Wastewater Treatment Plant Joint Powers Agreement

Financial Impacts on Morro Bay

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Introduction

The current Joint Powers Agreement (JPA), written by a Cayucos Sanitary District Board member, and enacted in October, 1982, has serious flaws that create financial risks and exposures for Morro Bay.

Due to inadequacies in the JPA, and failure/inability to enforce its existing provisions, Morro Bay is unable to fully control its expenditures for the Wastewater Treatment Plant and Collection System now, and in the future. Excessive expenditures are, and may potentially be, due to the following:

- Insufficient control over Main Street trunk lines
- Inability to manage costs related to defective collection infrastructure in Cayucos
- Inability to predict/manage the amount of future WWTP and trunk line flows from Cayucos
- Lack of appropriate formal agreements covering services to the State Parks
- Potentially unfavorable terms covering by-products of wastewater treatment

Updates to the agreement are necessary to protect Morro Bay's financial interests.

Insufficient Control Over Main Street Trunk Lines

1. Cayucos Line – Inflow and Infiltration

Issues:

The JPA does not provide Morro Bay with the power to ensure that Cayucos pays for the processing of the extra wastewater that enters the Cayucos trunk line during wet weather, or to fix the line so that inflow and infiltration do not occur.

The Cayucos trunk line is located in an area where flooding occurs during winter rains. Morro Bay has no way of measuring how much inflow and infiltration of this line contribute to the amount of wastewater coming through the line to the WWTP. Charges for Cayucos' flows into the WWTP are based on flow meter readings upstream of the trunk line, at lift station 5 at Toro Creek.

Financial Impacts:

- 1. Inflow and infiltration of the Cayucos line can contribute to surcharging events at the WWTP events for which both Morro Bay and Cayucos are liable.
- 2. On page 13, is the statement: "<u>Determination of Actual Usage</u>: On or before January 31 of each year, Cayucos and Morro Bay at their joint meeting shall determine by examination of operations performed to that date the proportion of sewage attributable to each party and the result thereof will be the proportion which each party agrees to pay in making payment of the operation and maintenance costs for the following year from January 1 through December 31. Notwithstanding the foregoing, at the end of each year, the cost shall be allocated and readjusted on the basis of the use that has actually occurred in the immediately preceding year. Further, Cayucos and Morro Bay at any joint meeting may update the allocation of costs at any reasonable time within each year based on the records of actual use during the year. The plant manager shall each month furnish Morro Bay and Cayucos with a flow analysis of effluent flowing through the pant in the previous month, which record shall be used to determine the parties' usage and percentage of costs liability under this paragraph".

Because we cannot isolate and measure increases in amounts of wastewater due to inflow and infiltration of the Cayucos trunk line during wet weather, we have no way to ensure that they pay the full cost of processing all of their own wastewater. In fact, the way the costs are currently measured, the more inflow and infiltration of the Cayucos trunk line, the less Cayucos pays. This is because the added flows end up being counted as part of Morro Bay's usage of the WWTP, and so, Cayucos' percentage of usage is lowered.

3. The amount of raw sewage exfiltrating from this line into the soil in North Morro Bay is also unknown. In dry weather, Cayucos pumps close to 300,000 gallons of raw sewage along north Main Street every day, and more during tourist events. Since this pollution is occurring in Morro Bay, the City may be liable.

2. Cayucos Line - Hydrogen Sulfide Emissions

Issues:

The JPA provides no means for requiring that Cayucos eliminate the problem of hydrogen sulfide gas emissions from its trunk line.

Residents have often reported a strong odor of hydrogen sulfide gas adjacent to manholes in the Cayucos trunk line down north Main Street. Hydrogen sulfide is a hazardous material. During pump cycling at Cayucos lift station 5, hydrogen sulfide gas is generated. The gas ends up venting all along north Main Street in Morro Bay.

Cayucos has made some effort to control the problem with the addition of ferrous chloride to wastewater, and the use of bio-filters, but citizens report these measures have been only partially successful.

Financial Impact:

The hydrogen sulfide emissions from the Cayucos line are occurring in Morro Bay. Morro Bay may have some liability for the air pollution caused by the emissions, as well as for any injury caused by the gas. We did not find any provisions in the JPA specifying Cayucos' responsibility for this problem.

3. Lack of Means to Control/Monitor Valve that Diverts Trunk Line Flow

Issues:

The JPA does not provide a means for Morro Bay to monitor, or adequately control, a valve that diverts flow from the Cayucos trunk line to the shared line. During a recent flow test of the shared line, those conducting the test were unaware that flow was being diverted to that line, and test results were incorrect, showing less remaining line capacity than actually exists.

In a serious case of "poor coordination", just before the Wallace Group tests of the line began, a valve was opened to divert flow from the Cayucos trunk line along Main street to the shared trunk line. The amount of flow coming through the trunk line during the test was considerably greater than normal. Had the test been conducted with the valve closed, as it should have been, test results would have been very different.

On page 5 of the JPA, is the statement: "It is agreed that both at the present time and after the reconstructed plant is completed, Morro Bay has, and will have, a 60% capacity right, Cayucos a 40% capacity right in the common trunk line". According to the JPA, operation, repair and maintenance of shared facilities is a joint responsibility. This would indicate that repair or replacement of the shared trunk line would be paid for by both parties.

Financial Impact:

It would seem that, since Morro Bay has a greater share of capacity of this line, Morro Bay would be expected to pay a larger share of the costs to replace the line with a larger one. Such replacement could benefit Cayucos, given the rate of development in the town, but is not likely to be of great benefit to Morro Bay in the foreseeable future. In paying a portion of the costs for replacement with a larger line, Morro Bay would be subsidizing an infrastructure to support Cayucos development.

Inability to Ensure Effective Management of Collection Infrastructure in Cayucos

1. Ineffective Collection System Maintenance Agreement

<u>Issues</u>

Although the JPA states that each town is responsible for maintaining its collection system, there are no effective provisions for prompt and effective enforcement. Paragraph 22, "Resolution of JPA Disputes", is not sufficient.

The inadequacy of enforcement provisions is clear in the fact that both Morro Bay and Cayucos are, and have consistently been, violating their own agreement. Had well-defined, effective enforcement procedures existed, they would have ensured an orderly, year-by-year inspection and repair process.

On page 8 of the JPA, is the statement: "Collection Lines: With the exception of the common trunk line and ocean outfall provided for in Paragraph 5, each of the parties shall assume the full responsibility for the construction, repair, replacement, operation, and maintenance of any trunk lines and sewer collection lines within their respective boundaries."

On page 9, is the statement: "Each party agrees to adequately maintain the collection and trunk lines within their respective boundaries." In fact, both Morro Bay and Cayucos are violating, and have been violating for many years, this provision of the agreement.

This is fine, but the agreement has no "teeth".

Like Morro Bay's, Cayucos' collection system is in poor condition. Deferred maintenance has resulted in a system with numerous leaks that allow inflow, infiltration, and exfiltration.

In our last report, "Damaged Lines in Morro Bay's Wastewater Collection System, Causes and Effects", we described the deplorable condition of our own lines. We know that the system in Cayucos is in no better condition and, in fact, may be even more dilapidated than ours. The full scope of the problem is difficult to precisely assess, but 2004 video camera inspections revealed significant damage in lines throughout the town.

Every year, during wet weather, there is considerable pooling and flooding in some areas of Cayucos. In fact, the Cayucos Sanitary District is violating its own ordinance regarding pooling over sewer easements. This problem has existed for some time, and contributes to inflow and infiltration which, in turn, contribute to surcharges at the WWTP.

Financial Impact:

We could fix every pipe in Morro Bay, but still have problems with WWTP surcharges due to excessive inflow and infiltration from Cayucos. Both MB and Cayucos are liable for surcharging events at the WWTP, regardless of who is at fault.

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2. Use of Morro Bay Emergency Equipment and Personnel to Service Cayucos

Issues:

While mutual aid is certainly desirable in times of emergency, the JPA makes no formal provision for charging back costs for emergency use of Morro Bay equipment and personnel. Agreements covering apportionment of costs cover only jointly held facilities.

Although the JPA makes each town responsible for maintenance of its own collection system, Cayucos uses Morro Bay's emergency equipment and personnel for callouts when there are backups and overflows. Morro Bay's truck and pumps are dispatched to deal with these emergencies because Cayucos does not have adequate equipment. They do not dispatch their personnel to help in the case of similar emergencies in Morro Bay.

Financial Impacts:

- 1, Costs for the use of MB personnel and equipment in Cayucos are not covered adequately by formal JPA requirements for chargebacks to Cayucos.
- 2. When Morro Bay's equipment and personnel are occupied in Cayucos, they are not available for use in Morro Bay, potentially leaving Morro Bay short-handed and unable to respond to its own backup and overflow events. This creates the potential for fines, if a Morro Bay spill is not contained and cleaned up quickly.

Inability to Predict the Amount of Future WWTP and Trunk Line Flows from Cayucos

Issues:

The JPA contains no provisions for planning for future capacity, and the sharing and management of the resultant costs, should rapid development result in early obsolescence of the new WWTP plant and other shared infrastructure.

There is a great deal of ongoing development in Cayucos, and every reason to expect this to continue. With expectations that the town will have access to a good supply of water from Lake Nacimiento, there is every reason to expect that the town will continue to grow.

Growth means more wastewater, and thus greater risks of exceeding the capacity of the WWTP, and the shared trunk line.

Financial Impact:

When the WWTP plant currently in the planning state is built, it will be constructed to handle a specific capacity. If development in Cayucos causes the capacity of the WWTP to be exceeded sooner than expected, Morro Bay will incur costs for another new plant earlier than planned. The JPA contains no provisions to protect Morro Bay from this potential impact of development outside its boundaries.

Lack of Appropriate Formal Agreements Covering Services to the State Park

Issues:

The JPA includes no discussion of services provided to the State Park. Before the current JPA was implemented, Morro Bay agreed to provide sewage treatment services for the State Park.

At that time, wastewater flows from the park were much less than today. Over the years, the amount of wastewater from the park has increased, and includes flows not just from the RV campground, but from the museum, from the restrooms serving the marina and Bayside Café, and of course, the Inn at Morro Bay. The wastewater from the State Park is counted as part of Morro Bay's allocated usage of the WWTP.

Morro Bay has never negotiated updates to the JPA to include the State Park; thus Cayucos has never had an opportunity to approve or disapprove the Morro Bay's wastewater treatment arrangement with the State Park. Yet, they may be impacted by it.

Currently, the County-run golf course has issues with water supply, and a failing leach field. The State Park needs to address these issues with the County. Then, the wastewater entering Morro Bay's collections and conveyance system can be appropriately accounted for.

Financial Impacts:

- 1. The State Park wastewater contributes significantly to the potential for surcharging at the WWTP, but the Park has no official responsibility/liability for fines that may be levied due to surcharging events. Thus, Morro Bay and Cayucos could be liable for financial impacts of their "silent partner".
- 2. Because the State Park is not included in the JPA, but still contributes to the potential for surcharge events at the WWTP, and because this is due to arrangements made by Morro Bay, Cayucos could potentially challenge its own responsibility for paying fines associated with those events.
- 3. Morro Bay may be subsidizing the State Park, if the Park is not paying a fair share of ongoing WWTP maintenance and operations costs. In addition, we are unaware of any arrangement to require the Park to contribute to construction costs for the new facilities currently being designed.
- 4. In the event of an emergency, When Morro Bay's equipment and personnel are occupied in the State Park, they are not available for use in Morro Bay, potentially leaving Morro Bay short-handed and unable to respond to its own backup and overflow events. This creates the potential for fines, if a Morro Bay spill is not contained and cleaned up quickly

Potentially Unfavorable Terms Covering By-products of Wastewater Treatment

<u>Issues</u>

JPA terms covering ownership and use of wastewater treatment by-products may be unfavorable to Morro Bay, should the City decide to process reclaimed water from the WWTP in the desalination plant.

On page 17 of the JPA, it is stated that: "By-products of treatment: any fertilizer, water, or other substance resulting from the operation of any of the joint facilities shall be deemed to be the property of the parties hereto and apportioned on a 60-40 basis.",

"Either Cayucos or Morro Bay shall have the right, for its own use, to use its proportionate share of effluent, fertilizer, water, methane gas, or other substance resulting from its use without payment to the other party. Such usage limitations are to be based on actual flow."

We are unaware of any attempt to clarify or re-negotiate these provisions with regard ownership of products of desalination.

Financial Impact:

While the above statements from the JPA are somewhat confusing, it appears to us that they may indicate that Cayucos is entitled to a share of any water that Morro Bay processes in the desalination plant, regardless of whether Cayucos contributes to any of the expenses of processing.

Recommendations

Morro Bay should attempt to negotiate a new JPA with the provisions necessary to protect the City's financial interests. Paragraph 11, "Amendment or Waiver" may be a problem as both governing bodies must approve any changes to the existing agreement.

However, the current JPA was negotiated during planning for a new WWTP facility. On page 4 of the JPA, it is stated: "This is intended to be a joint owners agreement setting forth the respective rights of Morro Bay and Cayucos for purposes of the construction of the expanded wastewater treatment plant, as well as for the ownership, operation, and maintenance of said plant and appurtenant facilities"

Since we are now embarking on constructing another new plant, the timing for negotiation of a new agreement would seem ideal.

Any new or revised agreement should include the following provisions not included in the current JPA:

- 1. Requirement for Cayucos to maintain its Main Street Trunk line to minimize inflow and infiltration, and the emission of hydrogen sulfide gas.
- 2. Provisions for measuring the true amount Cayucos flow (including inflow and infiltration from the Cayucos trunk line) for which Cayucos is responsible
- 3. Enforcement provisions to ensure that Cayucos, Morro Bay, and the State Parks maintain their respective collection systems in a condition that minimizes inflow, infiltration, and exfiltration. These provisions should include penalties for failure to comply.
- 4. Requirement that Cayucos purchase and operate its own equipment for dealing with backup and overflow events.
- 5. Detailed provisions for addressing the impacts of new development on infrastructure capacity, including financial responsibility of the parties for covering costs associated with increased loads, resulting from development, on jointly-held facilities.
- 6. Arrangements with, and financial responsibilities of the State Park, including coverage of the cost of additional emergency equipment and personnel, as necessary to ensure that Morro Bay has adequate coverage at all times.
- 7. Definition of ownership of any reclaimed wastewater processed in the desalination plant.

At one filmed Cayucos Sanitary District Board meeting, a Board member stated: "Morro Bay is asleep and that's just the way I like it. We don't want to wake them up". The gentleman may have been joking, but this is no laughing matter. Morro Bay does need to wake up, and understand the risks inherent in the current JPA. To protect Morro Bay's financial interests, and ensure that the City pays its fair share of the WWTP system costs, and no more, the JPA must be revised.