiving-water limitations specified in the NPDES discharge permit. Other than normal operations and maintenance, the following items are noteworthy:

The following items are noteworthy concerning the upgrade project for the wwtp:

Activities during September 2011

- On September 1, the Draft Rough Screening Alternative Sites Evaluation report prepared by Dudek was released for public review and comment. The Draft Rough Screening Alternative Sites Evaluation report was presented to the City Council and Sanitary District Board at the JPA meeting on September 8, 2011. The rough screening study evaluated seventeen potential sites and the final screening study is now tentatively reduced to three sites (the current WWTP site, the Chevron facility site and the Righetti property);
- On September 1, the public comment period began for the Draft Rough Screening Alternative Sites Evaluation report and the upcoming fine screen analysis. The deadline for public comments was September 30. Public comments will be received through the project website online submission form, as well as in hard-copy written, emailed and/or faxed formats.
- A public outreach workshop was held on September 19 at 6:00 PM at the Cayucos Vet's Building to receive comments on the Draft Rough Screen Analysis and the upcoming fine screen analysis to ensure conduct of a thorough and balanced alternatives analysis to prepare additional studies required by staff at the California Coastal Commission.

On September 29 and September 30, staff from Ballard Diving and Salvage in coordination with plant staff completed an internal video inspection of the outfall beginning at the air relief structure within the plant and proceeding west toward the diffuser structure. The outfall is approximately five thousand feet two hundred long. The inspection process was conducted by a submarine or "ROV" (remote operated vehicle) that utilizes both video cameras as well as sonar imaging to conduct the inspection. The logistics involved with this inspection were extremely difficult. As the water level within the outfall is dependent upon the tides, it required a sufficient flow within the outfall to push the ROV far enough down the outfall (approximately 800 feet) to where the ROV was completely submerged and could swim down the pipe under its own power. In addition, once the inspection process started, all flow to the outfall had to be stopped for a minimum of five hours without compromising and impacting normal plant operations (the only time it is possible to stop flow for this time period is during the early

morning hours when influent flow is at its lowest). This involved manipulation of plant operational processes and included draining the grit chamber and one primary clarifier that were refilled (thus stopping flow to the outfall) while the inspection was on-going. In addition, staff also pumped down the chlorine contact tank to a sludge drying bed for further storage capacity (this water was dechlorinated and ultimately decanted back to the headworks). During this period, staff also implemented methods to deliver precisely controlled flow amounts to the outfall to assist the contractor in getting the video inspection equipment into and down the outfall pipe. This included partially draining the secondary clarifier to temporarily increase flows within the outfall. Plant staff should be commended for their operational preparations and planning, as well as implementing their operational plans.

The inspection resulted in both video images as well as sonar images that provide pipe profiles. The video quality was not good due to limited visibility, but the sonar images provided cross sections of the pipe every one hundred feet to show out of round or loss of cross section from debris build up. Staff is still waiting for the final phase of the inspection and the final report, but it appears that overall the outfall pipe appears to be in good condition. The inspection process did detect some build up of sediment or debris towards the west end of the outfall near the diffuser structure, but it does not appear to be impacting the operational performance of the outfall. Staff will perform a more detailed analysis once they receive the final inspection report.

During the month of September, plant staff continued with efforts for protection of critical plant facilities against moderate flooding. This project is designed to protect critical buildings and equipment in the event of moderate flooding at the plant. During September, staff from Doug Allred Construction began making improvements to the administration building to protect the building in the event of moderate flooding. The improvements are scheduled to be completed in October.

On September 15, staff removed and performed repairs to the discharge piping for the sludge recirculation pump for digester #2. The repairs included spot welding repairs at various locations to stop pin hole leaks in the piping.

On September 9, staff rebuilt scum pump #2. They discovered a tear in the diaphragm of the pump. The rebuild included replacement of the o-rings on the shaft, new face gaskets, new balls and seats, and new diaphragms. The pump is on-line and operating as designed.

On September 5, staff from Univar pumped out the contents of the sodium bisulfite storage tank and filtered the sodium bisulfite through a series of filters to remove any contaminants. This was done in response to plant staff discovering some crystalline like debris in the bottom of the tank during maintenance activities in August. Plant staff set up a temporary storage barrel while the sodium bisulfite tank was drained and cleaned to ensure dechlorination of the effluent.

Staff is continuing to consult with the chemical distributor for sodium bisulfite for possible solutions to prevent crystallization within the piping and storage tank.

On September 16, staff replaced the shives and installed a new drive belt on the drive motor and pump for the digester sludge recirculation pump on digester #3.

On September 20, staff from the Gas Company replaced the main gas meter at the plant, as part of a regular replacement schedule. During that process, they discovered and informed plant staff that the gas line on the plant side of the meter had a pin hole leak due to corrosion. They stated that it was not an immediate safety threat, but that the pipe should be repaired. Plant staff is discussing possible solutions with various local contractors.

On September 9, staff replaced the hose on the sample head of the American Sigma 900 Max twenty-four composite samples used to collect the twenty four hour influent and effluent composite samples.

On September 6, plant staff sampled the biosolids in storage at the plant. Staff is awaiting the results of the biosolids analyses at this time. After receipt of the results, staff will make arrangements with a contractor to compost the biosolids.

On September 27 and 28, staff from Kones Cranes performed the annual inspection of three cranes at the plant. In addition to the inspection process, they changed the gearbox oil on the three cranes at the plant. No maintenance issues were identified during the inspection.

The following reports were submitted to the appropriate agencies:

- The Discharge Monitoring Forms (DMR) for August 2011

The following reports were submitted to the CIWQS electronic reporting system:

- The August 2011 Monthly Monitoring Data

The twenty-four hour flow total reported for September 29 was based on the twenty-four hour flow total recorded on the effluent flow meter that was adjusted downward by 25 % (historically the effluent flow meter over totalized the flow by about 25%) as recommended in the Recommendations Section of the 2002 Annual Report (page 5-8). The errant flow total recorded on September 29 was due to the influent flume surcharging during the internal video inspection of the outfall. During the inspection process, the main influent gate was closed several different times to regulate flow through the plant resulting in the surcharging of the influent flume.

On September 29, the influent flow meter recorded a twenty-four hour flow total of 1.256 million gallons. The effluent meter recorded a twenty-four hour flow total of 1.713 million gallons. The twenty-four hour flow total for September 29, was calculated as: $1.256 \text{ MG} * .75 = 0.942 \text{ million gallons}$.

During September, plant staff continued to investigate possible solutions to the struvite problem that has been noted at the plant. Struvite, which is crystal like material, appears to be building up in the discharge piping of the digesters. Staff is concerned that the crystal like material will build up in the discharge piping of the digesters, and potentially

impact the hydraulic capacity of those pipelines. Plant staff is currently in contact with various vendors and other treatment facilities in an attempt to correct the problem.

The September water bills for the City of Morro Bay included a “Don’t Flush the Mush” insert. The insert is an annual reminder to water customers within Morro Bay on the proper disposal of cat litter.

On September 8, Mr. Bruce Keogh, Mr. Steve Aschenbrener, and Mr. John Gunderlock attended the California Water Environment Association (CWEA) Tri Counties Workshop held at the City of San Luis Obispo Corporation yard.

On September 21, Mr. Stewart Stewart toured the plant.

The National Estuary Program Volunteer Monitoring Program continued analysis of bacterial samples collected from throughout the watershed in the laboratory at the plant. The volunteers are using space provided in the lab by plant staff.

The permanent household hazardous waste collection facility (PHHWCF) at the plant continued to be well used by the public. Between twenty and fifty participants are using the facility each Saturday.

Bruce Keogh
Wastewater Division Manager
Lab/C/Bruce/Monthlys/September 2011

2009	Total Flow	Daily Flow	Total Flow	Daily Flow	%	Total Flow	Daily Flow	%	# of days	Dates
JAN	30.468	0.983	7.585	0.237	24.9%	22.883	0.738	75.1%	32	Jan 1 - Feb 1, 2009
FEB	33.479	1.196	8.968	0.332	26.8%	24.511	0.875	73.2%	27	Feb 2 - Feb 28, 2009
MAR	33.975	1.096	7.973	0.257	23.5%	26.002	0.839	76.5%	31	Mar 1 - March 31, 2009
APR	33.841	1.128	7.341	0.245	21.7%	26.500	0.883	78.3%	30	April 1 - April 30, 2009
MAY	33.558	1.083	7.495	0.242	22.3%	26.063	0.841	77.7%	31	May 1 - May 31, 2009
JUNE	32.980	1.099	7.849	0.262	23.8%	25.131	0.838	76.2%	30	June 1-30, 2009
JULY	39.578	1.277	10.034	0.324	25.4%	29.544	0.953	74.6%	31	July 1 - July 31, 2009
AUG	35.664	1.150	8.843	0.285	24.8%	26.821	0.865	75.2%	31	Aug 1 - Aug 31, 2009
SEPT	30.367	1.012	7.219	0.241	23.8%	23.148	0.772	76.2%	30	Sept 1 - Sept 30, 2009
OCT	31.338	1.011	7.873	0.254	25.1%	23.465	0.757	74.9%	31	Oct 1 - Oct 31, 2009
NOV	30.237	1.008	7.181	0.239	23.7%	23.056	0.769	76.3%	30	Nov 1 - Nov 30, 2009
DEC	33.261	1.073	8.260	0.266	24.8%	25.001	0.806	75.2%	31	Dec 1 - Dec 31, 2009
ANNUAL AVERAGES	33.229	1.093	8.052	0.265	24.2%	25.177	0.828	75.8%		
2010	Total Flow	Daily Flow	Total Flow	Daily Flow	%	Total Flow	Daily Flow	%	# of days	Dates
JAN	42.053	1.357	11.058	0.357	26.3%	30.995	1.000	73.7%	31	Jan 1-Jan 31, 2010
FEB	35.432	1.265	9.845	0.352	27.8%	25.587	0.914	72.2%	28	Feb 1-Feb 28, 2010
MAR	36.204	1.168	9.396	0.303	26.0%	26.808	0.865	74.0%	31	March 1 - 31, 2010
APR	34.481	1.149	8.560	0.285	24.8%	25.921	0.864	75.2%	30	April 1 - April 30, 2010
MAY	34.141	1.101	8.059	0.260	23.6%	26.082	0.841	76.4%	31	May 1 - 31, 2010
JUNE	33.550	1.118	8.109	0.270	24.2%	25.441	0.848	75.8%	30	June 1-30, 2010
JULY	39.626	1.278	10.695	0.345	27.0%	28.931	0.933	73.0%	31	July 1-31, 2010
AUG	37.919	1.223	8.993	0.290	23.7%	28.926	0.933	76.3%	31	August 1-31, 2010
SEPT	31.984	1.066	7.510	0.250	23.5%	24.474	0.816	76.5%	30	September 1-30, 2010
OCT	32.144	1.037	7.490	0.242	23.3%	24.654	0.795	76.7%	31	October 1-31, 2010
NOV	31.512	1.050	7.885	0.263	25.0%	23.627	0.788	75.0%	30	November 1-30, 2010
DEC	44.378	1.432	14.061	0.454	31.7%	30.317	0.978	68.3%	31	December 1-31, 2010
ANNUAL AVERAGES	36.119	1.187	9.305	0.306	25.6%	26.814	0.881	74.4%		
2011	Total Flow	Daily Flow	Total Flow	Daily Flow	%	Total Flow	Daily Flow	%	# of days	Dates
JAN	42.338	1.366	12.089	0.390	28.6%	30.249	0.976	71.4%	31	Jan 1-Jan 31, 2011
FEB	35.600	1.271	9.674	0.346	27.2%	25.926	0.926	72.8%	28	Feb 1-Feb 28, 2011
MAR	47.887	1.545	13.770	0.444	28.8%	34.117	1.101	71.2%	31	March 1 - 31, 2011
APR	38.937	1.298	9.117	0.304	23.4%	29.820	0.994	76.6%	30	April 1 - April 30, 2011
MAY	37.092	1.197	8.704	0.281	23.5%	28.388	0.916	76.5%	31	May 1 - 31, 2011
JUNE	37.769	1.259	9.381	0.313	24.8%	28.388	0.946	75.2%	30	June 1-30, 2011
JULY	43.654	1.408	11.186	0.361	25.6%	32.468	1.047	74.4%	31	July 1-31, 2011
AUG	38.518	1.243	9.080	0.293	23.6%	29.438	0.950	76.4%	31	August 1-31, 2011
SEPT	33.263	1.109	7.526	0.251	22.6%	25.737	0.858	77.4%	30	September 1-30, 2011
OCT	0.000	0.000	0.000	0.000	#DIV/0!	0.000	0.000	#DIV/0!	31	October 1-31, 2011
NOV	0.000	0.000	0.000	0.000	#DIV/0!	0.000	0.000	#DIV/0!	30	November 1-30, 2011
DEC	0.000	0.000	0.000	0.000	#DIV/0!	0.000	0.000	#DIV/0!	31	December 1-31, 2011

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: Dennis Delzeit, P.E., Project Manager

Date: November 1, 2011

Subject: Status Report on Upgrade Project as of November 1, 2011

Recommendation: Receive the Status Report and direct staff accordingly

Activity During the Past Month:

The following is a condensed summary of the activity that has occurred since the October 1, 2011 monthly status report:

- The monthly *force majeure* status report was submitted to the Regional Water Quality Control Board;
- The Alternative Sites Evaluation Phase2-Fine Screening Analysis is now limited to three sites - the current WWTP site; the Chevron property (Site 5/15) and the Righetti property (Site 16);
- MBCSD staff issued a reclaimed water survey to potential customers as part of the water reclamation component of the Analysis. The survey deadline is November 7th;
- Dudek completed the administrative draft Analysis and submitted it to the MBCSD staffs and project manager for review and comment;
- The MBCSD staffs and the project manager reviewed the draft report with Dudek and provided comments;
- Dudek completed the final draft of the report;
- During the past month, Dudek has continued to communicate with the California Coastal Commission staff.

Looking Ahead:

The following activities are anticipated:

- The target date for the release of the draft Alternative Sites Evaluation Phase2-Fine Screening Analysis is November 3rd.
- Information obtained from the reclaimed water survey will be developed for CCC submittal once it is received;

- The draft Analysis will be on the November 10, 2011 JPA agenda;
- The MBCSD staff and project manager will meet with the Coastal Commission staff in Santa Cruz on November 28 to submit the *de novo* materials.

Fiscal Impact:

- No new expenditures are requested at this time.

Discussion/Project Overview:

Major Milestone Schedule

- | | |
|--|----------------------------|
| • Council certified the EIR and approval of the Conditional Use Permit and Coastal Development Permit | January 11, 2011 |
| • Deadline for Coastal Commission Appeals | January 31, 2011 |
| • Coastal Commission <i>substantial issue</i> hearing | March 11, 2011 |
| • Coastal Commission <i>de novo</i> hearing | Not scheduled |
| • Public Outreach/Workshops | June 27 & 28, 2011 |
| • Deadline for the rough screening criteria and alternative sites public comments | July 15, 2011 |
| • Coastal Commission staff level meeting in Santa Cruz | August 25, 2011 |
| • Public release of the Rough Screening analysis | September 1, 2011 |
| • Rough Screening Analysis Presentation to the JPA | September 8, 2011 |
| • Public workshop- Alternative Sites Update | September 19, 2011 |
| • Deadline for public comments on the Rough Screening Analysis and Fine Screening criteria and alternative sites | September 30, 2011 |
| • Public release of the draft Fine Screening analysis | November 3, 2011 |
| • Fine Screening Analysis Presentation to the JPA | November 10, 2011 |
| • Coastal Commission staff level meeting in Santa Cruz (review de novo materials) | November 28, 2011 |
| • Coastal Commission Hearing (Central Coast location)¹ | February 8-10, 2012 |
| or | |
| • Coastal Commission Hearing (S. Central Coast location)² | April 11-13, 2012 |
| • Submit SRF loan application to the State Board | On hold |
| • Issuance of SRF Financing Agreement | On hold |
| • Submit first SRF disbursement request to State Board | On hold |
| • Completion of the Design | On hold |
| • Advertise for Construction Bids | On hold |
| • Receive Construction Bids | On hold |
| • Award Construction Contract, after receiving State Revolving Fund Loan Approval | On hold |

¹ A Central Coast Location could be in Santa Cruz, Monterey or San Luis Obispo County.

² A South Central Coast Location could be in Santa Barbara, Ventura or Los Angeles County.

- Start Construction On hold
- Completion of Construction On hold
- Achieve full compliance with federal secondary treatment Requirements Extended per *force majeure* action

Substantial Issues Study:

Dudek contract Fee Status:

- Contract Amount: \$345,485.00
- Amount invoiced to date: \$203,255.31
- Amount remaining in contract: \$142,229.69
- Most recent billing amount (10/20/11): \$125,985.30
- Percent of contract billed: 59%

Design:

No design work has been done the past month. Final design of the project will resume after completion of the Coastal Commission Appeal Process.

MWH Contract Fee Status:

- Contract Amount: \$2,700,000.00
- Addendum #1, updated flows and loadings: \$ 9,000.00
- Addendum #2, advanced treatment options: \$ 9,600.00
- Addendum #3, updated cost estimate \$ 18,700.00
- Revised MWH Contract Amount: \$2,737,300.00
- Amount Billed to Date: \$ 469,858.82
- Amount Remaining: \$2,230,141.18
- Most Recent Billing Amount (5/20/11)³ \$ 29,849.74
- Percent of Contract Billed: 17%

California Coastal Commission Coastal Land Use and Advocacy Consultant Services:

The McCabe & Company contract is currently suspended.

- Invoice 4/11/11: \$12,500 + \$857.47⁴ = \$13,347.57
- Invoice 5/3/11: \$12,500 + \$98.28⁵ = \$12,598.28
- Invoice 6/3/11: \$12,500 + \$4,032⁶ = \$16,532.00
- Total billings from start of contract to suspension: \$42,477.85⁷

State Revolving Fund Loan:

³ The 5/2/11 invoice is for services rendered 1/1/11 through 1/28/11. MWH work was suspended on 11/19/10 except for completion of surveying, geotechnical report, floor plan layout and support at the PC and CC meetings in support of the permits.

⁴ Travel expenses to Morro Bay and the Santa Cruz Coastal Commission hearing on 3/11/11. The contract fee is \$12,500 per month plus outside expenses.

⁵ Conference calls outside expenses.

⁶ This is the prorated fee from March 22 through 31 that was not previously billed.

⁷ This is the total fee for services from the beginning to the suspension of the contract: Feb 22 through May 31, 2011

- The State Revolving Fund loan process is on hold for due to the *force majeure* time extension.

Project Manager Activities:

- Prepared and submitted the monthly report to the RWQCB;
- Prepared the monthly status report to the JPA;
- Updated the web site information;
- Prepared staff reports for the November 10, 2011 JPA meeting;
- Reviewed, commented and coordinated with Dudek and MBCSD staff on the draft Alternative Sites Evaluation Phase2-Fine Screening Analysis ;
- Contacted Chevron attempting to secure permission for site access;

- Dennis Delzeit's Contract Fee Status:

▪ Original Contract amount:	\$250,000.00
▪ Contract Amendment (PERC)	\$ 3,000.00
▪ Revised Contract Amount:	\$253,000.00
▪ Amount billed to date:	\$114,440.74
▪ Amount remaining:	\$138,559.26
▪ Most Recent Billing Amount (10/5/11)	\$ 3,463.20
▪ Percentage of contract billed:	45%

It is estimated that the \$253,000 project limit will be reached around December 2012.

Attachment:

None

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: Bruce Keogh, Wastewater Division Manager

Date: November 3, 2011

Subject:
Consideration to Discontinue the Concept of Brine Disposal at the WWTP

Recommendation:

This Department recommends that following consideration and discussion of this item that the Council and District Board direct staff to postpone further work on this activity until the Coastal Development Permit for the upgrade of the WWTP has been issued.

Fiscal Impact:

None

Summary:

At the September 8th JPA meeting, there was continued discussion concerning the concept of accepting brine from Central Coast Water Treatment DBA: Culligan Industrial (CCWT) for disposal in the outfall. At the September 8 JPA meeting, the Council and District Board directed staff to work with the Regional Water Quality Control Board (RWQCB) to develop a low threat discharge permit for brine disposal; and directed staff to continue discussions with CCWT for brine disposal and to develop a fee schedule for brine disposal.

Subsequent to that meeting, staff had discussions with staff from the California Coastal Commission (CCC) concerning the brine disposal concept. CCC staff has stated to City staff that the Coastal Development Permit (CDP) for the current plant does not allow for service for customers outside City and Cayucos Sanitary District Boundaries. This effectively stops the concept for accepting brine from CCWT at this time as they are outside the effective service boundaries of the City and District.

Background:

The concept of disposing of brine through the WWTP outfall has been a topic of discussion at the last two JPA meetings. The discussion was prompted by CCWT's request to dispose of brine from the regeneration of CCWT's DI (deionized) tanks that produce pure water for labs, wineries, car lots, etc.

Discussion:

Following the September 8, JPA meeting, there were discussions concerning the brine disposal concept with CCC staff. During the course of those conversations the CCC staff made it clear that they felt a CDP would be required for brine disposal, they stated, "...the disposal of

additional brine through the outfall is development that requires a permit from the Coastal Commission, and the current WWTP permit does not appear to allow for the proposed project.” In fact, the CDP issued in September 1978 for the current WWTP has the following condition: *“The area eligible to be served with wastewater services shall be limited to the service area as it exists at the time of the approval of this Coastal Development Permit which is defined as the existing Cayucos Service District and the incorporated city limits of Morro Bay.”*(Condition #3, CDP#406-1) As the CCWT facility is outside the City and CSD service boundaries, accepting brine from CCWT would not be consistent with the conditions of the CDP. Due to limited staff time and resources, and the minor potential revenue stream from this concept, staff is not recommending pursuing an amendment to the current CDP.

City staff did discuss with CCC staff the concept of amending or revising the CDP currently under review by CCC staff for the upgrade of the treatment plant to allow for limited quantities of brine and septage from outlying areas. CCC staff responded that this could be problematic as Coastal Act Section 30254 states that new or expanded public works facilities must be limited to accommodate the needs generated by development that is permitted consistent with the Coastal Act. It does not appear to CCC staff that trucking brine waste from inland areas could be found consistent with this section. They also stated that they would need a more detailed project description to fully understand the proposal.

Staff discussed the CCC response with staff at Dudek. Dudek staff felt that attempting to amend or revise the current CDP application pending before the CCC could make an already difficult process even more onerous. Based on their recommendation, limited staff time and resources that need to be focused on the current CDP application process, and the need to focus on the bigger picture of getting the CDP issued for the plant upgrade, City staff is recommending that the brine disposal concept be postponed until the CDP for the upgrade project is issued. Following issuance of the CDP, the Council and District Board could direct staff to pursue the concept of brine disposal through the WWTP outfall.

City staff has been in close contact with representatives from CCWT and informed them of the current situation and that City staff would be recommending that the brine disposal concept be postponed. They were very understanding and expressed thanks to the City and District for exploring this concept on their behalf.

Staff has also continued to stay in contact with the RWQCB staff concerning the brine disposal concept. While they understand the constraints of the conditions of the current CDP for the existing WWTP, they continue to express their support for brine disposal through WWTP outfalls as they seek to develop salt management programs to facilitate basin-wide management of salts and nutrients from all sources in a manner that optimizes recycled water use while ensuring protection of groundwater supply and beneficial uses, agricultural beneficial uses, and human health.

Conclusion:

This Department recommends that following consideration and discussion of this item that the Council and District Board direct staff to postpone further work on this activity until the WWTP Coastal Development Permit has been issued.

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: Dennis Delzeit, P.E., Project Manager

Date: November 3, 2011

Subject: Presentation and discussion regarding status of the Draft Alternative Sites Evaluation Phase 2 – Fine Screening Analysis

Recommendations:

Receive presentation by consultant regarding the Draft Alternative Sites Evaluation Phase 2 – Fine Screening Analysis;

Council and Board discussion regarding same;

Authorize staff to submit the Alternative Sites Evaluation Phase 1 – Rough Screening, Phase 2 – Fine Screening Analysis and associated de novo review summary materials to the California Coastal Commission.

Fiscal Impact: No new expenditures are requested

Background and Discussion:

On March 11, 2011 the California Coastal Commission (CCC) determined that substantial issues exist with respect to the City's Coastal Development permit for the upgrade to the wastewater treatment plant.

Dudek has prepared a draft Alternative Sites Evaluation Phase 2 – Fine Screen Analysis to address the issues raised by the California Coastal Commission.

This evaluation is available on the City's wastewater treatment plant upgrade website (<http://ca-morrobay.civicplus.com/>) and copies are available for review at the District office, at City Hall and at the library.

The preparation of this report was preceded by a public input workshop on September 19th at the Cayucos Vet's Building.

The Dudek project manager, April Winecki, and her staff will present an overview of the Draft Fine Screening Alternative Sites Evaluation to the JPA.

This analysis is still in the draft stage and any comments received and directed by the JPA will be incorporated into the updated draft, prior to submittal to the Coastal Commission staff.

A meeting is scheduled on November 28, 2011 with the Coastal Commission staff in Santa Cruz. Subsequently, the CCC staff will place the de novo hearing on the Coastal Commission agenda. It is estimated that the hearing will occur in February or April of 2012.

Attachment:

Printed copies of the evaluation are provided to the JPA under separate cover.

To view the full report, go to the City's website:
<http://www.morro-bay.ca.us/DocumentCenterii.aspx?FID=139>

City of Morro Bay and Cayucos Sanitary District Wastewater Treatment Plant Upgrade Project



DRAFT

Alternative Sites Evaluation

Phase 2 – Fine Screening Analysis

Prepared by:
DUDEK
621 Chapala Street
Santa Barbara, California 93101

Prepared for:
City of Morro Bay
595 Harbor Street
Morro Bay, California 93442

and

Cayucos Sanitary District
200 Ash Avenue
Cayucos, California 93430

Submitted: November 2011

Executive Summary

The review of alternative sites and issue conformity within this Fine Screening evaluation was conducted to ensure appropriate project siting and location is considered in regard to the highest and best use of the proposed project in accordance with applicable Local Coastal Program (LCP) policies, in the context of new technologies and more aggressive water reclamation, and coastal-dependent land use. This included an evaluation of the feasibility of returning treated wastewater effluent to beneficial uses and whether or not the proposed project is coastal dependent (i.e., whether or not an ocean outfall is a necessary component of the project).

The evaluation for each alternative site carried forward as part of Fine Screening summarizes the potential for use of wastewater effluent (reclaimed water) for groundwater enhancement, agricultural irrigation, residential and municipal landscaping and maintenance, as well as enhancement of water quality and biological resources associated with Morro and/or Toro groundwater basins to determine the potential for beneficial uses in the context of the need for an ocean outfall, and therefore assess the coastal dependency of the project.

Fine Screening Evaluation

Prior to completion of this report, an initial assessment and fatal flaws analysis was conducted of 17 potential project sites identified during the public environmental and California Coastal Commission (CCC) appeals processes, and through input received at public workshops commencing the preliminary analysis (or Rough Screening). Based on that analysis and comments received at the Joint Powers Agreement Board (JPA) hearing on September 8, 2011, three sites were determined to represent a reasonable range of alternative site locations for development of a wastewater treatment plant (WWTP) that maintains relative economic feasibility (because Site 5 and Site 15 are contiguous and under common ownership, Chevron, they were combined):

- Current WWTP (Site 1)
- Chevron Facility Site (Site 5/15)
- Righetti Property (Site 16)

As such, these sites are further assessed within this Fine Screening evaluation, at a greater and co-equal level of analysis and additional technical study completed to respond to Coastal staff comments raised during the CCC's Substantial Issue Determination.

This report incorporates and reflects responses to comments received at a JPA Hearing held on September 8, 2011, and a public workshop held to commence fine screening analysis on September 19, 2011. See Appendix A for a record of public comments received during the public comment period held from September 1 to September 30, 2011, and topical responses to major themes identified therein.

The alternative sites were assessed in the context of a more detailed LCP policy consistency analysis with applicable coastal resource protection policies of the certified City or County LCPs and the California Coastal Act (CCA). These policies address critical coastal resource issues including public coastline access, coastal and inland recreation, low-cost visitor-serving activities, protection and enhancement of sensitive habitat and species, water quality, archaeological, agricultural and visual resources, coastal hazards, sustainable use of public resources, and coastal-dependent/priority land uses. The policy issue analyses have been augmented, as necessary, to ensure previously unidentified environmental, CCA, City and/or County LCP coastal resource impact issues are addressed for each particular site.

The fine screening analysis has been conducted at a level of detail sufficient to demonstrate the project's consistency with applicable LCP and CCA policies, while ensuring project feasibility, and project goals and objectives are achieved. The analysis also addresses potential resource constraints at the alternative sites, as well as constraints associated with any additional facilities that may be required to construct and operate the new WWTP (e.g., conveyance pipelines, lift stations, access roads, etc.) on an alternative site.

Evaluation Criteria

The following fine screening evaluation criteria were identified and weighted by relative importance in coordination with public and stakeholder input received during a public workshop held on September 19, 2011, and the related public comment period from September 1 through September 30, 2011, as well as with input from the City of Morro Bay and Cayucos Sanitary District (MBCSD) and CCC staff. The fine screening criteria are based on a combination of environmental, policy, project implementation requirements, and economic factors.

Avoid and Minimize Environmental Impacts/Local Coastal Program Consistency Analysis

- Coastal Hazards
 - Risk of flooding – 100-year storm event
 - Tsunamis
 - Shoreline erosion – sea level rise
 - Liquefaction
 - Greenhouse gas emissions/energy consumption/global climate change
- Public Access, Recreation, and Visitor-Serving Uses
 - Traffic/parking/land use compatibility
 - Objectionable odors
 - Biosolids treatment
 - Opportunities to enhance if feasible recreation/visitor-serving resources
- Visual Resources
 - Public viewsheds
 - Significant landforms
 - Compatible design
- Sustainable Use of Public Resources

- Maximize water reclamation
- Maximize treated wastewater disposal options
- Coastal-Dependent Development
- Cultural Resources
 - Recorded archaeological and historical sites
- Environmentally Sensitive Habitat Areas (ESHA)
 - Water quality/groundwater basin recharge
 - Terrestrial resources/upland plant habitat
 - Marine habitat/ocean outfall
- Agricultural Resources

Project Implementation

- Complies with NPDES Requirements
 - Compliance with secondary treatment standards and Water Quality Objectives of the Basin Plan
 - Compliance with “Settlement Agreement for Issuance of Permits to and Upgrade of Morro Bay Cayucos Wastewater Treatment Plant” (Settlement Agreement)
- Minimizes Project Schedule Delays
 - Additional infrastructure requirements – wastewater collection/conveyance system
 - Regulatory permits and approvals
 - Public controversy – hazardous materials remediation and site reuse
- Ease of Property Acquisition
 - Acquisition of land
 - Easements/encroachment permits

Economic Factors

- Minimizes Capital Cost
 - Construction/mitigation/r extended preventive maintenance of the existing plant
- Minimizes Operating Cost
 - 30 year timeframe
- Minimizes Project Delivery Costs
 - Planning/permitting/design/property acquisition

Criteria Weighting Methodology, Assumptions & Summary Conclusion

The Fine Screening criteria evaluated for each alternative site was grouped into three topical issue areas that were weighted as follows (out of a possible 100%):

- Avoid and Minimize Environmental Impacts and LCP Policy Consistencies – 40%
- Project Implementation – 30%
- Economic Factors – 30%

It was determined that Coastal staff comments concerning the project’s consistency with applicable LCP policies, as well as its ability to avoid or minimize identified environmental impacts would be of greatest

concern and interest to the CCC as part of their de novo review, and thus it received the highest weighting percentage. Although not identified by the majority of the public commenters as a key component, the ability to implement a project in the most expeditious fashion to meet the current plant’s requirements under the NPDES permit and Regional Water Quality Control Board (RWQCB) Settlement Agreement is of great interest to the affected resource agencies and thus was assigned 30% of the total weighting percentage. Finally, the overall cost to develop and operate at each site was consistently identified by the public as a key consideration, and was assigned the remaining 30% of the total weighting percentage.

Within each topical area, the specific criteria were then assigned a weighting factor based upon comments and concerns raised during the public appeals and site evaluation processes. For example, the 8 criterion under consideration for avoiding and minimizing environmental impacts and LCP policy consistencies were assigned a sub-weighting factor of 1% to 10%, for a total of 40%.

Finally, as part of the Fine Screening evaluation, the site’s ability to meet, or be in conformance with each of the criterion was assigned a ranking number from 1 to 5, with 1 being the least likely to conform due to lack of feasible mitigation, greatest delays, or highest costs, etc. and 5 being the highest level of conformance due to lack of resources identified onsite, fewest schedule delays, or lowest costs, etc. A ranking of “3” would thus be assigned to a site that could apply feasible mitigation or conditions of approval for a known resource onsite to bring it to a less than significant level of impact, or in full conformance with applicable requirements and regulations.

Following calculation of each ranking in context of its relative weighting values, a comparison was made between each alternative site to determine the best fit location for a WWTP project to serve the MBCSD service areas, summarized as follows.

Table ES-1. Fine Screening Alternative Sites Ranking

Alternative Project Site	Fine Screening Criteria			Ranking	
	Avoid and Minimize Environmental Impacts/ LCP Consistency Analysis	Project Implementation	Economic Factors	TOTAL	Final Ranking
Site 1 – Current WWTP	1.54	1.50	1.50	4.54	1
Site 5/15 – Chevron Facility	1.32	0.90	0.60	2.82	3
Site 16 – Righetti Property	1.52	1.00	0.80	3.32	2

In accordance with the City’s LCP that dictates that the existing WWTP be protected in its current location because a critical operational component of the WWTP, the ocean outfall, is a coastal-dependent use (Policy 5.03), the analysis completed as part of this Fine Screening indicates that operational use of the ocean outfall will remain a critical component, even with increased development and application of reclaimed water, due to seasonal demand fluctuations and in the foreseeable future, the need to dispose of brine concentrated from use of higher tertiary treatment processes (e.g., Reverse Osmosis [RO]) that would be required to reap the full benefit of uses available under Title 22.

Based on the analysis contained herein, it is therefore recommended that the Current WWTP (Site 1) be brought back before the CCC during its de novo review hearing as the most feasible alternative site for development of the MBCSD's WWTP facilities in accordance with its consistency with applicable City LCP and CCA policies, its ability to reduce environmental impacts to a less than significant level, and because it presents the most streamlined project implementation schedule, while being the most cost-effective option for the rate payer within the MBCSD service area.