

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF GUAM**



GUAM WATERWORKS AUTHORITY -)
USEPA ADMINISTRATIVE CONSENT ORDER) DOCKET 02-02
_____)

GUAM WATERWORKS AUTHORITY -)
REVENUE CYCLE AUDIT) DOCKET 02-01
_____)

CONSOLIDATED ORDER

By this consolidated order, the Commission, after careful deliberation and for good cause shown, issues the following directives and makes delegations of authority to implement further regulatory activities in the subject dockets.

1. Docket 02-02 [USEPA Administrative Consent Order].

At a December 3, 2001 workshop, the Commission received Georgetown Consulting Group's [GCG] report and recommendations concerning the financial plan, which Guam Waterworks Authority [GWA] is required to submit to USEPA by January 31, 2002. GWA supports the proposed financial plan. The Commission commends GCG on the significant effort represented in its thorough and well reasoned report, which will be instrumental in both satisfying USEPA requirements and in establishing the strategic process by which GWA will achieve its public mission of providing safe, reliable, reasonably priced water and wastewater treatment services to the people of Guam.

Pursuant to delegation of authority in the Commission's September 13, 2001 Order [Dockets 00-01 and 01-08], ALJ has been empowered and directed to: a] facilitate the finalization of the financial plan and its submission by GWA to USEPA; b] report to the Legislature on necessary legislation to implement the plan; and c] oversee the implementation of the plan once approved by USEPA. The Commission confirms this delegation of authority, including, without limitation, the authority to visit USEPA, if deemed necessary by ALJ, as part of the process of securing approval of the plan. In furtherance of its audit authority under P.L. 25-05:12 and its authority under P.L. 26-34:14, the Commission directs GWA to provide its full cooperation in Commission activities in this docket.

2. Docket 02-01 [Revenue Cycle Audit].

Pursuant to the Commission's September 13, 2001 Order, GCG has undertaken and reported to the Commission on its revenue cycle audit of GWA. The audit report makes 38 recommendations, which have been incorporated into a GWA – GCG stipulation dated December 10, 2001. It is apparent from the implementation matrix, which is attached to the stipulation, that funding authorization will be necessary from the Legislature in order to undertake most of the audit recommendations.

The Commission finds that the prompt implementation of the audit recommendations is essential if GWA is going to be able to: a] capture savings through improved operations; b] realize lost revenues; and c] establish the autonomous operational and fiscal platform necessary to access financial markets to fund its compliance with the USEPA consent order. Under the proposed financial plan, GWA must be ready and able to access the financial market for short term financing [\$18 million dollars] in April 2002 and for the first tranche of its long term financing [\$64 million dollars] in October 2003. This will not occur unless there is a focused collaboration between the Legislature, Guam Economic Development Authority, the Commission and GWA.

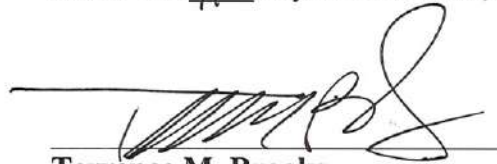
In furtherance of the above findings, the Commission authorizes and directs ALJ to: a] oversee the implementation of the audit recommendations under a timeline which is consistent with eliminating unreasonable expenses, realizing potential revenues and establishing the operational and fiscal platform necessary for GWA to implement its USEPA approved financial plan; b] seek necessary legislative action to authorize funding for the audit recommendations; and c] establish GWA reporting requirements to the Commission.


During the December 6, 2001 Commission workshop on the GCG revenue audit report, Senators Brown and Forbes expressed interest in the Commission undertaking an operations audit of GWA. ALJ is directed to develop and transmit to the senators a cost estimate and scope of work for this audit.

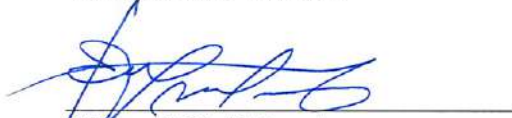
A collateral GCG report, dated November 29, 2001, addresses GWA management and operational problems in servicing the Tiyan complex as a customer. A GCG – GWA stipulation, dated December 5, 2001 proposes remedial action to resolve the Tiyan problems. ALJ is hereby authorized and directed to issue appropriate orders as he may determine are necessary and appropriate to implement the stipulation or as the same should in his judgment be amended or expanded.

This consolidated order was duly adopted by the Commission at its December 11, 2001 meeting by the affirmative vote of the undersigned.


Dated this 11th day of December, 2001.


Terrence M. Brooks


Filomena M. Cantoria


Edward C. Crisostomo


Joseph M. McDonald


Gerald M. Woo



**BEFORE THE PUBLIC UTILITIES COMMISSION
OF GUAM**

**GUAM WATERWORKS AUTHORITY
COLLECTION PRACTICES
(TIYAN RECEIVABLES)**

DOCKET 01-08

**GUAM WATERWORKS AUTHORITY
REVENUE CYCLE AUDIT**

DOCKET 02-01

Georgetown Consulting Group, Inc., the independent consultant of the Guam Public Utilities Commission, hereby submits its response to Administrative Law Judge Harry Boertzel's October 5, 2001 letter regarding the Guam Waterworks Authority's Tiyan receivables.

Dated this 29th day of November, 2001.

KLEMM, BLAIR, STERLING & JOHNSON
A Professional Corporation

By: 

WILLIAM J. BLAIR

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November 21, 2001

Harry M. Boertzel, ALJ for
The Guam Public Utilities Commission
Suite 207, GCIC Building
Hagatna, Guam 96932

Re: GWA GPUC Dockets 01-08/02-01 "Tivan"

Dear Harry,

This letter is in response to your October 5, 2001 letter in which you incorporated this issue into Docket 02-01 (Revenue Cycle Audit) and requested that investigation into the Tivan issue be part of the Revenue Cycle Audit. During our investigation into the accounts receivable balances of Guam Waterworks Authority (GWA) in Docket 01-08, we learned that GWA had fully reserved ("written off") approximately \$1.1 million related to past invoices issued to the Tivan Reuse Authority (Tivan or TRA). We had not received a timely explanation of why this had occurred nor received any documents associated with the write-off. In our report of August 22, 2001, we recommended that the Public Utilities Commission (PUC) require an explanation of GWA on this issue.

In its September 13, 2001 Decision and Order in Docket 01-08, the Public Utilities Commission (PUC or Commission) authorized the ALJ to oversee GWA's compliance with the recommendations of Georgetown Consulting Group (GCG) contained in that report. Among the recommendations was a review of the Tivan write-off. During our investigation other issues related to the Tivan facilities arose. The following summarizes our investigation and conclusions.

HISTORICAL BACKGROUND

The Navy Period

From the late 1940s until the early 1990s the U.S. Department of Defense had utilized the Tivan area as a Naval Air Station. The Navy had installed a water system adequate to their needs with a limited number of master meters (five or six) to measure the water distributed to various areas of the Base. Billings for water and sewer usage were not sent to tenants of the houses and buildings, thus there was no requirement of installing individual meters on such facilities.

The Transfer to Government of Guam

In 1995 the Federal Government transferred Tiyan to the Government of Guam (GovGuam) as part of the Base Reduction and Closure (BRAC) activity. GovGuam took title to the area through five different entities; Guam International Airport Authority, Guam Economic Development Authority, Guam Housing and Urban Renewal (Chapel area), Department of Parks and Recreation (athletic fields) and Department of Public Works (proposed highway right of way). The utility transmission lines and pipes were transferred along with other assets on the Tiyan property to the five GovGuam entities. This avoided the necessity of each utility applying to the Federal Government for title to such transmission and distribution assets, which may require paying fair market value therefor. While there may have existed the assumption that GovGuam would then transfer title to the water and sewer pipes at Tiyan to GWA, this has not occurred.

Tiyan Reuse Authority Management Period

At the time of transfer (1995), GovGuam established a new entity, the Tiyan Reuse Authority (TRA) to manage the property. GWA provided water to the various buildings on Tiyan and billed TRA based upon readings of three (3) active master meters on the property. The amount billed TRA during this period went unpaid.

Sometime in 1998 an agreement was reached wherein GWA would bill directly the tenants of the various buildings at Tiyan (we've not been able to obtain anything in writing to support this understanding). Further, GWA was to back bill the tenants for water and sewer charges from 1995 forward, the outset of the TRA management period. GWA received a listing from TRA specifying the name of tenants to be billed for the period 1995 through 1998. Total Tiyan service charges for the period 1995 through 1998 were as follows:

<u>Year</u>	<u>Amount billed</u>
1995	\$ 43,406.77
1996	438,126.42
1997	531,717.03
1998	<u>559,827.49</u>
Total	<u>\$1,573,077.71</u>

Separate customer accounts were established for each Tiyan building. As there were no meter readings to support the amounts to be billed for past or future service, an engineering study was undertaken to estimate the consumption by building. Most of the unique buildings (barracks, clubs, etc.) received specific usage estimates while the generic single family dwellings and duplexes were allotted a standard water usage volume (30,000 gallons per month). The estimated usage/consumption rates have continued to be used for the Tiyan customers unless they have come forward requesting a reassessment/survey of usage. As may be assumed, this would only happen where the tenant believed the estimated consumption rate was too high.

After back billing the tenants in accordance with the supplied listing and the volumes established by the engineering study, GWA records continued to reflect an outstanding receivable from TRA of over \$800,000. This amount was never paid.

Throughout the period 1995 to September 30, 2000 GWA billed the tenants of the Tiyan buildings but received little in payment on the accounts. When water/sewer services to certain buildings/tenants were terminated the related amounts due GWA were transferred to an "inactive receivable" account. At September 30, 2000 this inactive receivable related to Tiyan accounts totaled \$1,141,173.95. A significant portion of this balance (approximately

\$900,000) is reflected as due from TRA. A decision was reached at September 30, 2000 by GWA (supported by the independent auditors) to fully reserve this amount. During the same period the "active Tiyan receivables" (accounts for tenants/buildings which had not been terminated) continued to grow. At September 30, 2001 this account reflected an accumulated unpaid balance of \$1,133,569.55. One million of the inactive receivable balance is due from customers that also have large active account balances (GIAA and TRA). The following schedule reflects amounts due from selected Tiyan customers for both active (current accounts) and inactive (terminated accounts) receivables as of September 30, 2001:

Tiyan Receivables as of September 30, 2001

<u>Agency</u>	<u>Active</u>	<u>Inactive</u>
Guam International Airport Authority	\$ 262,941.94	\$ 101,390.22
Department of Revenue and Taxation	215,523.20	
Guam Fire Department	188,359.57	
Department of Education	77,928.22	
Superior Court of Guam	55,662.16	
Guam Army National Guard	52,439.73	
Department of Parks & Recreation	48,460.15	
Tiyan Reuse Authority	41,413.31	899,572.74
Various Charities	40,392.22	
Guam Police Department	26,230.00	
Freedom Air	19,551.36	
Office of Governor, Gov't House, etc.	15,372.76	207.41
Department of Labor	15,161.20	
Guam National Olympic Committee	12,548.32	
Guam Institute of Aviation		70,619.51
PacDiv "POI"		30,306.84
Guam Museum		17,489.90
Other	<u>61,585.42</u>	<u>21,587.33</u>
Totals	<u>\$1,133,569.56</u>	<u>\$1,141,173.95</u>

\$914,907.53 of the above "active receivable" balance is over 90 days old, thus qualifying for disconnection under existing GWA policy. When queried as to the ultimate disposition of this \$1,133,569.55, the GWA controller indicated that it may have to be reserved in the same fashion as the inactive account balance.

One of the original arguments made by GWA as to why enforcement of its billing and collection policy was not applied to TRA was that GWA was not incurring rent charges at its facilities on the Tiyan property. While the receivable was accumulating, TRA decided to bill GWA for rental of certain buildings they were occupying at Tiyan. Invoices were sent by TRA to GWA for the period October 1997 through September 2000 totaling \$1,585,690. We are informed that TRA did not bill and collect rent from any of its other tenants. GWA did not record a liability for these rental billings, nor did they render payment for the amounts billed.

Transfer to Guam International Airport Authority

By Executive Order No. 2000-34 the oversight of a portion of Tiyan was transferred to Guam International Airport Authority (GIAA) effective October 1, 2000. Coincidental with this transfer, TRA ceased to exist with their personnel transferred to GIAA and other GovGuam agencies.

In a memorandum dated June 26, 2001 to the General Manager of GWA, the Executive Director of GIAA indicates that his organization "...by its federal mandate, cannot assume water and sewage obligations for those buildings and housing units occupied by the Government of Guam prior to September 29, 2000. Therefore, all prior year outstanding water and sewage charges need to be addressed directly with those entities occupying the various Tiyan buildings and housing units." In other words, GIAA concludes that it is not responsible for any liabilities of TRA (or any other tenants) related to water/sewer charges incurred prior to the beginning of fiscal year 2001.

On October 12, 2001 GIAA forwarded a "Space Lease Agreement" for eleven (11) of the buildings utilized by GWA at Tiyan. This lease is for a term of one year at a monthly rate of \$5,086.41. The lease does not cover certain buildings occupied by GWA which are located within the area of Tiyan designated for a future highway. We were informed that this area is under the purview of GovGuam Department of Public Works and that they have not expressed a desire to bill GWA for rent of these facilities. We further understand that while GWA reflected rental expense in its fiscal year 2002 budget, the proposed amount was eliminated by the Guam Legislature in anticipation that GWA would not receive rental charges from its new landlords.

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

Based on the above we reach the following conclusions and make the these recommendations:

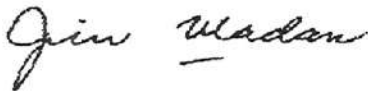
1. The situation with regard to the extraordinary level of receivables at Tiyan and the subsequent reserving of these receivables has arisen because of gross mismanagement on the part of GWA by simply ignoring its policies for collection and disconnection. The rules call for disconnection of service if bills are not paid in approximately 60 days. In this case the receivables were allowed to accumulate for approximately 3 years without payment.
2. In examining the receivable of \$1.141 million reserved in FY 2000, we believe that there would be little chance of success in attempting to collect these receivables. The majority of these amounts are owed by TRA and the Guam Institute of Aviation which have no assets. We recommend no further action on these receivables.
3. We understand that a further \$1.134 million of receivables could possibly be reserved this year (FY 2001). These receivables existed at the same time that the \$1.141 million was reserved in FY 2000. In FY 2001 the billings for the year have been paid. The receivable balance for the year grew by \$32,613. There continues to be a dispute with regard to balances that are pre-October 2000. As indicated in our report, the billings to these accounts have been made in most part through tariffs that have not been approved by the PUC. We therefore recommend that GWA make some attempt to collect these funds. If however they are unsuccessful no further action be taken on these receivables.
4. Since GWA does not own the physical assets at Tiyan, GWA should provide service to these facilities through a master metering arrangement. This could be accomplished by GWA providing a plan to the PUC within 30 days of the PUC order in this proceeding to undertake the necessary engineering and construction. GWA would also need to provide notice to the various entities that would be master metered that the responsibility to maintain the physical assets and to bill and collect from the customers would now be their responsibility. GCG should then be instructed to propose an appropriate tariff for this wholesale service approximately 30 days before the next regulatory session. GWA should be permitted to comment on the tariff prior to a hearing at the next regulatory session. GWA and GCG should also examine whether

any arrangements between GWA and the various entities are required to determine the appropriate demarcation points between each of their assets.

5. Between this regulatory session and the next, GWA in conjunction with GCG should explore whether the various entities would prefer to continue to have GWA bill and collect for utility services on Tiyan. In this scenario appropriate arrangements would have to be worked out for the use of the facilities, responsibility for the repair and replacement of existing facilities on the properties, construction of new facilities as needed and the installation of meters at each account. The parties should also explore whether transfer of the assets would offer a solution.
6. The billing methodologies that are currently in place for the various customer accounts at Tiyan have not been approved by the PUC. We recommend that GWA immediately convert to the tariff that is appropriate for each customer based upon a PUC approved tariff. GWA would certainly have the right to petition the PUC to amend the tariff if desired.

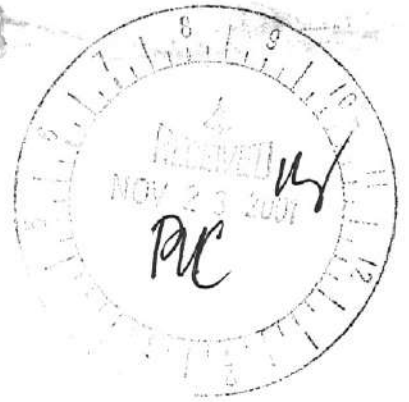
This concludes our report.

Cordially,



Jamshed K. Madan

C: Bill Blair, Esq.
Bert Johnston, GWA
Zeny Levitch, GWA
Jim Madan
Larry Gawlik
Al Pickens



**BEFORE THE PUBLIC UTILITIES COMMISSION
OF GUAM**

GUAM WATERWORKS AUTHORITY

DOCKET 02-02

**EPA CONSENT ORDER —
GWA FINANCIAL PLAN**

Georgetown Consulting Group, Inc., the independent consultant of the Guam Public Utilities Commission, hereby submits its response to Administrative Law Judge Harry Boertzel's October 5, 2001 letter regarding EPA Consent Order—GWA Financial Plan, and the accompanying report attached thereto.

Dated this 23rd day of November, 2001.

KLEMM, BLAIR, STERLING & JOHNSON
A Professional Corporation

By: 

WILLIAM J. BLAIR

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November 21, 2001

Harry M. Boertzel, ALJ for
The Guam Public Utilities Commission
Suite 207, GCIC Building
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Re: GWA GPUC Dockets 01-08/02-01 "Tiyan"

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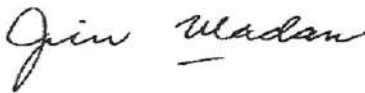
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This concludes our report.

Cordially,



Jamshed K. Madan

C: Bill Blair, Esq.
Bert Johnston, GWA
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Al Pickens

**PUBLIC UTILITIES COMMISSION
OF GUAM**

EPA CONSENT ORDER -- GWA FINANCIAL PLAN

REPORT OF GEORGETOWN CONSULTING GROUP, INC.

PUC DOCKET 02-02

DECEMBER 2001

EPA CONSENT ORDER -- GWA FINANCIAL PLAN

I. INTRODUCTION

In the Environmental Protection Agency's (EPA) Administrative Order on Consent¹ (the "Consent Order") it is ordered that GWA shall submit a Financial Plan and schedule by January 31, 2002 to secure funds for capital, operational and maintenance costs necessary to bring certain of GWA's wastewater collection, treatment and disposal systems into compliance with their NPDES operating permits and the Clean Water Act. GWA is also required to submit compliance schedules, based on the Financial Plan, by January 31, 2002, for each of the wastewater collection, treatment, and disposal facilities and supporting activities identified in the Consent Order.²

Section 14 of Public Law 26-34 directs the Commission to oversee the development of the Financial Plan required by the EPA's Consent Order. This law also directs the Commission to Report to the Legislature during the December regulatory session on the following:

- A. A proposed financial plan, including appropriate sources of funding and analysis of rate impact.³
- B. The feasibility of using BOT to undertake corrective action mandated by the Consent Order.
- C. The impact of the Financial Plan on GWA's FY 02 budget.
- D. Recommended legislation.

This report fulfills the requirements set forth above. It is our understanding that comments from the Legislature and the Commission delivered during the December regulatory session will be taken into account and incorporated into the final Financial Plan presented to the EPA pursuant to the Consent Order on January 31, 2002. While many aspects of the two reports will be similar, the two reports will be different. It is anticipated that additional data (i.e., information from GEDA financial advisors and technical information from GWA) will become available between the December

¹ United States Environmental Protection Agency, Docket no. CWA-402-9-01-19, dated August 16, 2001. A complete copy of this Administrative Order on Consent will be separately provided to the members of the Legislature.

² *Ibid.* Order for compliance, para. 1.

³ The rate impact analysis should also provide some comparative review of GWA's current and projected rates with other localities. This analysis is currently under preparation and will be presented to the commission and the Legislature during the December regulatory session.

regulatory session and the Consent Order deadline of January 31, 2002. In these cases we will modify the relevant portions of our report to take into account this additional information. In addition, any section of this report that has been written to meet the requirements of the Legislature and which is not required to meet the requirements of the filing that is required on January 31, 2002 will be modified or removed. We recommend that oversight of the process to produce the final report required by the EPA be maintained by the Commission. Since there will not be a subsequent regulatory session between the December session and January 31, 2002, we recommend that the Administrative Law Judge (ALJ) be delegated the responsibility of approving the final report. A final clarification: the Consent Order requires that, "GWA shall submit a Financial Plan...". It will therefore be necessary for GWA to adopt the Financial Plan that the Legislature has directed the Commission to oversee and transmit it to the EPA.

II. REQUIREMENTS OF THE ADMINISTRATIVE ORDER ON CONSENT

There are several requirements of the Administrative Order on Consent. This section provides an overview of those requirements.

Paragraph 1 of the ordering section has several requirements. First, there is the requirement for a Financial Plan mentioned above. In addition, there is a requirement to submit compliance schedules for various facilities covered by the Consent Order.¹⁴ This paragraph also provides that where a BOT¹⁵ mechanism is chosen to bring a facility into compliance, a compliance schedule shall be submitted for the activities required to support a BOT project. Both the Financial Plan and the compliance schedules are envisioned to become a part of the EPA's Order upon review and approval by EPA in consultation with Guam Environment Protection Agency (GEPA.)

Paragraph 2 requires GWA to take all necessary actions to implement the compliance schedule requirements. It also makes the final compliance schedules submitted to EPA a part of the final Consent Order.

Paragraph 3 requires GWA to submit quarterly compliance progress reports the first of which was due on October 31, 2001. This report provides EPA with the status of GWA's progress in meeting the requirements contained in the various compliance schedules for various activities that are a part of the Consent Order. The report is to also identify any areas of non-compliance and to outline actions being taken to bring GWA into future conformity with its compliance schedules.

Paragraph 4 requires GWA to designate a Compliance Coordinator who will be the principal contact with EPA relative to the Consent Order. Under the Consent Order this person is designated the

¹⁴ A compliance schedule sets action steps and target dates by which the action steps will be accomplished.

¹⁵ Build, Operate and Transfer.

responsibility for overseeing implementation and monitoring of all compliance schedule activities and submission of the required quarterly reports. GWA has designated Danny Santos, Assistant General Manager for Operations as the Compliance Coordinator.

Paragraph 5 requires that GWA submit to EPA and GEPA a final status report within 60 days of completing the final compliance activity covered by the Consent Order.

Paragraph 6 through 12 contains various administrative and legal provisions including civil and criminal penalties for negligent or knowing violations. As outlined in Paragraph 11 the Consent Order shall terminate when EPA issues a written approval of the work required to bring GWA's various facilities into compliance with their NPDES operating permits.

This report to the Legislature principally deals with the requirements of Paragraph 1 and Public Law 26-34, which directs the Commission to Report to the Legislature during the December regulatory session on the matters identified in I. A. though I. D above.

III. PROJECT COSTS AND PRIORITIZATIONS

A. Description of Projects.

The projects and activities to be undertaken to bring GWA into compliance with its various National Pollutant Discharge Elimination System (NPDES) permits and as mandated by the Consent Order are described in Attachment I to this report. The total capital cost associated with these projects has been estimated by GWA to be \$40,600,000.¹⁶ In summary these projects are:

1. Agana Sewer Treatment Plant. This project primarily consists of bringing this major wastewater plant into compliance with NPDES operating permit guidelines. Principal activities to be undertaken include the renovation of the plant and the construction of an extension to the existing deep-water outfall for effluent disposal.
2. Agat Sewer Treatment Plant. This project primarily consists of bringing this small wastewater plant serving the Agat area into compliance with NPDES operating permit guidelines. Principal activities to be undertaken include the renovation of the plant and the design and construction of various sewer collector lines, which are subject to high levels of inflow and infiltration (I&I).
3. Baza Gardens Sewer Treatment Plant. This project consists of bringing this small wastewater plant into compliance with NPDES operating permit guidelines. Principal activities to be

¹⁶ See the Compliance Costing Worksheet, attached to the Consent Order.

undertaken include the renovation of the plant.

4. Northern District Sewer Treatment Plant. This project primarily consists of bringing this major wastewater plant into compliance with NPDES operating permit guidelines. Principal activities to be undertaken include the renovation of the plant and the construction of an extension to the existing deep-water outfall for effluent disposal.
5. Umatac/Merizo Sewer Treatment Plant. This project consists of bringing this major wastewater plant into compliance with NPDES operating permit guidelines. Principal activities to be undertaken include the correction of the high levels of I&I in the sewer collection system and the construction of the second phase of the sewer system.
6. Operator Training and Certification. This activity will involve providing proper operations and maintenance training to GWA personnel responsible for wastewater treatment. In addition, GWA plant personnel will be required to obtain requisite certification as plant operators.
7. Monitoring Requirements. This activity will involve obtaining laboratory services from certified laboratories until that time that GWA's laboratories are certified.
8. Facilities Master Plan. This activity will involve an update to the GWA Master Plan finalized in December 1994

B. Cost Evaluations.

The estimate of costs for the projects and other activities required by the Consent Order were prepared by GWA personnel without the aid of any detailed study or review by an engineering firm specializing in wastewater treatment. These cost estimates, which we believe adequate for initiating the process of preparing a Financial Plan pursuant to the EPA Consent Order, are very preliminary and should be considered as such. They were developed by GWA on the basis of certain historical information it had available concerning each of the projects or activities. In many cases the costing parameters, operating and plant data, and other information upon which the original cost estimates were developed is dated. Accordingly, the capital cost estimates present a degree of uncertainty, since GWA is obligated to undertake these improvements regardless of their final costs. Updated estimates have not been embarked upon nor have independent estimates been authorized in response to the Consent Order. Since the costs of these projects will be a critical element in the development of the Financial Plan, an independent review to determine the reasonableness of the estimate will be conducted. It is anticipated that this review will be undertaken and completed prior to the January 31, 2002 submittal of the Financial Plan to EPA.

C. Prioritization and Overall Time Frame.

In the development of the Financial Plan, it is necessary to establish a reasonable time frame over which the various projects will be implemented and to establish a reasonable prioritization of the order in which the projects will be implemented. Establishing a time frame is necessary because it is not reasonable to expect that GWA would have the financial or personnel resources to undertake all of the projects immediately and concurrently. We therefore believe that the projects should be implemented beginning this fiscal year (FY 2002) and be completed in fiscal year 2006 (FY 2006, the year ending September 30, 2006). In terms of prioritization we believe that it would be appropriate to schedule the projects with the largest beneficial impact from the point of view of reducing pollution at the earliest possible time. We recommend the following prioritization for the various projects:

1. Begin in Fiscal Year 2002 (current fiscal year): Agana and Northern District Sewer Treatment Plants. These are the largest sewer treatment plants on the island with a capacity of 12 million gallons per day (12 MGD) each. It is proposed that the activities at Agana and the Northern plants be undertaken in two phases. The first phase would see the completion of the disposal (outfall) facilities. The second phase would consist of modifications to the individual plants to bring them into compliance with their NPDES permits.

Additionally in fiscal year 2002, it is necessary to undertake the necessary engineering activities required to design and construct the improvements at the Agana and Northern treatment plants. It will also be necessary to initiate the necessary monitoring requirements of the Consent Order.

Finally, in fiscal year 2002, it will be necessary to initiate the necessary training and certification activities required of the GWA treatment plant personnel. Also, GWA should undertake the necessary activities to procure an independent certified laboratory for water quality testing while seeking to obtain certification for its own laboratories.

2. Begin in Fiscal Year 2003: Baza Gardens Sewer Treatment Plant. Activities would consist of modifications to the plant to bring it into compliance with its NPDES permit.
3. Begin in Fiscal Year 2004: Agat and Umatac/Merizo Sewer Treatment Plants. Both of these facilities are relatively small in terms of treatment capacity. Activities would consist of modifications to the individual plants to bring them into compliance with their NPDES permits. Activities at these facilities and locations will also involve a substantial investment in correcting the infiltration and inflow problems that carry a substantial capital cost. Appropriate planning for these projects will be critical.
4. Begin in Fiscal Year 2005: Facilities Master Plan. The current wastewater Master Plan was completed in 1994. While it has been seven years since the preparation of the Master Plan, the increase in population since that time and growth in tourism related facilities has been vastly

less than estimated in the original plan due to economic conditions in Japan and Guam. The 1994 Master Plan, which is very comprehensive, is still relatively current. In fact, many of the projects identified are still not required given the change in Guam economic activity. We believe that it would be appropriate to have an updated version complete by FY 2006, when all of the projects related to this Consent Order are completed and implemented.

We point out that further review of the prioritization of the projects with GWA between the December regulatory session and January 31, 2002 could modify the prioritization described above. We believe that any modification will not impact the major conclusions of this report.

D. Other Items Considered in the Financial Plan.

The ability to craft a successful Financial Plan will be dependent not only on the requirements of the projects in the Consent Order but also on other capital and operating requirements of GWA. The ability to raise capital will be dependent on the overall financial condition of GWA. In crafting the recommended Financial Plan, consideration was given to the following items:

1. GWA operates an integrated water and wastewater utility. As such, resources are deployed in manner that meets the requirements of both the water and wastewater systems. In addition, many common and joint costs are shared between the two utilities. Important to this Financial Plan is the fact that GWA's total revenues are pledged when accessing the capital markets. Accordingly, in the development of an overall financial plan it is necessary to consider both systems.
2. Capital funding required to support the activities mandated by the Consent Order.
3. Routine capital improvement projects (CIPs). An annual CIP level of \$6 million has been reflected for the purpose of day-to-day system renewal and replacements for the water and wastewater system. This represents \$30 million in additional capital requirements over the time frame of this Financial Plan (or 75% of the capital requirements of the projects required by the consent Order). The level of appropriate CIP funding on a going forward basis would be reviewed when the Master Plan is being updated.
4. Growth related CIPs. There will be some level of CIPs required to connect new customers each year. For purposes of this projection we have assumed that the revenues collected from customers will roughly equal the costs for such activities and have not provided specific figures for these amounts.
5. Water Meter Maintenance and Replacement and Sewer Connections CIP projects have been identified by both the Commission and GWA as having a significant financial benefit to GWA. The requirements for these projects were determined from recent studies undertaken by GWA. The meter replacement project is projected to cost \$4.5 million and the sewer

connection project is estimated to cost \$6 million. There is currently legislation that provides relief to certain customers' connection fees which if implemented would result in a number of new customers being connected to the sewer system.¹⁷

6. Appropriate costs for regulatory management, engineering and construction management are also included in the Financial Plan. It is anticipated that these costs will be capitalized.

Exhibit I, page 1 attached to this report reflects all of the capital costs that we estimate are associated with the Financial Plan for the next five fiscal years (fiscal years 2002 through 2006).

In addition to the capital costs discussed above, the Financial Plan also takes into account other costs of an operations and maintenance account nature. We have used the approved budget for FO 2002 as a base to project the operations and maintenance expenses for the period covered in the Financial Plan using an escalation factor of 4% per annum. There is some degree of uncertainty with this projection since the operations and maintenance expenses for the entire system with the normal operation of the facilities that are being rehabilitated could be greater than the figures that we estimate net of the savings from a properly functioning system. In that event greater revenues will be needed from the system.

IV. FINANCING CONSIDERATIONS

As has been discussed above, the following are the key considerations in meeting the requirements of the Consent Order:

Uses of Capital

1. Undertake the activities required by the Consent Order in the time frame discussed above. The capital requirements for these projects over five fiscal years are \$40,300,000.
2. Provide for routine renewal and replacements CIPs for GWA. Over the five fiscal year time horizon the CIP requirement is \$30,000,000.
3. Provide for the CIPs necessary to support new customers. Over the five fiscal year time horizon we have assumed that these capital requirements will be met through connection fees.
3. Implement revenue enhancement capital projects that would improve the long-term financial condition and operating efficiencies of GWA. Two such projects that have been identified for implementation over this time frame are the meter management program and the sewer

¹⁷ 10 GCA § 48101 *et seq.*

connections program. The capital requirements for these programs are \$10,500,000.

4. Appropriately maintain and operate the GWA water and wastewater systems in an efficient manner. The FY 2002 operating and capital budget provides an appropriate starting point for the budgets required. Future years are to be based on appropriate escalations.

Sources of Capital

1. The refunding of the 1989 Water bonds, which is anticipated to close in December 2001 is anticipated to provide GWA with \$6,000,000.
2. Internally generated revenues from user charges will be used to offset short and long-term financing.
3. GWA will avail itself to the short and long-term financing markets.
4. Other financial options such as financing or grants from the Rural Utility Service (RUS) and project financing through the Build Operate and Transfer (BOT) mechanism will be considered if the economics appear more favorable than using the long term and short term financing markets.
5. The Commission has studied and made recommendations to the Legislature with regard to appropriately modifying the existing legislation regarding the System Development Charge (SDC) so that it can be an important source of new capital for GWA. If appropriate legislation is passed, the SDC could be a source of capital over the next five years that could be considered in the Financial Plan.

Based on the above, the total capital requirement over the five-year time horizon is \$83.8 million. Of this amount, \$6 million has been provided for in the stated use of the refunding of the 1989 Water Bonds. This would leave approximately \$77.8 million to be funded over the five years through external debt financing or through internally generated funds resulting from rate increases.¹⁸

GWA's financial advisors have determined that in its current financial condition GWA can not immediately access the financial markets for long-term debt financing.¹⁹ Letters from GWA's financial advisors have been attached as Attachment II to this report (these letters are currently in

¹⁸ To the extent that bond financing would require GWA to achieve a debt service coverage ratio of 1.5 times, there would be internal cash generated from the excess in the debt coverage ratio over 1 time that could be used to fund capital needs. In the proposed Financial Plan there would be approximately \$10.9 million of internally generated capital.

¹⁹ GWA's financial advisors are Guam Economic Development Agency (GEDA) and First Union, who is retained by GEDA on financial issues.

draft form and will be finalized prior to the January 31, 2001 filing to EPA). In order to accomplish the capital program that is required, GWA's financial advisors have recommended that GWA consider a program that combines rate increases to generate some cash as well as net income that will be required to access the bond markets. In addition, short-term debt from the present to when the long-term debt market can be accessed will be required. Long-term debt will replace the short-term debt when GWA is able to do so. It is the opinion of the financial advisors that GWA can access the financial markets at reasonable interest rates if the program that they have outlined is followed. A discussion of the various financing alternatives is contained below.

A. Increased Rates.

Increased rates can be used as a financing instrument in one of two ways. Increased rates may be used to generate all of the financing requirements over the five year period. This would be the case if GWA did not have access to any form of external financing because its financial condition was and continued to be unacceptable to any lender. This would be a very expensive option since all of the capital requirements of \$77.8 million over the next five years would be raised through increased rates. GWA's financial advisors believe that this scenario can be avoided. To provide an estimate as to what the impact on customers would be under this scenario, Exhibit I, page 5 shows the magnitude of rate increases that will be required. A rate increase of approximately 12% would be required in FY 2002 with additional increases of approximately 56% in FY 2003 and 46% in FY 2004. A cumulative increase of over 115%.

In the alternative, rates can be used to sufficiently improve GWA's financial condition to the point where GWA can access the long-term debt markets, which is the alternative that GWA's financial advisors recommend. This requires that rates be raised to a level where there would be sufficient income to produce a debt service coverage ratio of at least 1.5 times with the debt outstanding. To provide an estimate as to what the impact on customers would be under this scenario, Exhibit I, page 4 shows the magnitude of the rate increases that will be required. A rate increase of approximately 16.6% would be required in mid FY 2003 (April 2003). A further increase of approximately 9% could be required in FY 2006 which could be mitigated by significant increased efficiencies at that time. This would enable a bond issue of approximately \$49 million in October 2003 and \$25 million in October 2004.

In either scenario it is important for the Commission to issue a resolution or an Order stating that it is committed to provide the required rate relief to permit GWA to access the long-term debt market. We recommend that this be accomplished during the December regulatory session.

B. Short Term Debt.

Short-term debt provides the flexibility for GWA to begin implementing the required capital program without having to immediately raise rates or access the long-term debt financial markets.

There are several types of short-term debt that could be considered. There are bank loans, revolving lines of credits as well as Tax Exempt commercial Paper (TECP), which has been used effectively by GPA. While setting up a TECP program should be evaluated, there is a time delay with this option. The two most immediate options would therefore be a bank loan or a revolving line of credit. GWA's financial advisors have indicated that PUC support of such a financing option will be important given the weak current financial condition of GWA.

It will therefore be important for the Commission to issue a resolution or an Order stating that it is committed to provide any required rate relief to keep GWA current on its obligations related to any short term debt acquired. We recommend that this be accomplished during the December regulatory session.

Currently, GWA has a limit on the amount of short term debt that it can obtain.¹⁰ In order to provide the flexibility required to undertake the required capital program it will be necessary to amend current legislation and provide for a ceiling of \$25 million for short term debt.

C. Long Term Debt.

GWA's financial advisors indicate that GWA can access the long-term debt markets and secure financing at reasonable interest rates. As stated previously this will require action by the Commission to increase rates to provide for the required debt service coverage. The use of long-term debt provides the ability to spread out the rate impact over the life of the bonds that also approximates the period over which the customers get the benefit of the capital projects, providing for an equitable distribution of the costs. Given the current weak financial condition of GWA it will require a period of time before GWA can successfully access the financial markets. Short-term debt will provide the bridge financing. Legislation will be required to permit GWA to issue long-term debt. The amounts required for this five year period would be approximately \$75 million.¹¹ It is suggested that the PUC be empowered to approve the specific terms and conditions of the financing and the specific used to which it would be put.

¹⁰ 12 GCA Section 14201 (b), which is part of GWA's enabling legislation.

¹¹ This amount of \$75 million includes a debt service reserve of one year's interest and principal of \$5.8 million which will be maintained by the trustee.

D. Rural Utility Service (RUS) Loans/Grants.

GWA is eligible to apply to RUS for loans and grants under several programs. A letter from the local administrator of the RUS office in Guam has been attached as Attachment III (this is in draft form and will be finalized before the January 31, 2002 filing to EPA). GWA currently has pending two applications to RUS for loans/grants.

While the letter in Attachment III is encouraging, there is no assurance that GWA will be successful in securing loans or grants from RUS. GWA will therefore aggressively seek such loans and grants with the plan that if the applications are successful and economically beneficial, GWA will accept the loan or grant and reduce the amount of long-term debt that it would have otherwise borrowed. If successful, this program will reduce the rate relief that will be required to support the capital program.

The legislation that permits GWA to assume long-term debt should be made flexible enough to permit GWA to accept RUS loans and grants. As before the PUC should be empowered to approve the specific terms and conditions of the financing and the uses to which it would be put.

E. Build Operate and Transfer (BOT)

GWA is currently permitted to enter into BOT arrangements with the approval of the Commission. Many of the projects required by the Consent Order could be accomplished by a BOT mechanism. As with the situation with the RUS loan and grant programs, there is no assurance at this time that such an arrangement would actually materialize. GWA will therefore aggressively seek such arrangements with the plan that if the process is successful and economically beneficial, GWA will enter into a BOT arrangement and reduce the amount of long-term debt that it would have otherwise borrowed. Any BOT arrangement would have to meet the requirements of the Consent Order, while also necessitating that the BOT meet or beat any milestone requirements set by the EPA.

V. Proposed Financial Plan.

GWA's Financial Plan is based on the recommendations of its financial advisors. The advice of these financial advisors is to access the long term financial markets after the financial condition of GWA has been improved by securing a rate increase to provide the debt service coverage required to support long term debt. To provide bridge financing GWA will obtain a loan or a revolving line of credit. GWA's proposed financial Plan will be as follows:

1. Long Term Debt Financing. Issue long-term debt in two tranches:
 - Series A of \$49.2 million issued October 2003
 - Series B of \$24.8 million issued October 2004
2. Short Term Loan Requirements:
 - Draw down of approximately \$18 million through September 2003
 - Roll into Series A long-term debt issue of \$49.2 million

The short-term loan or revolving line of credit will be in place by April 2002.

The financial advisors will study and recommend on the feasibility of issuing TECP as an alternative for a short-term loan or revolving line of credit.

3. Apply for RUS loans and grants immediately. To the extent successful and economically viable, reduce the amount of long-term debt accordingly.
4. Structure Requests for Bids on projects that could be awarded on a BOT basis. To the extent successful and economically viable, reduce the amount of long-term debt accordingly.
5. Initiate a rate proceeding to increase rates by \$6.5 million (approximately 16.6% on overall water and waste water revenues) to be effective April 2003 to provide for debt service coverage for long-term bonds to be issued in October 2003. An additional rate increase to take effect on October 2005 for approximately \$3.8 million (approximately an additional 9% on overall water and wastewater revenues).

Exhibit I, pages 2 and 4 summarize the Financial Plan described above.

VI. Compliance Schedules.

The consent Order requires that compliance schedules be filed for all the required projects. The compliance schedules will be worked up in collaboration with GWA and be attached to the report filed with EPA on January 31, 2002.

VII. Legislative Requirements.

The following is a summary of the legislative changes that are recommended to implement the Financial Plan required by the Consent Order. These have been discussed in the relevant portions of the report above:

1. Raise the ceiling on the level of the amount of short-term debt that GWA can acquire to \$25 million. Empower the PUC to authorize the assumption of the short-term debt and approve the uses to which it can be put. The authorization to acquire short-term debt should be flexible enough to include TECP.

2. Authorize the issuance of \$75 million in long-term debt. Empower the PUC to authorize issuance of the long-term debt and approve the uses to which it can be put. This legislation should be flexible enough to permit GWA to enter into RUS loans.
3. Authorize amendments to the FY 2002 budget to meet the requirements of the Financial Plan. These amendments would be to initiate the renovation of the Agana and Northern District Sewer Treatment Plants and the construction of Outfall Extensions for each, to retain the necessary engineering support required, to initiate wastewater operations and maintenance training, to obtain laboratory services, and to initiate those activities necessary to obtain certification for GWA laboratories.. In addition any effort and related expense related to implementation of the Financial Plan should also be provided for. This would include acquisition of short term financing; acquisition of TECP if feasible; initiation of the meter replacement and sewer connections projects. These amounts, for FY 2002, could be funded by the reserve that was set up in the FY 2002 budget to pay for the debt service on a \$6 million loan that was anticipated in the budget but which funds are now being provided by the refunding of the 1989 Water Bonds.
4. Review and amend the System Development Charge legislation as appropriate.

VIII Recommended Commission Actions

The following is a summary of Commission actions recommended:

1. Issue a resolution or an Order stating that it is committed to provide the required rate relief to permit GWA to access the long term and short term debt markets. This should be accomplished during the December regulatory session. We recommend that the Commission seek input from GWA's financial advisors as to the appropriate language that would provide comfort to potential lenders.
2. Recommend to the Legislature that the Commission be empowered to approve the specific terms and conditions of the long and short term financing and the specific uses to which it would be put. This should be accomplished during the December regulatory session.
3. Recommend to the Legislature that the proposed legislation that permits GWA to assume long term debt should be made flexible enough to permit GWA to accept RUS loans and grants. The Commission should be empowered to approve the specific terms and conditions of the financing and the uses to which it would be put.
4. Issue a ruling that the Commission will set a process and schedule for GWA to seek BOT financing for required capital projects. The implementation of this should be delegated to the ALJ and be completed prior to January 31, 2002 if possible.

5. Issue a ruling that the Commission will use its management audit powers to oversee the implementation of the proposed Financial Plan and construction of the required capital projects. The Commission in conjunction with staff should develop appropriate reporting and surveillance mechanisms.

EXHIBIT 1

GUAM WATERWORKS AUTHORITY

SUMMARY FINANCIAL PLAN

GUAM WATERWORKS AUTHORITY
Summary Financial Plan
(\$000's)

Exhibit I, page 1
Capital Projects

Project:	Estimated Cost	Start Year	2002	2003	2004	2005	2006	TOTAL
Agana STP	\$ 8,300	2002	\$ 2,075	\$ 4,150	\$ 2,075			\$ 8,300
Agat STP	18,700	2004			9,350	9,350		18,700
Baza Garden STP	1,100	2003		550	550			1,100
Northern District STP	6,400	2002	1,600	3,200	1,600			6,400
Umatac/Merizo STP	2,900	2004			1,450	1,450		2,900
Regulatory Management	1%	2002	75	75	75	75	75	374
Engineering	4.5%	2002	421	421	421	210	210	1,683
Construction Management	2.5%	2002	117	117	234	234	234	935
Operator Certification ¹	300	2004						-
Monitoring Requirements	600	2002	120	120	120	120	120	600
Facilities Master Plan	2,300	2005				1,150	1,150	2,300
Sub-Total EPA Projects	\$ 40,600		\$ 4,407	\$ 8,632	\$ 15,874	\$ 12,589	\$ 1,789	\$ 43,292
Ongoing Capital Projects ²			6,000	6,000	6,000	6,000	6,000	30,000
Water Bond Contribution			(6,000)					(6,000)
Funded Internally ³			(313)	(2,154)	(2,534)	(2,404)	(3,455)	(10,859)
Meter Replacement ⁴				1,500	1,500	1,500		4,500
Sewer Connections ⁵					2,000	2,000	2,000	6,000
Total Required Capital			\$ 4,095	\$ 13,979	\$ 22,840	\$ 19,685	\$ 6,334	\$ 66,933

Notes

- ¹ Amount contained in GWA's O&M Budget
- ² GWA 2002 budget approved by legislature (PL26-49)
- ³ See Pro Forma Income Statement
- ⁴ Per GWA's SIP Implementation Plan (April 2000)
- ⁵ Per GWA's SIP Implementation Plan (April 2000)

GUAM WATERWORKS AUTHORITY
Summary Financial Plan
(\$000's)

Exhibit 1, page 2
Construction Funds

2002	2003	2004	2005	2006	TOTAL
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Uses of Capital:

Total Required Capital	\$ 4,095	\$ 13,979	\$ 22,840	\$ 19,685	\$ 6,334	\$ 66,933
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Sources of Capital:

Short Term Debt	\$ 4,095	\$ 18,074	\$ -	\$ -	\$ -	
Series A Proceeds			\$ 44,500	\$ 4,043		
Pay Down LOC			(18,074)			
Series A Construction			(22,840)	(4,043)		
Series B Proceeds				22,500	7,024	
Series B Construction				(15,642)	(6,334)	
Interest on Fund	3%		457	166	11	
Construction Fund			\$ 4,043	\$ 7,024	\$ 701	
Bond Funding:			\$ 44,500	\$ 22,500		
Debt Service Reserve	1 yr DS		3,848	1,946		
Issuance & Regulatory Co	1.75%		846	428		
Total Bond			\$ 49,194	\$ 24,874		\$ 74,068
Term	25 years					
Interest Rate	6%					

GUAM WATERWORKS AUTHORITY
Summary Financial Plan
(\$000's)

Exhibit 1, page 3
Amortization Schedules

Series A
Principal \$ 49,194
Amortization 25
Interest Assumption 6%
Annual Debt Service \$3,848

Series B
Principal \$ 24,874
Amortization 25
Interest Assumption 6%
Annual Debt Service \$1,946

								TOTAL		
Payment	Interest	Principal	Balance	Payment	Interest	Principal	Balance	Debt Svce	Interest	Principal
			\$ 49,194							
1	3,848	2,952	897					3,848	2,952	897
2	3,848	2,898	950				\$ 24,874	3,848	2,898	950
3	3,848	2,841	1,007	1	1,946	1,492	453	5,794	4,333	1,461
4	3,848	2,780	1,068	2	1,946	1,465	481	5,794	4,246	1,548
5	3,848	2,716	1,132	3	1,946	1,436	509	5,794	4,153	1,641
6	3,848	2,648	1,200	4	1,946	1,406	540	5,794	4,054	1,740
7	3,848	2,576	1,272	5	1,946	1,373	572	5,794	3,950	1,844
8	3,848	2,500	1,348	6	1,946	1,339	607	5,794	3,839	1,955
9	3,848	2,419	1,429	7	1,946	1,303	643	5,794	3,722	2,072
10	3,848	2,333	1,515	8	1,946	1,264	682	5,794	3,598	2,197
11	3,848	2,243	1,606	9	1,946	1,223	723	5,794	3,466	2,328
12	3,848	2,146	1,702	10	1,946	1,180	766	5,794	3,326	2,468
13	3,848	2,044	1,804	11	1,946	1,134	812	5,794	3,178	2,616
14	3,848	1,936	1,912	12	1,946	1,085	861	5,794	3,021	2,773
15	3,848	1,821	2,027	13	1,946	1,034	912	5,794	2,855	2,940
16	3,848	1,699	2,149	14	1,946	979	967	5,794	2,678	3,116
17	3,848	1,571	2,278	15	1,946	921	1,025	5,794	2,491	3,303
18	3,848	1,434	2,414	16	1,946	859	1,087	5,794	2,293	3,501
19	3,848	1,289	2,559	17	1,946	794	1,152	5,794	2,083	3,711
20	3,848	1,135	2,713	18	1,946	725	1,221	5,794	1,860	3,934
21	3,848	973	2,876	19	1,946	652	1,294	5,794	1,624	4,170
22	3,848	800	3,048	20	1,946	574	1,372	5,794	1,374	4,420
23	3,848	617	3,231	21	1,946	492	1,454	5,794	1,109	4,685
24	3,848	423	3,425	22	1,946	405	1,541	5,794	828	4,966
25	3,848	218	3,630	23	1,946	312	1,634	5,794	530	5,264
			0	24	1,946	214	1,732	1,946	214	1,732
				25	1,946	110	1,836	1,946	110	1,836

GUAM WATERWORKS AUTHORITY
Summary Financial Plan
(\$000's)

Exhibit 1, page 4
Funding through debt

	2002	2003	2004	2005	2006
Water Revenues	\$24,698	\$24,945	\$25,194	\$25,446	\$25,701
Wastewater Revenues	14,182	14,324	14,467	14,612	14,758
Add'l Sewer Revenues	-	-	80	470	1,190
Meter Management	-	113	508	961	961
Rate Increase (1)		3,250	6,500	6,565	6,631
Rate Increase (2)					3,750
Allowance	(2,333)	(1,705)	(1,870)	(1,442)	(1,590)
Other Revenues	351	351	351	351	351

TOTAL \$36,898 \$41,278 \$45,231 \$46,963 \$51,752

Operating Expense	\$35,840	\$37,274	\$38,765	\$40,315	\$41,928
Depreciation	10,000	11,000	12,000	13,000	14,000
Interest on Const. Fund	-	-	(457)	(166)	(11)
Training	500	520	541	562	585
IMC/PMC	500	520	541	562	585
Construction Management	500	500	500	250	250

Net Income (\$9,442) (\$7,516) (\$5,618) (\$6,748) (\$4,751)

Interest (ST)	246	1,330	-	-	-
Interest (LT)			2,952	2,898	4,333
Total Interest	\$246	\$1,330	\$2,952	\$2,898	\$4,333

Net Income (\$9,687) (\$8,846) (\$8,569) (\$9,646) (\$9,084)

DSCR Calculation					
Income	(\$9,687)	(\$8,846)	(\$8,569)	(\$9,646)	(9,084)
Interest	246	1,330	2,952	2,898	4,333
Depreciation	10,000	11,000	12,000	13,000	14,000
Total Available	\$558	\$3,484	\$6,382	\$6,252	9,249
Interest	\$246	\$1,330	\$2,952	\$2,898	\$4,333
Principal			897	950	1,461
Total Debt Service	\$246	\$1,330	\$3,848	\$3,848	\$5,794
DSCR	2.27	2.62	1.66	1.62	1.60

Logic for Rate Increase 1.60 1.60 1.60 1.60 1.60

Cash Generated:					
Earnings	(\$9,687)	(\$8,846)	(\$8,569)	(\$9,646)	(\$9,084)
Plus: Depreciation	10,000	11,000	12,000	13,000	14,000
Less: Principal Pymts	-	-	(897)	(950)	(1,461)
Cash Generated to Fund Projects:	\$313	\$2,154	\$2,534	\$2,404	\$3,455

Percent Increase (annual.) ¹ 16.6% 16.4% 16.4% 25.7%

¹ First Year Increase assumed six months

Assumptions:

FY02 Budget-Growth 1%
FY02 Budget-Growth 1%
GWA Strategic Initiative Plan
GWA Strategic Initiative Plan

Decreasing Allowance 6% 4% 4% 3% 3%

Growth 4%
Does not impact DSCR
Sources and Uses Table
Growth 4%
Growth 4%

6% on average balance
Amortization Table

See Amortization Tables
See Amortization Tables

GUAM WATERWORKS AUTHORITY
Financial Plan
(\$000's)

Exhibit 1, page 5
Funding by Rates

	2002	2003	2004	2005	2006
Water Revenues	\$24,698	\$24,945	\$25,194	\$25,446	\$25,701
Wastewater Revenues	14,182	14,324	14,467	14,612	14,758
Add'l Sewer Revenues	-	-	80	470	1,190
Meter Management	-	113	508	961	961
Rate Increase (1)	5,000	5,050	5,101	5,152	5,203
Rate Increase (2)		10,500	10,605	10,711	10,818
Rate Increase (3)			9,500	9,595	9,691
Allowance	(2,633)	(2,197)	(2,618)	(2,008)	(2,050)
Other Revenues	351	351	351	351	351
TOTAL	\$41,598	\$53,086	\$63,188	\$65,289	\$66,623
Operating Expense	35,840	37,274	38,765	40,315	41,928
Depreciation	10,000	11,000	12,000	13,000	14,000
Interest on Const. Fund	-	-	-	-	-
Training	500	520	541	562	585
IMC/PMC	500	520	541	562	585
Construction Management	500	500	500	250	250
Net Income:	(\$5,742)	\$3,272	\$10,842	\$10,599	\$9,276
Add: Depreciation	10,000	11,000	12,000	13,000	14,000
Opening Cash	0	163	457	458	4,372
Cash Available	\$4,258	\$14,435	\$23,298	\$24,057	\$27,647
Required Capital	4,095	13,979	22,840	19,685	6,334
Closing Cash	\$163	\$457	\$458	\$4,372	\$21,314
Cumulative Increase (annual.) ¹	12.2%	68.0%	113.9%	117.1%	117.0%

Assumptions:

FY02 Budget-Growth 1%
FY02 Budget-Growth 1%
GWA Strategic Initiative Plan
GWA Strategic Initiative Plan

Decreasing Allowance 6% 4% 4% 3% 3%
Static

Growth 4%
Does not impact DSCR

Growth 4%
Growth 4%

¹ First Year Increase assumed six months

ATTACHMENT I

DESCRIPTION OF PROJECTS REQUIRED BY THE EPA CONSENT ORDER

Agana Sewer Treatment Plant: The Agana STP was put into service in 1979. It provides primary treatment with a design average daily capacity of 12.0 MGD and a peak flow of 21.0 MGD. The Agana STP also receives waste sludge from Baza Gardens STP, Umatac/Merizo STP, and Agat STP. The primary treatment processes at Agana STP consist of flow measurement, primary clarification, scum removal, aerobic digestion, centrifuges for sludge dewatering, and effluent disposal via a deep-water outfall.

Agat Sewer Treatment Plant: The Agat STP was originally put into service in 1972. The facility is a small secondary treatment plant. The secondary treatment processes at Agat STP consist of preliminary treatment and secondary treatment including an extended aeration system with a secondary clarifier, sludge holding, and effluent disposal via an ocean outfall shared with the Navy. The Agat STP is the most recent addition to the treatment capacity of GWA. It is also proposed that the excessive infiltration/inflow be reduced to a more acceptable level. Inflow is defined as surface water that enters the wastewater system through sources such as manhole covers, lift station wet wells, and direct interconnections between the sewer system and yard, roof, and storm drains. Infiltration is defined as groundwater that leaks into a sewer pipe through joints, porous wall, or breaks. Fixing the problems at Agat will require modifications to the existing collection systems in the Agat and Santa Rita area. The inflow/infiltration problems in these areas are the result of private laterals owned by consumers and GWA collection facilities and mains.

Baza Gardens Sewer Treatment Plant: The Baza Gardens STP is located on the eastern side of the southern-central portion of Guam, just south of Route 17 adjacent to the Baza Gardens residential area. The Baza Gardens STP was put into service 1975 and renovated in 1992. The plant is a very small secondary treatment plant with a design average daily capacity of 0.6 MGD. The Baza Gardens STP consist of preliminary treatment of comminutor and an aerated grit chamber, secondary treatment consisting of contract stabilization with secondary clarification, sludge holding, and effluent discharge to the Togcha River.

Northern District Sewer Treatment Plant: The Northern District STP is the only wastewater treatment plant in the north and is located on the Old Harmon Village area above the Tanguisson Power Plant. The Northern STP is one of GWA's two major STPs. The plant was originally put into service in 1979. It provides service to Andersen Air Force Base, the Agafa Gumas area, Naval Communications Station, Yigo, Dededo, Barrigada Heights, Harmon, Liguana Terrace, and Tumon Bay. The Northern District STP is a primary treatment plant with a design average daily capacity

of 12.0 MGD and a peak flow of 27.0 MGD. The primary treatment processes at Northern District STP consist of headworks preliminary treatment consisting of comminution with standby manual bar screen, preaeration and grit removal, primary clarification and scum removal. Sludge is anaerobically digested and dewatered by centrifuges. Effluent disposal of treated wastewater is via a deep-water outfall.

Umatac/Merizo Sewer Treatment Plant: The Umatac/Merizo STP is located on the southern end of Guam along Route 4, between the villages of Umatac and Merizo. The Umatac/Merizo STP was put into service in 1981. The facility is an extremely small secondary treatment plant with a design average daily capacity of 0.25 MGD. The Umatac/Merizo STP facility is a secondary aerobic facultative lagoon treatment system followed by an overland treatment/disposal system. Effluent disposal is via percolation/transpiration in the overland treatment/disposal system. This plant frequently experiences hydraulic overloading and has experienced sewer main backups, and surcharging of manholes. Previous studies indicate that the primary sources of inflow/infiltration are located at sewer cleanouts and laterals in need of rehabilitation on the customer side of the connection with GWA.

Operator Training and Certification. As part of GWA's commitment to meet the objectives of the EPA Consent Order it will be necessary for GWA to institute a strong training and certification program for its wastewater treatment plant personnel. This program will consist of both traditional classroom training as well as on-the-job-training activities. It is anticipated that GWA will retain the services of a performance management contractor (PMC) during the next three years to assist in not only rehabilitating the treatment plants, but also training operating personnel. Finally, these activities will lead to the certification of plant operations personnel.

Monitoring Requirements. As part of GWA's commitment to meet the objectives of the EPA Consent Order it will be necessary for GWA to upgrade the capabilities of its laboratory services. Ideally these services would be accomplished by its own lab, which would obtain the necessary certification status to be acceptable to EPA. In the near-term it will be necessary for GWA to rely on private laboratories in Guam that possess the requisite certification status.

Facilities Master Plan. This activity is intended to update the previous master plan for GWA's wastewater system. The last master plan was prepared in December 1994, or seven years ago. While the 1994 plan was very comprehensive it was based upon a very optimistic growth forecast, which has failed to materialize. Ideally, the revised master plan should be completed prior to embarking on major new investments in GWA wastewater facilities. These would be system investments required to support future growth and would not be undertaken until GWA has complied with the requirements of the Consent Order for the purpose of meeting its various NDPES operating permit conditions.

ATTACHMENT II

LETTERS FROM GWA'S FINANCIAL ADVISORS -- GEDA AND FIRST UNION

ATTACHMENT III

LETTER FROM ADMINISTRATOR OF THE GUAM RUS OFFICE



Guam Area Office - Western Pacific Region
Room 303, FHB Building
400 Route 8
Hagatna, GU 96910

Telephone: (671) 472-7361
FAX: (671) 472-7366

DRAFT

November 23, 2001

v
v
v

Dear

Thank you for allowing USDA Rural Development to provide comments relative to the Consent Order from U.S. Environmental Protection Agency (EPA) that addresses several projects that the Guam Waterworks Authority (GWA) is required to implement. We understand that a financing plan needs to be in place in order to address required project implementation.

Funds are available to public entities, such as municipalities, counties, special-purpose districts, and Indian tribes. In addition, funds may be made available to corporations operated on a not-for-profit basis. Priority will be given to public entities, in areas with less than 5,500 people, to restore a deteriorating water supply, or to improve, enlarge, or modify a water facility or an inadequate waste facility. Applicants must be unable to obtain funds from other sources at reasonable rates and terms. The maximum term for all loans is 40 years; however, no repayment period will exceed state statutes or the useful life of the facility.

As a public entity, GWA would be eligible for Rural Utilities Service (RUS) financing under the Water and WasteWater loan and grant program (<http://www.usda.gov/rus/water/index.htm>). RUS provides loans, grants and loan guarantees for drinking water, sanitary sewer, solid waste and storm drainage facilities in rural areas and cities and towns of 10,000 or less. Maximum grant per project is 75% of eligible project costs, depending on the eligible area's median household income as a percentage of Guam's overall median household income. The remaining 25% would be in the form of a low interest loan.

The administrative funding allocation for Guam and the Western Pacific has traditionally been approximately \$800,000 in loans and \$800,000 in grants for this program. However, additional funds above and beyond this figure may be available from the National Reserve in Washington, D.C. on a competitive basis. The National Reserve represents a pool of funds that is made available for all States that have utilized their initial administrative allocation. The National Office ordinarily "pools" funds at least twice a year from those states that have not used their initial administrative allocations to add to the National Reserve.

A potential resource where additional funds may be obtained is in the event that a Presidential or Secretary of Agriculture declares a disaster for Guam. The Governor of Guam on November 2001

DRAFT

had requested for a Presidential Disaster Declaration for Guam as a result of the 7.0 earthquake that struck Guam in October. Should disaster funds be made available for FY 2002, I see this as a potential resource to address more of GWA's project implementation needs.

Another potential resource would be in the form of a guaranteed loan, whereby RUS can guarantee up to 90% of a loan made by a lender. Guaranteed funds are more readily available when compared to our direct loan and grant funding. This could potentially address a majority of GWA's project implementation requirements. However, since it is a loan made by a lender and guaranteed by the Government, market rates would likely apply.

Understanding the formidable tasks of identifying a Financing Plan to address long and short term financing requirements, so long as a reliable repayment source is identified to service any RUS debt, we would have no difficulty with other traditional financing existing for GWA.

Our review of an application will be completed within 60 days of receipt of a completed application. The Agency conducts its own environmental assessment per project. This assessment would be completed prior to approval. Should a favorable determination be made on the application, then a formal approval will be issued to the applicant should funds be made available.

Our office is currently in receipt of 2 preapplications submitted by GWA. A \$2.8 million request was submitted for the Umatac/Merizo STP. Also, we recently received a second application for approximately \$9.2 million; the breakdown of the request includes approximately \$7.0 million to purchase equipment and \$2.2 million to refinance the IBM/JD Edwards loan.

As of this date, our Agency has not received RUS program funding for FY '02. In addition to determining the administrative allocations for all states to include the Western Pacific, information on the availability of disaster funding and emergency funding availability for FY '02 will be announced. Once published, then a more certain position on RUS funding availability can be provided.

Should you have any questions or comments on this matter, please contact me.

Sincerely,

JOSEPH M. DIEGO
Rural Development Manager

cc: State Director, Hilo, HI
RUS Program Director, Hilo, HI

Memo

To: Jim Madan
From: Harry Boertzel
Date: October 25, 2001

file
Docket
02-02

The following are developing thoughts that I have about the Commission's report to the Legislature [Report] and the GWA financial plan, which will be presented to EPA. These will be separate documents.

1. Commission Report.

I will draft the Report, which I want the Commissioners to sign. I will coordinate with Senator Brown how she would prefer its presentation to the Legislature. I would think that you, Larry and Bill will be involved in this presentation. The Report will be presented to the Commission at the December 3 workshop/public hearing. Presentation to the Legislature probably 12/6, 7, 10 or 11. The Georgetown report, on which you are now working, will provide the information and analysis necessary to prepare the Report and the Plan. It will be useful and important to clearly document and "market" the magnitude and diversity of work required under the Order [including regulatory work if we are to oversee it] to get both the Commission and the Legislature "on-board". I now agree with you that substantial regulatory fees will be involved for a number of years. What, if any, portion of these fees can be capitalized?

I envision the Report containing the following sections, for which I need your team's assistance in gathering information and answers to the following questions asap:

a) **Regulatory History.** The tough terms of the Consent Order reflect a history of GWA's chronic violation of Federal environmental law. I would like Bill to investigate and to prepare a brief report on the following issues: 1] Are GWA's board of directors and senior management subject to the criminal and civil penalties discussed in section 8 of the Order? What about the Legislature should it fail to provide the budget and borrowing authorization necessary to enable GWA to perform the remedial work required by the Order? [Bill or Mike Bradley will need to research this point]. 2] Except for Baza Gardens and Merizo [where GWA didn't even have a permit until 9/00] all of the NPDES permits expired in the early 90s and have been "administratively extended". What does this mean? Have permit violations been going on since the early 90s? 3] Why does the Order only assert violations in the 1/97-12/00 time frame? 4] Are there other EPA orders in existence which address other GWA violations not discussed in the Consent Order? I know, for example, that a pump has not worked for some time at Pago Bay causing raw sewage to flow into the bay. This does not seem to be addressed in the Order. 5] Is there EPA correspondence or reports which would provide a more detailed history of GWA's violation of Federal law? If so, get copies. 6] The Order speaks of the discharge of raw sewage from the Northern and Agana plants. Provide some order of magnitude of the

volume of sewage that has been dumped. Where was it dumped? What environmental, health and economic risk has it created? It will be both useful and important to give both the Commission and the Legislature a perspective on why and how the Order evolved. It would be useful to connect these violations to the chronic pollution of the island's beaches; the threat they pose to the golden egg [tourism]; and the health risk they pose to island residents. Again, I think that an important purpose of the Commission's Report is to raise the level of awareness of the Legislature and the public to the risks presented by GWA's environmental violations and the condition of its facilities. Does GWA face potential liability to tourists and residents for this pollution? Does GWA have insurance to protect against this risk? If not, it would seem that GWA ratepayers are exposed to the risk of rate increases if judgments are entered against GWA for pollution damage.

b] **Consent Order Projects.** I would like a map prepared which shows the location of each of the 8 renovation projects. Ask Larry to prepare a short statement, which provides for each restoration project: when the subject facility was built, what villages it services, what kind of treatment it provides, a general description of the current condition of the facility and the remedial work, probable cost and time necessary to bring it into compliance with Federal law. The order also lists 5 other comprehensive projects that need to be undertaken: facilities master plan; CPEs for Agat, Baza and Merizo; assessment and corrective action plan for sewer pump stations and collection systems; preventative maintenance program; and operation and maintenance training and certification program. Larry should prepare a short description of what these comprehensive projects will entail and the cost and time necessary to accomplish them. From EPA's perspective, does all the remedial work need to be started at once and proceed on parallel track? Can the work be undertaken in phases? What work has already started? Are you comfortable its progress? Should supplemental regulatory procurement controls be established in addition to those contained in the Commission's 2/00 Order?

c] **Master Schedule.** A master timeline schedule, which identifies all action steps [from a regulatory perspective] necessary for GWA to comply with the Order [regulatory, procurement, funding, outside management, interim measures, legislative action]. This would be an attachment to the Commission Report.

d] **Funding.** The letters from RUS and GEDA are a good start. These letters need to speak clearly on GWA's eligibility, potential amounts, and timeline for processing. What about immediate, interim financing [say from a local bank]? Should we pursue immediate legislative authority to obtain interim financing? In what amount? Rate impact needs to be examined and also the "get real" issue of to what extent are GWA's operations currently underfunded [i.e., what will it cost for GWA to provide reliable, safe service?]. We need to discuss the probable sequence and timing of rate proceedings to fund Order compliance. I am also interested in answers to the questions posed to you and

Bill in my 10/5/01 memo. The Report needs to contain a position on whether GWA's FY02 budget needs to be amended.

e] **Regulatory Process.** What should be the level of Commission involvement and oversight and how will it happen? Who will prepare the RFP documents and oversee the procurement and administration of the consultants and contractors who will do the remedial work? Does the Commission need to issue implementing orders in December? Should the BOT committee be eliminated? Revised regulatory budget for this process.

f] **Legislation.** We need to identify the legislation we need to move the process forward. I note that the Order speaks of expanding certain facilities. Does this trigger the need for the system development charge to correctly allocate the cost of these expansions? Is now the time to obtain borrowing authorization. Does the Commission need additional regulatory authority to oversee GWA's compliance with the Order?

g] **Procurement.** The Report needs to contain an analysis of the procurement vehicles, which will be used to undertake Order compliance.

2. **Financial Plan.** Most of the plan will flow from the matters discussed above. We'll talk next week about how it will be put together. How do you propose we interface with GWA? The Plan needs to be an attachment to the Report, although I agree with you that we can continue to refine it during December and January in preparation for its formal submission to EPA on or before January 31, 2002. We need to plan adequate time for GWA to formally adopt and transmit the Plan. They are the ones that are the EPA enforcement hook.

**PUBLIC UTILITIES COMMISSION
OF GUAM**

Terrence M. Brooks, Chairman

Filomena M. Cantoria
Edward C. Crisostomo
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Harry M. Boertzel, Esq.
Administrative Law Judge

Monessa C. Leon Guerrero
Executive Director

October 23, 2001

Ms. Alexis Strauss, Director
Water Division
United States Environmental Protection Agency Region IX
75 Hawthorne Street
San Francisco CA 94105

**RE: Docket 02-02 [Guam Waterworks Authority Financial Plan – USEPA
Consent Order]**

Dear Ms. Strauss:

The Guam Public Utilities Commission, which has regulatory authority over Guam Waterworks Authority [GWA], has been directed by Guam Public Law 26-34 to oversee GWA's preparation and timely submission of the financial plan mandated by the USEPA Administrative Order on Consent [Order] dated August 16, 2001. In P.L. 26-34:14, the Legislature expressed serious concern over GWA's chronic violation of Federal environmental law and orders. A copy of section 14 of this law is enclosed for your information.

In the course of preparing the financial plan, the Commission's consulting staff may have technical questions regarding your office's expectations. We understand that Mr. Lee or Mr. Machol of the Pacific Insular Area Program are the appropriate contact persons for any Commission inquiries.

The Commission is committed to providing GWA with the regulatory oversight and rate relief, which is necessary for it to accomplish its public mission of providing reliable, safe, reasonably priced water and wastewater treatment services to the people of Guam. We look forward to working with your office in this important effort.

Cordially,



Terrence M. Brooks

cc Jim Madan
William J. Blair, Esq.
Senator Joanne Brown
Bert Johnston

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Fax History Report for

4721917
Oct 23 2001 9:20am

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Oct 23	9:17am	Sent	16467421650	2:25	2	OK

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Oct 23	9:17am	Sent	16467421650	2:25	2	OK

Result:

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OK color - color fax

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9**

IN THE MATTER OF:

Guam Waterworks Authority
Agana, Agat, Baza Gardens,
Commercial Port, Northern
District, Umatac-Merizo
Sewage Treatment Plants
Agana, Guam

Docket No. CWA-402-9-01-19

Proceedings under Sections 308(a)
and 309(a)(3), (a)(4), and (a)(5)(A)
Clean Water Act, as amended,
33 U.S.C. Sections 1318(a), and
1319(a)(3), (a)(4), (a)(5)(A)

**ADMINISTRATIVE ORDER
ON CONSENT**

STATUTORY AUTHORITY

The following Findings are made and Order is issued pursuant to the authority vested in the Administrator of the U.S. Environmental Protection Agency (EPA) by Sections 308(a) and 309 (a)(3), (a)(4), and (a)(5)(A) of the Clean Water Act, as amended (Act), 33 U.S.C. Section 1318 (a), and Section 1319 (a)(3), (a)(4), and (a)(5)(A). This authority has been delegated to the Regional Administrator of EPA, Region 9, and re-delegated by the Regional Administrator to the Director of the Water Division of EPA, Region 9.

FINDINGS OF VIOLATION

On the basis of the following facts, the Director of the Water Division of EPA, Region 9, finds that the Guam Waterworks Authority (GWA) is in violation of National Pollutant Discharge Elimination System (NPDES) Permit Nos., GU0020087, GU0020222, GU0020095, GU0020109, GU0020141, GU0020273 for the Agana, Agat, Baza Gardens, Commercial Port, Northern District and Umatac-Merizo Sewage Treatment Plants, respectively, and therefore in violation of Sections 301(a) and 402 of the Act, 33 U.S.C. Section 1311(a) and 33 U.S.C. Section 1342, respectively:

1. GWA is a municipality or political subdivision of the State organized under the laws of the Territory of Guam. GWA is therefore a "person" as defined by Section 502(5) of the Act, 33 U.S.C. Section 1362(5), and is thus subject to its requirements.
2. GWA is the owner and operator of the Sewage Treatment Plants (STP) listed

below which provide treatment to wastewater from their respective areas:

Agana STP, Route 1, Agana, Guam
Agat STP, Route 2, Agat, Guam
Baza Gardens STP, Baza Gardens Street, Talofofo, Guam
Commercial Port STP, Cabras Island, Piti, Guam
Northern District STP, Route 34, Harmon Annex/Dededo, Guam
Umatac-Merizo STP, Route 4, Merizo, Guam

3. The Agana, Agat, Commercial Port and Northern District STPs discharge to the Philippine Sea; the Baza Gardens STP discharges to the Togcha River; and the Umatac-Merizo STP discharges to the Toguan River, all of which are "navigable waters" as defined by Section 502(7) of the Act, 33 U.S.C. Section 1362(7), and "waters of the United States" as defined by EPA regulations in 40 C.F.R. Section 122.2.
4. Section 301(a) of the Act, 33 U.S.C. Section 1311(a), prohibits the discharge of pollutants to waters of the United States except in compliance with certain sections of the Act, including Section 402, 33 U.S.C. Section 1342. Section 402 of the Act authorizes EPA to issue National Pollutant Discharge Elimination System (NPDES) permits allowing for the discharge of pollutants into waters of the United States. Compliance with Section 301(a) of the Act, 33 U.S.C. Section 1311(a), therefore, requires compliance with a valid NPDES permit, inter alia.
5. Under the authority of Section 402(a) of the Act, 33 U.S.C. Section 1342 (a), EPA issued NPDES permit No. GU0020087 to GWA's Agana STP. The permit became effective on June 30, 1986 and expired on June 30, 1991. The permit has been administratively extended pending renewal of the permit. Sections A.1. and A.2. of Permit No. GU0020087 set forth the discharge limits and monitoring requirements for specified constituents of the effluent discharge from the Agana STP.
6. A review of the Discharge Monitoring Reports for the Agana STP for the period of January, 1997 through December, 2000, showed violations of discharge and monitoring requirements. Permit effluent limitations were frequently exceeded for Biochemical Oxygen Demand (BOD), Suspended Solids (SS), and Settleable Solids. Receiving water monitoring was also not performed in accordance with permit requirements. Therefore, GWA has violated Section 301(a) of the Act, 33 U.S.C. Section 1311(a), by failing to meet effluent limits and monitoring requirements in violation of Permit No. GU0020087. The violations are summarized in Table 1 which is attached to and made part of this Findings of Violation.
7. Under the authority of Section 402(a) of the Act, 33 U.S.C. Section 1342 (a), EPA issued NPDES permit No. GU0020222 to GWA's Agat STP. The permit

became effective on September 30, 1987 and expired on September 29, 1992. The permit has been administratively extended pending renewal of the permit. Sections A.1., A.2. and A.3. of the Permit No. GU0020222 set forth the discharge limits and monitoring requirements for specified constituents of the effluent discharge from the Agana STP.

8. A review of the Discharge Monitoring Reports for the Agat STP for the period of January, 1997, through December, 2000, showed violations of discharge requirements. Permit effluent limitations were frequently exceeded for Fecal Coliform Bacteria, BOD, SS, and Settleable Solids. Therefore, GWA has violated Section 301(a) of the Act, 33 U.S.C. Section 1311(a), by failing to meet effluent limit requirements in violation of Permit No. GU0020222. The violations are summarized in Table 2 which is attached to and made part of this Findings of Violation.
9. Under the authority of Section 402(a) of the Act, 33 U.S.C. Section 1342 (a), EPA issued NPDES permit No. GU0020095 to GWA's Baza Gardens STP. The permit became effective on September 7, 2000 and expires on September 6, 2005. This NPDES permit had an initial effective date of September 2, 1986 which was to expire on September 6, 1991. The permit was administratively extended until reissuance of the permit in September, 2000. Sections A.1. and B. of Permit No. GU0020095 set forth the discharge limits and monitoring requirements for specified constituents of the effluent discharge from the Baza Gardens STP for the period of September 2, 1986 to September 6, 2000 and Sections A. and D. for the period of September 7, 2000 to September 6, 2005.
10. A review of the Discharge Monitoring Reports for the Baza Gardens STP for the period of January, 1997, through December, 2000, showed violations of discharge requirements. Permit effluent limitations were frequently exceeded for Fecal Coliform Bacteria, BOD and SS. Therefore, GWA has violated Section 301(a) of the Act, 33 U.S.C. Section 1311(a), by failing to meet effluent limit requirements in violation of Permit No. GU0020095. The violations are summarized in Table 3 which is attached to and made part of this Findings of Violation.
11. Under the authority of Section 402(a) of the Act, 33 U.S.C. Section 1342 (a), EPA issued NPDES permit No. GU0020109 to GWA's Commercial Port STP. The permit became effective on September 16, 1983 and expired on September 16, 1988. The permit has been administratively extended until completion of project to eliminate the discharge. Section A.1. of the Permit No. GU0020109 set forth the discharge limits and monitoring requirements for specified constituents of the effluent discharge from the Commercial Port STP.
12. A review of the Discharge Monitoring Reports for the Commercial Port STP for the period of January, 1997, through December, 2000, showed violations of

discharge and monitoring requirements. Permit effluent limitations were frequently exceeded for Fecal Coliform Bacteria, BOD, SS and Settleable Solids. Effluent monitoring requirements were not performed in accordance with permit requirements. Therefore, GWA has violated Section 301(a) of the Act, 33 U.S.C. Section 1311(a), by failing to meet effluent limits and monitoring requirements in violation of Permit No. GU0020109. The violations are summarized in Table 4 which is attached to and made part of this Findings of Violation.

13. Under the authority of Section 402(a) of the Act, 33 U.S.C. Section 1342 (a), EPA issued NPDES permit No. GU0020141 to GWA's Northern District STP. The permit became effective on June 30, 1986 and expired on June 30, 1991. The permit has been administratively extended until reissuance of the permit. Sections A.1. and A.2. of Permit No. GU0020141 set forth the discharge limits and monitoring requirements for specified constituents of the effluent discharge from the Northern District STP.
14. A review of the Discharge Monitoring Reports for the Northern District STP for the period of January, 1997, through December, 2000, showed violations of discharge and monitoring requirements. Permit effluent limitations were frequently exceeded for SS, BOD and Settleable Solids. Receiving water monitoring was also not performed in accordance with permit requirements. Therefore, GWA has violated Section 301(a) of the Act, 33 U.S.C. Section 1311(a), by failing to meet effluent limits and monitoring requirements in violation of Permit No. GU0020141. The violations are summarized in Table 5 which is attached to and made part of this Findings of Violation.
15. Under the authority of Section 402(a) of the Act, 33 U.S.C. Section 1342 (a), EPA issued NPDES permit No. GU0020273 to GWA's Umatac-Merizo STP. The permit became effective on September 7, 2000 with an expiration date of September 6, 2005. The Umatac-Merizo STP did not have an NPDES permit prior to September 7, 2000. Sections A.1. and A.2. of Permit No. GU0020273 set forth the discharge limits and monitoring requirements for specified constituents of the effluent discharge from the Umatac-Merizo STP.
16. The GWA has violated Section 301(a) of the Act, 33 U.S.C. Section 1311(a), by discharging without an NPDES permit prior to September 7, 2000 and failing to meet effluent limits and monitoring requirements in violation of the recently issued Permit No. GU0020273 for the Umatac-Merizo STP. A review of the Discharge Monitoring Reports showed violations of discharge and monitoring requirements. The dates of unpermitted discharges and violations are summarized in Table 6 which is attached to and made part of this Findings of Violation.
17. Under 40 C.F.R. Section 122.41(m)(4), Prohibition of Bypass, a POTW is prohibited from bypassing sewage from its treatment facilities unless: 1) it is

unavoidable to prevent loss of life, personal injury, or severe property damage; 2) there were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime; or 3) the permittee submitted notices as required by the permit. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 C.F.R. Section 122.41(m)(1)].

18. The GWA has violated Section 301(a) of the Act, 33 U.S.C. Section 1311(a), by allowing the bypass and overflow of raw sewage from sewer pump stations associated with the Northern District and Agana STPs. GWA reported 280 overflow events in their Quarterly Overflow Reports for the period of July, 1997 through June, 1999. GWA has had 31 overflow events for the period of July, 1999 through April, 2001. They are included in Table 7 which is attached to and made part of this Findings of Violation.

ORDER FOR COMPLIANCE

Considering the foregoing Findings and the potential environmental and human health effects of the violation, EPA has determined that compliance in accordance with the following requirements is reasonable. Pursuant to the authority of Sections 308 and 309 of the Act, 33 U.S.C. Sections 1318 and 1319, it is hereby ordered that the Guam Waterworks Authority comply with the following requirements:

1. GWA shall submit a Financial Plan and schedule by January 31, 2002, to secure funds for capital, operational and maintenance costs necessary to bring GWA's wastewater collection, treatment and disposal systems into compliance with its NPDES permits and the Clean Water Act. GWA shall also submit compliance schedules, based on the Financial Plan, by January 31, 2002, for the following: Agat STP Renovation/Expansion; Agat Collector System Inflow/Infiltration; Agana STP Renovation; Agana Ocean Outfall; Baza Gardens STP Renovation/Expansion (including chlorination/dechlorination system); Northern District Ocean Outfall; Umatac-Merizo STP Renovation; Agana Collector System Inflow/Infiltration; GWA Facilities Master Plan; Comprehensive Performance Evaluations (CPE) for the Agat, Baza Gardens, and Umatac-Merizo STPs; Comprehensive Assessment of GWA's Sewer Pump Stations/Collection System and Implementation of a Corrective Action Plan; Development and Implementation of a GWA Preventive Maintenance Program, and; Development and Implementation of a GWA Operation and Maintenance Training and Certification Program.

All renovations and/or corrective actions for a respective facility shall include, but not be limited to, the inclusion of all deficiencies identified in Appendix B, O&M Deficiencies.

Where the Financial Plan includes the implementation of mechanisms such as

Build-Operate-Transfer (BOT) to bring a treatment facility into compliance, a compliance schedule shall be submitted which includes the necessary milestone activities to finalize and implement the selected mechanism and/or agreement. In addition, where a BOT will be implemented a CPE or its equivalent shall be completed to ensure all performance limiting deficiencies are identified and included to be addressed under a BOT agreement/contract to ensure compliance with NPDES permit requirements and the Clean Water Act.

The Financial Plan and Compliance schedules shall be made a part of this Order upon the review and approval by EPA in consultation with GEPA.

2. GWA shall take all necessary actions to implement the compliance schedules set forth in Appendix A to bring its wastewater treatment, collection and conveyance systems into compliance with their respective NPDES permits. The compliance schedules have been attached to and made a part of this Order on Consent.
3. GWA shall submit quarterly compliance progress reports. Quarterly Compliance Progress Reports shall include, but not be limited to, the following: GWA's progress toward completing compliance activities specified as part of this Order on Consent; reporting of compliance and/or non-compliance with specific compliance schedule activities; explanations of non-compliance and actions taken or to be taken to address non-compliance; and briefly discuss status toward meeting future compliance schedule activities. The Quarterly Compliance Progress Report shall be a separate report submitted concurrently with GWA's Wastewater Operations and Maintenance Progress Report. The first Quarterly Compliance Progress Report shall be due on the first quarter ending following the effective date of this Order on Consent.
4. GWA shall designate a Compliance Coordinator who will be responsible for overseeing implementation and monitoring of the Order on Consent's compliance schedule activities. The Compliance Coordinator will also be responsible for submittal of the Quarterly Compliance Progress Report and act as the initial point of contact for matters relating to the Order on Consent. The Compliance Coordinator shall be at a Divisional Manager level or higher within GWA. GWA shall designate and submit the name and contact information for the Compliance Coordinator within fifteen (15) days of the effective date of this Order on Consent.
5. GWA is required to submit to EPA and GEPA a final status report within sixty (60) days of completing the final compliance activity confirming completion of all requirements and terms of this Order.
6. All reports submitted pursuant to this order must be signed by a principal executive officer, ranking elected official or duly authorized representative of GWA [as specified by 40 C.F.R. Section 122.22 (b)(2)] and shall include the

following statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

7. All submissions requested by this Order shall be mailed to the following addresses:

U.S. Environmental Protection Agency
Pacific Insular Area Programs (CMD-5)
75 Hawthorne Street
San Francisco, CA 94105

Administrator
Guam Environmental Protection Agency
P.O. Box 22439-GMF
Barrigada, Guam 96921

All telephone inquiries should be made to Mike Lee at (415) 744-1484.

8. Any violation of the terms of the enclosed Order or the NPDES permit could subject GWA to a civil action for appropriate relief pursuant to Section 309 (b) of the Act, 33 U.S.C. Section 1319 (b), and/or civil penalties not to exceed \$27,500 per day for each violation, 33 U.S.C. Section 1319(d). Under Section 309 (g) of the Act, 33 U.S.C. Section 1319 (g), any violation of the NPDES permit could subject GWA to an administrative penalty action of up to \$11,000 per day of violation not to exceed \$137,500. In addition, Section 309 (c) of the Act, 33 U.S.C. Section 1319 (c), provides for criminal penalties in the event of either negligent or knowing violations of the Act. Negligent violations of the Act are punishable by a fine of not less than \$2,500 no more than \$25,000 per day of violation, or imprisonment for not more than one year, or both (Section 309 (c) (1), 33 U.S.C. Section 1319 (c) (1)). Knowing violations of the act shall be punished by a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or imprisonment for not more than three years, or both (Section 309 (c) (2), 33 U.S.C. Section 1319 (c) (2)).
9. This Order on Consent does not waive or modify or in any way relieve GWA of its obligations imposed by the Act or any other local, State, or Federal law. EPA

reserves the right to seek any and all remedies available under Section 309 (b), (c), (d), or (g) of the Act, 33 U.S.C. Section 1319 (b), (c), (d) or (g), for any violation cited in this Order.

10. Issuance of an Order on Consent shall not be deemed an election by EPA to forego any administrative, civil, or criminal action to seek penalties, fines, or other appropriate relief under the Act.
11. This Order on Consent shall terminate when EPA issues a written approval of GWA's written certification that GWA has fully completed all work required under this Order on Consent. GWA certification of completion shall comply with requirements set forth in Section 3 above.
12. This Order on Consent shall take effect upon signature by all parties.

IT IS SO AGREED AND ORDERED:

For United States
Environmental Protection Agency
Region 9

26 June 2001
Dated

Alexis Strauss
Alexis Strauss, Director
Water Division

July 25, 2001
Dated

For Guam Waterworks Authority
[Signature]
Herbert J. Johnston, Jr.
General Manager

8/6.01
Dated



For Guam
[Signature]
Carl T.C. Gutierrez
Governor of Guam

GUAM WATERWORKS AUTHORITY
ADMINISTRATIVE ORDER ON CONSENT
FINDINGS OF VIOLATIONS

TABLES 1 THROUGH 7

TABLE 1

Name of Discharger: Guam Waterworks Authority
Agana Sewage Treatment Plant, Guam

NPDES Permit No.: GU0020087

Reporting Period: January, 1997 through December, 2000

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a	Biochemical Oxygen Demand	80 mg/L Monthly Average	Jan.97	81
			Feb.97	88
			May 97	86
			Oct. 97	87
			Dec. 97	86
			Apr. 98	107
			June 98	87
			July 98	92
			Aug.98	83
			Sept.98	82
			Oct. 98	103
			June 99	97
			Sept.99	90
			Nov. 99	110
			Dec. 99	90
			Jan. 00	125
			Feb. 00	98
			Mar. 00	104
			Apr. 00	133
			May 00	126
			June 00	106
			July 00	123
			Aug.00	121
			Sept.00	127
			Oct.00	171
			Nov.00	177
			Dec.00	173
		8011 lbs/day Monthly Avg.	Jan.00	8485
			Feb.00	8133
			Mar.00	8430
			Apr.00	9867

TABLE 1 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Suspended Solids	120 mg/L Daily Maximum	Dec.97	154
			Sept.98	184
				176
			Nov.99	190
				150
			Apr.00	128
			May00	168
				164
			Sept.00	132
			Dec.00	136
			Sept.98	13,274
			Nov.99	12,994
			May00	12,246
			Sept.00	12,143
	Settleable Solids	1.0 ml/L Monthly Avg.	Oct.00	1.2
			Nov.00	1.7
	Settleable Solids	2.0 ml/L Daily Max.	Feb.98	3.0
				3.0
			Apr.98	3.0
			July 98	3.0
			Sept.98	5.0
				2.5
				3.0
			Jan.99	3.0
			May00	4.0
				3.0
			Oct.00	7.0
				2.5
				4.0
			Nov.00	17.0
			Dec.00	3.0

TABLE 1 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Biochemical Oxygen Demand	8011 lbs./day Monthly Average	May00	9590
			July00	8981
			Sept.00	9611
			Oct.00	12811
			Nov.00	12943
			Dec.00	13718
		160 mg/L Daily Maximum	May00	164
			Sept.00	191
			Oct.00	221
				201
			Nov.00	196
				162
			Dec.00	211
				193
		16022 lbs./day Daily Maximum	Oct.00	17602
	Suspended Solids	60 mg/L Monthly Avg.	Apr.97	67
			June97	85
			Aug.97	65
			June98	61
			July 98	65
			Sept.98	84
			Nov.99	110
			Jan.00	66
			Apr.00	65
			May00	74
			Sept.00	61
			Oct.00	72
			Nov.00	68
			Dec.00	82
		6008 lbs/day Monthly Avg.	Sept.98	6130
			Dec.00	6197

TABLE 1 Continued

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Guam Water Quality Std.</u>	<u>Month And Year</u>	<u>Station and Value(s) Reported in Violation</u>
	Fecal Coliform Bacteria	400/100ml Maximum	July 97	Station D,E TNTC
			Aug.97	Station A TNTC
			Oct.97	Station A TNTC
			Dec.97	Station D TNTC
				Station E TNTC
			Jan.98	Station D TNTC
			Apr.98	Station D >400
			July 98	Station A TNTC
				Station B TNTC
				Station C TNTC
			Sept.98	Station D TNTC
			Dec.98	Station A,B,C NP/R
				Station D TNTC
			Jan.99	Station A TNTC
				Station B TNTC
				Station C TNTC
			Mar.99	Station B TNTC
				Station D TNTC
			June99	Station D TNTC
				Station E TNTC
			Aug.99	Station D TNTC
			Sept.99	Station A TNTC
			Nov.99	Station A TNTC
			Dec.99	Station D TNTC
			Jan.-Mar00	Station D,E,F NP/R
			Apr.-June00	Station D,E,F NR/R
			July-Sept.00	All Stations NP/R
			Oct.-Nov.00	All Stations NP/R

TNTC = To Numerous To Count
 NR = Not Performed/Reported

TABLE 2

Name of Discharger: Guam Waterworks Authority
Agat Sewage Treatment Plant, Guam

NPDES Permit No.: GU0020222

Reporting Period: January, 1997 through December, 2000

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a	Fecal Coliform Bacteria	70/100ml Monthly Average	Jan.97 thru	>400
			Dec.97	
			Jan.98 thru	>400
			Dec.98	
			Jan.99 thru	>400
			Dec.99	
			Jan.00	>70
			Feb.00	>70
			Mar.00	>400
			Apr.00	>400
			May00	364,000,000
			June00	128,000,000
			July00	133,000,000
			Aug.00	168,000,000
			Sept.00	270,000,000
			Oct.00	74,211,111
			Nov.00	73,966,666
			Dec.00	28,912,500
		400/100ml Daily Maximum	Jan.97 thru	>400(12)
			Dec.97	
			Jan.98 thru	>400(50)
			Dec.98	
			Jan.99 thru	>400(51)
			Dec.99	
			Jan.00 thru	>400(13)
			Mar.00	
			Apr.00	TNTC
				3,200,000
				450,000,000
				340,000,000

TABLE 2 Continued

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Fecal Coliform Bacteria	400/100ml Daily Maximum	May 00	440,000,000
				441,000,000
				230,000,000
				320,000,000
				420,000,000
			June00	260,000,000
				116,000,000
				84,000,000
				54,000,000
				340,000,000
			July00	52,000,000
				74,000,000
				68,000,000
				410,000,000
				57,000,000
			Aug.00	NP/R
				NP/R
				626,000,000
				339,000,000
				88,000,000
			Oct.00	28,000,000
				8,333,333
				17,300,000
				197,000,000
				NP/R
			Nov.00	161,500,000
				30,700,000
				NP/R
				NP/R
			Dec.00	12,200,000
				22,750,000
				54,850,000
				25,850,000

TNTC = To Numerous To Count

NP/R = Not Performed/Reported

Note: Numbers in () refers to the number of times the daily maximum effluent limitations was exceeded for the respective period.

TABLE 2 Continued

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
	Biochemical Oxygen Demand	70 mg/L Monthly Avg.	Jan.97	80
			Mar.97	86
			Aug.97	82
			Sept.97	76
			Jan.98	79
			Feb.98	73
			Apr.98	73
			May98	72
			Aug.98	75
			June99	80
			Jan.00	88
			Feb.00	78
	Suspended Solids	876 lbs./day Monthly Avg.	Jan.97	1156
			May97	984
			June99	921
		65 mg/L Monthly Avg.	Mar.97	86
			June97	66
			July 98	68
			Jan.00	76
			Apr.00	73
		814 lbs./day Monthly Avg.	Mar.97	1099
			June97	857
	Settleable Solids	130 mg/L Daily Maximum	Mar.97	176
		1628 lbs./day	Mar.97	2055
		1.0 mL/L Monthly Avg.	Aug.97	6.5
			Dec.97	3.6
			Feb.98	2.1
			Apr.98	1.1
			May98	1.3
			Oct.99	1.7
			Nov.99	1.2
			May00	2.2
			June00	1.6
			Aug.00	1.2

TABLE 2 Continued

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
	Settleable Solids	2.0 ml/L	Aug.97	6.5
		Daily Maximum	Dec.97	10.0
			Feb.98	4.0
			Mar.98	2.1
			Oct.99	3.0
			Nov.99	3.0
			Jan.00	2.1
			Mar.00	3.0
			Aug.00	3.0

TABLE 3

Name of Discharger: Guam Waterworks Authority
Baza Gardens Sewage Treatment Plant, Guam

NPDES Permit No.: GU0020095

Reporting Period: January, 1997 through December, 2000

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Fecal Coliform Bacteria	70/100ml Monthly Average	Jan.97	>400
			Feb.97	>400
			Mar.97	>400
			Apr.97	>400
			May97	>400
			June97	>400
			July97	>400
			Aug.97	>400
			Sept.97	>400
			Oct.97	>400
			Nov.97	>400
			Dec.97	>400
			Jan.98	>400
			Mar.98	>400
			Apr.98	>400
			May98	>400
			June98	>400
			July98	>400
			Aug.98	>400
			Sept.98	>400
			Oct.98	>400
			Nov.98	>400
			Dec.98	>400
			Jan.99	>400
			Feb.99	>400
			Mar.99	>400
			Apr.99	>400
			May99	>400
			June99	>400
			July99	>400
			Aug.99	>400
			Sept.99	>400
			Oct.99	>400
			Nov.99	>400

TABLE 3 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Fecal Coliform Bacteria	70/100ml Monthly Average	Dec.99	>400
			Jan.00	>70
			Feb.00	>70
			Mar.00	>70
			Apr.00	>70
			May00	27,930,000
			June00	15,033,333
			July00	23,000,000
			Aug.00	28,644,440
			Sept.00 ⁽¹⁾	94,725,000
			Oct.00 ⁽¹⁾	9,900,000
			Nov.00 ⁽¹⁾	22,646,666
			Dec.00 ⁽¹⁾	3,028,334
		400/100ml Daily Maximum	Jan.97	>400
			Feb.97	>400
			Mar.97	>400
			Apr.97	>400 (3)
			May97	>400 (4)
			June97	>400 (3)
			July97	>400 (4)
			Aug.97	>400 (3)
			Sept.97	>400 (5)
			Oct.97	>400 (3)
			Nov.97	>400 (3)
			Dec.97	>400 (1)
			Jan.98	>400 (3)
			Feb.98	>400 (3)
			Mar.98	>400 (5)
			Apr.98	>400 (4)
			May98	>400 (4)
			June98	>400 (5)
			July98	>400 (4)
			Aug.98	>400 (4)
			Sept.98	>400 (5)
			Oct.98	>400 (4)
			Nov.98	>400 (4)
			Dec.98	>400 (5)
			Jan.99	>400 (4)
			Feb.99	>400 (4)
			Mar.99	>400 (5)

TABLE 3 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Fecal Coliform Bacteria	400/100ml Daily Maximum	Apr.99	>400 (4)
			May99	>400 (4)
			June99	>400 (5)
			July99	>400 (4)
			Aug.99	>400 (5)
			Sept.99	>400 (4)
			Oct.99	>400 (4)
			Nov.99	>400 (5)
			Dec.99	>400 (4)
			Jan.00	>400 (4)
			Feb.00	2,150,000
				9,650,000
				186,000,000
				>10,000,000
			Mar.00	305,000
				39,000,000
				>10,000,000
				256,333
			Apr.00	88,000,000
				13,000
				3,900,000
				31,000,000
			May00	44,500,000
				18,500,000
				11,150,000
				29,000,000
				36,500,000
			June00	17,000,000
				26,000,000
				2,000,000
			July00	30,000,000
				20,000,000
				13,000,000
				29,000,000
			Aug.00	38,000,000
				16,933,333
				31,000,000
			Sept.00 ⁽¹⁾	291,533,333
				80,800,000
				5,066,667
				1,500,000

TABLE 3 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Fecal Coliform Bacteria	400/100ml Daily Maximum	Oct.00 ⁽¹⁾	14,233,333
				5,933,333
				9,533,333
			Nov.00 ⁽¹⁾	52,200,000
				1,740,000
				14,000,000
			Dec.00 ⁽¹⁾	4,466,667
				3,220,000
				2,676,667
				1,860,000
	Biochemical Oxygen Demand	30 mg/L Monthly Average	Jan.97	55
			Apr.97	36
			May97	34
			June97	48
			July97	41
			Aug.97	38
			Sept.97	35
			Jan.98	46
			Feb.98	31
			Apr.98	42
			May98	35
			June98	37
			July98	31
			Aug.98	49
			Sept.98	39
			Oct.98	53
			Nov.98	33
			Dec.98	40
			Jan.99	36
			Feb.99	43
			Mar.99	54
			Apr.99	50
			May99	44
			June99	53
			July99	39
			Nov.99	43
			Mar.00	31
			Apr.00	35
			May00	37
			June00	33

TABLE 3 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a	Biochemical Oxygen Demand	30 mg/L Monthly Average	July00	31
			Aug.00	42
			Nov.00	48
			Dec.00	42
		60 mg/L Daily Maximum	Apr.97	84
			Aug.98	61
			Oct.98	65
			Nov.99	65
		45 mg/L ⁽²⁾ Weekly Average	Nov.00	57
				48
				46
			Dec.00	53
		150 lbs./day Monthly Average	June97	172
			July97	172
			Aug.97	208
			Jan.98	170
			Aug.98	198
			Sept.98	171
			Oct.98	229
			Dec.98	178
			Feb.99	185
			Mar.99	198
			Apr.99	188
			May99	157
			June99	193
			July99	153
			Nov.99	183
			Aug.00	162
			Nov.00	203
			Dec.00	160
		300 lbs./day Daily Maximum	Aug.97	462
			Oct.98	301
		225 lbs./day ⁽²⁾ Weekly Average	Nov.00	226
				239

TABLE 3 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Suspended Solids	30 mg/L Monthly Average	June97	36
			Mar.98	37
			Apr.98	44
			May98	41
			Jan.00	40
			Mar.00	33
			May00	33
			June00	31
			July00	34
			Nov.00	31
		60 mg/L Daily Maximum	June97	102
		40 mg/L ⁽²⁾ Weekly Average	Nov.00	42
		150 lbs./day Monthly Average	Apr.98	156
			May98	161
		300 lbs./day Daily Maximum	June97	367

1. New NPDES permit was issued (effective date 9/7/00) which changed bacteriological effluent parameter from fecal coliform to E.coli (126 CFU/100ml monthly average and 406 CFU/100ml daily maximum). GWA did not make necessary changes in its bacteriological analysis from fecal coliform to E.coli in accordance with its new permit requirements. Therefore, "Values Reported in Violation" are for Fecal Coliform bacteria and not E.coli.

2. Effluent limitations based on new NPDES permit issued with an effective date of 9/7/2000.

Note: Numbers in () refers to the number of times the daily maximum effluent limitations was exceeded for the respective period.

TABLE 4

Name of Discharger: Guam Waterworks Authority
Commercial Port Sewage Treatment Plant, Guam

NPDES Permit No.: GU0020109

Reporting Period: January, 1997 through December, 2000

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a	Fecal Coliform Bacteria	70/100ml Monthly Average	Jan.97 thru	>400
			Dec.97	
			Jan.98 thru	>400
			Apr.98	
			June98 thru	>400
			Sept.98	
			Oct.98	>70
			Nov.98	>400
			Dec.98	NP/R
			Jan.99 thru	>400
			Mar.99	
			May99	>400
			June99	NP/R
			July99 thru	>400
			Dec.99	
			Jan.00 thru	>70
			Mar.00	
			Apr.00	>400
			May00	>400
			June00	27,500,000
			July00	49,500,000
			Aug.00	NP/R
			Sept.00	28,800,000
			Oct.00	280,925,000
			Nov.00	18,667
			Dec.00	3,764,167
		400/100ml Daily Maximum	Jan.97	>400
			Feb.97	>400
			Mar.97	>400
			Apr.97	>400
			June97	>400
			July97	>400 (3)
			Aug.97	>400

TABLE 4 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Fecal Coliform Bacteria	400/100ml Daily Maximum	Sept.97	>400 (2)
			Oct.97	>400
			Nov.97	>400 (2)
			Dec.97	>400 (2)
			Jan.98	>400
			Feb.98	>400 (2)
			Mar.98	>400 (2)
			Apr.98	>400 (2)
			June98 thru	>400
			Nov.98	
			Dec.98	NP/R
			Jan.99 thru	>400
			Mar.99	
			June99	NP/R
			July99	>400 (2)
			Aug.99	>400 (2)
			Sept.99	>400
			Oct.99	>400 (2)
			Nov.99	>400 (2)
			Dec.99	>400
			Jan.00 thru	>400
			May00	
			June00	46,000,000
			July00	51,000,000
				48,000,000
			Aug.00	NP/R
			Sept.00	57,600,000
			Oct.00	533,000,000
				28,850,000
			Nov.00	18,667
			Dec.00	7,390,000
				138,333
	Biochemical Oxygen Demand	30 mg/L Monthly Average	May.97	34.3
			July97	32
			Sept.97	38.8
			Oct.97	37
			Nov.97	52.5
			Dec.97	63
			Jan.98	31
			Feb.98	36

TABLE 4 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Biochemical Oxygen Demand	30 mg/L Monthly Average	Mar.98	42
			Apr.98	39
			May98	42
			June98	46
			July98	85
			Aug.98	47
			Oct.98	37
			Nov.98	NP/R
			Dec.98	NP/R
			Jan.99	95
			Feb.99	32
			Mar.99	106
			May99	NP/R
			June99	NP/R
			July99	43
			Aug.99	36
			Sept.99	38
			Nov.99	48
			Jan.00	72
			Mar.00	57
			Apr.00	47
			May00	39
			June00	46
			July00	66
			Aug.00	63
			Sept.00	84
			Oct.00	43
			Nov.00	72
			Dec.00	36
		45 mg/L Weekly Maximum	Mar.97	49
			May97	47.5
			Sept.97	51
			Oct.97	51
			Nov.97	58
			Dec.97	63
			Apr.98	55
			May98	46.6
			June98	46
			July98	85
			Aug.98	47

TABLE 4 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Biochemical Oxygen Demand	45 mg/L Weekly Average	Oct.98	58
			Nov.98	NP/R
			Dec.98	NP/R
			Mar.99	106
			May99	NP/R
			June99	NP/R
			Aug.99	46
			Nov.99	48
			Jan.00	72
			Mar.00	96
			Apr.00	47
			May00	55
			June00	77
			July00	95
			Aug.00	63
			Sept.00	101, 66
			Oct.00	51
			Nov.00	106
			Dec.00	56
	12.5 lbs./day Monthly Average		May98	46.6
			July00	15.5
			Nov.00	20.8
	25 lbs./day Daily Maximum		May98	46.6
			July00	28.5
	Suspended Solids	30 mg/L Monthly Average	Mar.97	31
			July97	42
			Nov.97	38
			Dec.97	32
			Feb.98	40
			Apr.98	33
			June98	64
			July98	44
			Nov.98	52
			Dec.98	NP/R
			Jan.99	36
			Mar.99	40
			June99	NP/R
			July99	43

TABLE 4 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Suspended Solids	30 mg/L Monthly Average	Aug.99	31
			Oct.99	45
			Jan.00	66
			Apr.00	46
			July00	65
			Sept.00	72
			Oct.00	33
			Nov.00	92
		45 mg/L Weekly Average	Nov.97	52
			Apr.98	48
			June98	64
			Nov.98	52
			Dec.98	NP/R
			June99	NP/R
			July99	54
			Aug.99	46
			Oct.99	56
			Jan.00	66
			Apr.00	47
			July00	66
			Sept.00	98, 46
			Oct.00	50
			Nov.00	160
		12.5 lbs./day Monthly Average	May98	31.1
			Nov.00	23.6
		25 lbs./day Daily Maximum	May98	31.1
			Nov.00	36
	Settleable Solids	1.0 ml/L Monthly Average	July97	2.5
			Nov.97	9.3
			Feb.98	2.0
			Apr.98	3.3
			Sept.98	6.1
			Jan.99	1.5
			Feb.99	2.6
			Mar.99	4.0
			Nov.99	5.0
			Dec.99	2.5

TABLE 4 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Settleable Solids	1.0 mg/L Monthly Average	June00	3.5
			Sept.00	4.0
		2.0 ml/L Daily Maximum	July97	2.5
			Nov.97	10.0, 8.5
			Apr.98	6.5
			Sept.98	12.0
			Feb.99	5.0
			Mar.99	4.0
			Nov.99	5.0
			Dec.99	2.5
			June00	7.0
			Sept.00	8.0
			Oct.00	3.5

NP/R = Not Performed/Reported

Note: Numbers in () refers to the number of times the daily maximum effluent limitations was exceeded for the respective period.

TABLE 5

Name of Discharger: Guam Waterworks Authority
Northern District Sewage Treatment Plant, Guam

NPDES Permit No.: GU0020141

Reporting Period: January, 1997 through December, 2000

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a	Suspended Solids	50 mg/L Monthly Average	Jan.97	122
			Feb.97	144
			Mar.97	106
			Apr.97	51
			May97	95
			June97	259
			July97	157
			Aug.97	201
			Sept.97	70
			Oct.97	95
			Nov.97	89
			Dec.97	NS
			Jan.98	68
			Feb.98	98
			Mar.98	78
			Apr.98	63
			May98	60
			June98	155
			July98	145
			Aug.98	125
			Sept.98	123
			Oct.98	84
			Nov.98	95
			Dec.98	63
			Jan.99	77
			Feb.99	51
			May99	90
			June99	106
			July99	84
			Aug.99	100
			Sept.99	110
			Oct.99	67
			Dec.99	74
			Jan.00	224

TABLE 5 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Suspended Solids	50 mg/L Monthly Average	Feb.00	138
			Mar.00	129
			Apr.00	96
			May00	75
			June00	102
			Aug.00	105
			Sept.00	91
			Oct.00	85
			Nov.00	121
			Dec.00	76
		100 mg/L Daily Maximum	Jan.97	192
			Feb.97	168
			Mar.97	206
			May97	174
			June97	576
			July97	144, 164, 292
			Aug.97	324, 204, 156
				120
			Sept.97	140
			Oct.97	114, 174
			Nov.97	114, 104
			Dec.97	NS
			Mar.98	152
			June98	244, 124, 150
				184
			July98	216
			Aug.98	180, 152
			Sept.98	176, 136, 144
			Nov.98	108
			May99	132, 130
			June99	144
			July99	102
			Aug.99	140, 112
			Sept.99	156, 128
			Nov.99	130
			Dec.99	118
			Jan.00	336, 114, 316
				128
			Feb.00	190, 148
			Mar.00	160, 146

TABLE 5 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Suspended Solids	100 mg/L Daily Maximum	May.00	104
			June00	132, 120, 124
			Aug.00	142
			Sept.00	126
			Oct.00	136
			Nov.00	170, 150
			Dec.00	112
		2,504 lbs./day Monthly Average	Jan.97	6,630
			Feb.97	7,596
			Mar.97	5,614
			Apr.97	2,625
			Mar.97	5,070
			June97	14,280
			July97	7,568
			Aug.97	10,396
			Sept.97	3,511
			Oct.97	4,947
			Nov.97	4,752
			Dec.97	NP/R
			Jan.98	3,459
			Feb.98	5149
			Mar.98	4,026
			Apr.98	4,984
			May98	3,159
			June98	7,877
			July98	7,750
			Aug.98	7,077
			Sept.98	6,871
			Oct.98	4,617
			Nov.98	5,285
			Dec.98	3,439
			Jan.99	4,128
			Feb.99	2,790
			Mar.99	2,628
			May99	4,962
			June99	5,866
			July99	4,671
			Aug.99	5,485
			Sept.99	5,882
			Dec.99	3,428

TABLE 5 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Suspended Solids	2,504 lbs./day Monthly Average	Jan.00	12,624
			Feb.00	8,391
			Mar.00	7,934
			Apr.00	5,259
			May00	3,431
			June00	5,378
			Aug.00	5,538
			Sept.00	4,364
			Oct.00	4,152
			Nov.00	6,601
			Dec.00	3,269
		5,008 lbs./day Daily Maximum	Jan.97	10,094
			Feb.97	8,687
			Mar.97	10,950
			May97	9,287
			June97	31,705
			July97	12,420
				8,480
				7,806
			Aug.97	17,024
				10,208
				7,546
				6,805
			Sept.97	7,006
			Oct.97	9,215
				5,771
			Nov.97	6,370
				5,464
			Dec.97	NS
			Feb.98	5,149
			June98	5,791
				12,617
				7,756
				9,207
			July98	14,807
				5,494
				5,204
				5,494

TABLE 5 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Suspended Solids	5,008 lbs./day Daily Maximum	Aug.98	5,671
				8,367
				10,358
			Sept.98	9,981
				5,421
				7,486
				8,167
			Oct.98	5,364
			Nov.98	5,945
			Dec.98	5,254
			Feb.99	5,064
			May99	7,596
				6,939
			June99	8,407
				5,507
				5,313
			July99	5,955
			Aug.99	5,174
				6,352
				7,473
			Sept.99	8,457
				6,939
			Nov.99	7,373
			Dec.99	6,889
			Jan.00	7,227
				17,130
				18,775
				7,366
			Feb.00	8,393
				12,043
			Mar.00	9,619
				9,875
			Apr.00	5,640
				5,338
				5,067
			May00	5,551
			June00	8,607
				5,835
				6,722

TABLE 5 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Suspended Solids	5,008 lbs./day Daily Maximum	Aug.00	7,461
				5,149
				5,671
			Sept.00	7,761
				5,252
			Oct.00	7,486
			Nov.00	9,357
				8,257
			Dec.00	5,885
	Biochemical Oxygen Demand	85 mg/L Monthly Average	Jan.97	116
			Feb.97	96
			May97	105
			June97	100
			Aug.97	99
			Oct.97	95
			Dec.97	NP/R
			Jan.98	93
			Feb.98	118
			Mar.98	106
			Apr.98	96
			May98	94
			June98	105
			July98	144
			Sept.98	108
			Oct.98	107
			Jan.99	115
			Feb.99	86
			Mar.99	100
			May99	95
			June99	109
			July99	102
			Aug.99	126
			Sept.99	152
			Oct.99	97
			Jan.00	184
			Feb.00	149
			Mar.00	137
			Apr.00	131
			May00	152
			June00	129

TABLE 5 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Biochemical Oxygen Demand	85 mg/L Monthly Average	Aug.00	136
			Sept.00	135
			Oct.00	146
			Nov.00	180
			Dec.00	163
		170 mg/L Daily Maximum	July98	216
			Sept.99	176
			Jan.00	249, 207
			Feb.00	174
			Nov.00	187, 186, 185
			Dec.00	205
		4,256 lbs./day Monthly Average	Jan.97	6,312
			Feb.97	5,048
			May97	5,620
			June97	5,562
			Aug.97	5,127
			Sept.97	4,277
			Oct.97	5,020
			Jan.98	4,731
			Feb.98	6,200
			Mar.98	5,493
			Apr.98	4,984
			May98	5,001
			June98	5,385
			July98	7,594
			Aug.98	4,391
			Sept.98	6,022
			Oct.98	5,883
			Nov.98	4,632
			Dec.98	4,401
			Jan.99	6,254
			Feb.99	4,684
			Mar.99	5,504
			May99	5,231
			June99	6,082
			July99	5,673
			Aug.99	6,927
			Sept.99	8,083
			Oct.99	4,934

TABLE 5 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a	Biochemical Oxygen Demand	4,256 lbs./day Monthly Average	Jan.00	10,473
			Feb.00	9,001
			Mar.00	8,356
			Apr.00	7,089
			May00	6,416
			June00	5,688
			Aug.00	7,224
			Sept.00	6,251
			Oct.00	6,424
			Nov.00	9,803
			Dec.00	6,442
		8,512 lbs./day Daily Maximum	July98	11,709
			Aug.99	9,641
			Sept.99	9,541
			Jan.00	11,221
				13,914
				9,783
			Feb.00	9,868
				9,127
			Mar.00	10,146
				9,196
			Sept.00	8,829
			Oct.00	8,697
			Nov.00	10,293
				9,875
				10,238
				8,807
			Dec.00	8,669
	Settleable Solids	1.0 ml/L Monthly Average	Jan.97	3.3
			Feb.97	2.0
			Mar.97	2.5
			Apr.97	1.8
			June97	5.4
			Mar.98	1.6
			Apr.98	2.3
			May98	1.2
			July98	2.0
			Aug.98	4.6
			May99	1.6

TABLE 5 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Effluent Limitation</u>	<u>Month And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.a.	Settleable Solids	1.0 ml/L Monthly Average	Jan.00	2.2
			Feb.00	2.0
			Mar.00	1.5
			May00	4.6
			June00	1.7
		2.0 ml/L Daily Maximum	Jan.97	5.0
			Feb.97	4.0
			Mar.97	5.0
			Apr.97	4.0
			June97	10.0
			Mar.98	3.0
			Apr.98	6.0
			July98	5.0
			Aug.98	10.0, 3.5, 3.0
			Apr.99	5.0
			Jan.00	6.0
			Feb.00	3.0
			Mar.00	4.0
			May00	8.0, 6.0, 2.5
			June00	3.0

Receiving Water Quality Monitoring

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Guam Water Quality Std.</u>	<u>Quarter And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.f.	Fecal Coliform Bacteria(1)	<400/100ml Maximum(1)	Aug.97	Station A TNTC
			Nov.97	Station A TNTC
			Dec.97	Station C, D TNTC
				Station A, B NP/R
			Mar.98	Station ? TNTC
			Apr.98	Station C >400
			Sept.98	Station C TNTC
			Dec.98	Station C, D TNTC
			June99	Station C TNTC
			Aug.99	Station A TNTC
			Jan.-Mar.00	Station D, E, F
				NP/R

TABLE 5 Cont.

<u>Permit Condition</u>	<u>Pollutant Constituent</u>	<u>Guam Water Quality Std.</u>	<u>Quarter And Year</u>	<u>Value(s) Reported in Violation</u>
A.1.f.	Fecal Coliform Bacteria(1)	<400/100ml Maximum	Apr.00	Station C TNTC
				Station A, B TNTC
			Apr.-Jun.00	Station D, E, F NP/R
			July-Sept.00	All Stations NP/R
			Oct.-Dec.00	All Stations NP/R

Note: To Numerous To Count (TNTC)

NP/R = Not Performed/Reported

(1) Fecal Coliform Bacteria: Guam Water Quality Standards, Adopted January 2, 1992.

TABLE 6

Name of Discharger: Guam Waterworks Authority
Umatac-Merizo Sewage Treatment Plant, Guam

NPDES Permit No.: GU0020273

Reporting Period: January, 1997 through December, 2000

Date Discharge at Station J (overflow weir)

4/10/97	150 gpm
5/8/97	200 gpm
7/28/97	200 gpm
8/26/97	250 gpm
9/18/97	150 gpm
10/31/97	100 gpm
11/20/97	50-60 gpm
1/22/98	40-50 gpm
2/27/98	50-60 gpm
3/28/98	40-50 gpm
4/24/98	130 gpm
5/22/98	130 gpm
7/23/98	200 gpm
8/28/98	200 gpm
9/29/98	500 gpm
10/15/98	350 gpm
11/28/98	130 gpm
12/17/98	300 gpm
1/28/99	350 gpm
2/18/99	200 gpm
10/14/99	100 gpm

9/00 New Permit Effective Date--No Monitoring Data Reported for Sept.-December, 2000.

TABLE 7

Name of Discharger: Guam Waterworks Authority

Sewage Overflow Events

Period Covered: June, 1999 through April, 2001

<u>Date</u>	<u>Location</u>	<u>Overflow Period</u>	<u>Estimated Vol. (gals.)</u>
11/03/99	Southern Link SPS	2 days	9,600,000
11/06/99	Southern Link SPS	11 days	52,800,000
11/17/99	Southern Link SPS	6 days	28,800,000
12/03/99	Southern Link SPS	10 days	48,000,000
05/27/00	Southern Link SPS	14 days	67,200,000
07/03/00	Southern Link SPS	13 days	62,400,000
09/17/00	Southern Link SPS	7 days	33,600,000
12/19/00	Southern Link SPS	15 days	72,000,000
12/31/00	Southern Link SPS	13 days	62,000,000
01/20/01	Southern Link SPS	4 days	19,200,000
03/05/01	Southern Link SPS	1 days	4,800,000
03/12/01	Southern Link SPS	5 days	24,000,000
04/15/01	Southern Link SPS	2 days	9,600,000
10/03/00	Mamajanao SPS	10 hours	63,900
10/07/00	Mamajanao SPS	1 hour	6,390
10/29/00	Mamajanao SPS	4 hours	25,560
10/30/00	Mamajanao SPS	24 hours	153,360
10/31/00	Mamajanao SPS	4 hours	25,560
11/01/00	Mamajanao SPS	24 hours	153,360
01/10/00	Chaot SPS	5 hours	210,000
02/01/00	Chaot SPS	24 hours	1,008,000
02/05/00	Chaot SPS	4 hours	168,000
02/15/00	Chaot SPS	30 min.	21,000
03/01/00	Chaot SPS	2.5 hours	105,000
01/23/01	Chaot SPS	3 hours	126,000
02/09/01	Chaot SPS	7 days	7,056,000
02/14/01	Chaot SPS	1 day	1,008,000
02/15/01	Chaot SPS	13 days	13,104,000
09/06/00	Hyatt Manhole (Fujita SPS)	1 day	10,000
03/03/01	Fujita SPS	1 day	180,000
03/18/01	Hyatt Manhole (Fujita SPS)	1 day	10,000

APPENDIX A

GUAM WATERWORKS AUTHORITY COMPLIANCE SCHEDULES

GWA Wastewater Systems Comprehensive Performance Evaluation Agana and Northern District STPs

<u>Activity</u>	<u>Compliance Schedule</u>
Submit draft CPE Scope of Work for the Agana and Northern District STPs	July 31, 2001
Submit final CPE Scope of Work for the Agana and Northern District STPs	August 31, 2001
Advertise Agana and Northern District CPE	September 15, 2001
Award Contract for the Agana and Northern District STP's CPE	October 31, 2001
Commence Agana and Northern District STP's CPE	November 15, 2001
Complete Agana and Northern District STP's CPE	December 15, 2001
Submit Agana and Northern District CPE Final Report	December 25, 2001
Submit GWA Corrective Action Plan Schedule(s) [schedules for respective facilities will be incorporated into Order on Consent at this time]	January 31, 2002

APPENDIX A

Northern District and Agana STP Ocean Outfall Extentions

<u>Activity</u>	<u>Compliance Schedule</u>
Submit 60% Ocean Outfall Designs for Northern and Agana STPs	July 31, 2001
Submit 90% Ocean Outfall Designs for Northern and Agana STPs	September 30, 2001
Submit Final (100%) Ocean Outfall Designs for Northern and Agana STPs	October 31, 2001

Southern Link Sewer Pump Station Interceptor Line

<u>Activity</u>	<u>Compliance Schedule</u>
Submit Construction Progress Report for the Southern Link Sewer Pump Station Interceptor Line	July 31, 2001
Complete Construction of the Southern Link Sewer Pump Station Interceptor Line	September 30, 2001

Commercial Port Sewer Pump Station and Forcemain

<u>Activity</u>	<u>Compliance Schedule</u>
Complete Construction of the Commercial Port Sewer Pump Station/Forcemain Project	July 31, 2001
Commence Start-up and Operation of the Commercial Port Sewer Pump Station/Forcemain	August 15, 2001
Decommission Commercial Port STP, Seal/Cap Ocean Outfall Pipe and Submit Report, with Documentation, to EPA	September 30, 2001

APPENDIX B

GUAM WATERWORKS AUTHORITY OPERATION AND MAINTENANCE DEFICIENCIES

Agana STP:

- Primary Clarifier No.2 Out of Service
- Primary Clarifier Effluent Channel Weir Separated from Channel Wall
- Centrifuges No.1 and 2 Out of Service
- Digester No. 2 Out of Service
- Primary Clarifier Scum Removal System Out of Service
- Flow Measurement Out of Service
- Ozonator Out of Service

Agat STP:

- Sludge Drying Beds Overgrown with Vegetation (requires renovation)

Northern District STP:

- Centrifuges No.1 & 2 Out of Service
- Flow Measurement (Parshall Flume) Needs Accuracy Evaluation (influent flows just upstream and into flume are very turbulent)
- Preaeration Basins Not Operating Properly
- Grit Removal Basin/System Not Removing Grit Adequately
- Clarifier No.1 Effluent Weir Section Missing
- Clarifier No.1 Scum Collection System Out of Adjustment/Not Operating Properly
- Primary Sludge Pumps Out of Service
- So. Link SPS Headworks (appears hydraulically overloaded during peak flows and needs to be assessed for adequacy)

Umatac-Merizo STP:

- Aerated Treatment Pond Not Properly Maintained (high solids content, vegetation)
- Pond Aerators Not Properly Maintained and/or Out of Service

Guam Waterworks Authority
USEPA NPDES Administrative Order
Compliance Costing Worksheet

Facility	Description of Project	Estimated Total Cost
Agana STP	Comprehensive Performance Evaluation	\$100,000
	Renovation of STP	\$3,800,000
	Construction of Outfall Extension	\$4,400,000
	TOTAL	\$8,300,000
Agat STP	Comprehensive Performance Evaluation	\$100,000
	Renovation of STP	\$5,000,000
	Design & Construction of sewer collector line (Agat Assessment 5A)	\$4,200,000
	Design & Construction of sewer collector line (Old Agat)	\$2,900,000
	Design & Construction of sewer collector line (Santa Rita Assessment 4A)	\$6,500,000
	TOTAL	\$18,700,000
Baza Gardens STP	Comprehensive Performance Evaluation	\$100,000
	Renovation of STP	\$1,000,000
	TOTAL	\$1,100,000
Northern District STP	Comprehensive Performance Evaluation	\$100,000
	Renovation of STP	\$2,000,000
	Construction of Outfall Extension	\$4,300,000
	TOTAL	\$6,400,000
Umatac/ Merizo STP	Comprehensive Performance Evaluation	\$100,000
	Correction of Infiltration & Inflow Problems in Sewer System Phase II	\$2,800,000
	TOTAL	\$2,900,000
Operator Certification	Operator Training & Certification	\$300,000
Monitoring Requirements	Certified Laboratory Services	\$600,000
Facilities Master Plan	Master Plan Update	\$2,300,000

TOTAL

\$40,600,000

Public Law 26-34**MINA'BENTE SAIS NA LIHESLATURAN GUÅHAN
2001 (FIRST) Regular Session****Bill No. 133 (COR)**

As substituted by the Committees on
Natural Resources and Ways and Means
and as amended in the Committee of the
Whole.

Introduced by: J. M.S. Brown

K.S. Moylan

T. C. Ada

J. T. Won Pat

J. F. Ada

F. B. Aguon, Jr.

E. B. Calvo

F. P. Camacho

M. C. Charfauros

Mark Forbes

L. F. Kasperbauer

L. A. Leon Guerrero

V. C. Pangelinan

A. L.G. Santos

A. R. Unpingco

**AN ACT TO ADOPT A BUDGET FOR THE GUAM WATERWORKS AUTHORITY
FOR FISCAL YEAR 2002.****BE IT ENACTED BY THE PEOPLE OF GUAM:****Section 1. Legislative Findings and Intent.**

In accordance with Public Law Number 26-15, the Guam Waterworks Authority ("GWA") transmitted to *I Liheslaturan Guåhan* the "*Guam Waterworks Authority Proposed Fiscal Year 2002 Budget*."

GWA continues to experience revenue losses whilst struggling as an autonomous agency. *I Liheslaturan Guåhan* finds that in order to insure greater accountability for the management and operations of Guam's water resources, finances and public assets, *I Liheslaturan Guåhan* has assumed the responsibility to examine, amend and approve the proposed Fiscal Year 2002 budget for GWA.

Section 2. Budgetary Mandate, Short Title and Construction.

Notwithstanding any other provision of law, this Act shall be the Fiscal Year 2002 budget for GWA and shall be known as the "*Guam Waterworks Authority Fiscal Year 2002 Budget Act*."

Except as otherwise provided for in this Act, the budget funding authorizations made by this Act shall be available to pay for obligations incurred *on or after* October 1, 2001, but *no later than* September 30, 2002. This Act shall be strictly construed as a line item budget for GWA's Fiscal Year 2002.

If any provision of this Act is found contrary to Federal law, all other provisions shall remain valid.

Section 3. GWA FY2002 Budget Adoption. The GWA Fiscal Year 2002 budget proposal, as amended in **Exhibit A**, a copy of which is attached hereto and incorporated by reference herein, is hereby adopted as the Fiscal Year 2002 budget for GWA, *subject* to all provisions of this Act. *I Liheslaturan Guåhan* also hereby adopts the GWA FY2002 Budget Digest Summary, a copy of which is attached hereto as **Exhibit B**, *subject* to all provisions of this Act.

Section 4. Estimated Revenues. *I Liheslaturan Guåhan* adopts Thirty-seven Million Seven Hundred Twelve Thousand One Hundred Nine Dollars (\$37,712,109) as the revenue forecast for GWA for Fiscal Year 2002. Any funds collected in excess of said amount shall *not* be expended without the prior consent and appropriation of *I Liheslaturan Guåhan*, but shall be deposited into the GWA Budget Reserve Account as mandated in § 8 of this Act.

Section 5. Exempt Revenues. Revenues collected from the surcharge which may be authorized by the Public Utilities Commission ("PUC") as a result of PUC Docket Numbers 00-01:A and 01-08 shall *only* be expended according to the purposes set forth in the PUC's order.

Section 6. FY2002 Staffing Pattern. The approved staffing pattern for the FY2002 GWA budget is contained within the attached **Exhibit A**, a copy of which is attached hereto and incorporated by reference herein.

(a) GWA is authorized three hundred thirty-three (333) positions with sixteen (16) unfunded vacancies, for a total of *only* three hundred forty-nine (349) Full-Time Equivalency ("FTE") positions.

(b) *Except* with the prior approval of the PUC and in accordance with GWA's budget and budget staffing pattern for Fiscal Year 2002, as approved by *I Liheslaturan Guåhan* and in accordance with this Act, GWA shall *not* fill any vacant position pending the PUC's completion of the staffing and manpower study of GWA, as required by Public Law Number 26-23.

Section 7. GWA Cost Containments.

(a) **Freeze on GWA Salary Increments and Merit Bonuses.**

(1) **Salary Increments and Merit Bonus Freezes.**

Notwithstanding any other provision of law, rule or regulation, effective October 1, 2001, there is hereby put into effect a freeze on *all* GWA salary increments and merit bonuses which shall remain in effect through September 30, 2002, and shall be applicable to all positions within GWA.

(2) **Continuation of Annual Review.** The freeze on GWA salary increments shall *not* preclude GWA from conducting their normal personnel reviews, which routinely precede such salary adjustments for each employee.

Section 8. GWA Budget Reserve Account. GWA shall establish the "GWA Budget Reserve Account."

(a) Funds within the "GWA Budget Reserve Account" shall *not* be used, transferred nor

otherwise expended by GWA, nor any other government official nor entity without the prior consent and appropriation by *I Liheslaturan Guåhan*.

(b) GWA shall deposit the sum of Six Hundred Eleven Thousand One Hundred One Dollars (\$611,101.00) from revenues collected for FY2002 into the GWA Budget Reserve Account. Said amount is reflected in **Exhibit B** under the "Special Reserve" category. In addition to this amount, the funding listed in **Exhibit A** for all positions vacant on October 1, 2001 or becoming vacant thereafter shall revert to the GWA Budget Reserve Account.

Section 9. Build-Operate-Transfer ("BOT") Projects.

Notwithstanding any other provision of law to the contrary and in addition to the PUC's oversight authority over BOT activities as conferred by Public Law Number 26-14, the PUC is hereby authorized to designate the BO projects, which shall be undertaken by GWA, and to establish the scope and timeline for the procurement of such BOT projects by GWA. GWA shall strictly comply with all PUC orders.

Section 10. Reports. The General Manager of GWA shall submit the following reports to *I Liheslaturan Guåhan*.

(a) **Overtime Expenditure Report.** Beginning on November 15, 2001, a written overtime expenditure report for the previous two (2) pay periods shall be submitted on or before the fifteenth (15th) day of every month following. Said report shall include: (i) the name and position of every employee who received overtime pay; (ii) the purpose of the overtime payment; (iii) the amount paid for overtime to each employee during the report period; and (iv) the cumulative overtime paid to date to the respective employee.

(b) **Financial Activity Report.** For every fiscal quarter, a written status report shall be submitted for the following:

1. Expenditure breakdown on laboratory contractual services;
2. Expenditure breakdown for water purchases from vendors;
3. Contracts awarded, detailing the (i) nature of every contract awarded, (ii) contractor receiving the award, (iii) amount of the contract, (iv) contract account number, (v) contract start and completion date, and (vi) the project status;

4. **Vacant Positions.** A list of every currently vacant GWA FTE position; and

5. **Financial Summary.** A summary of: (i) actual revenue collected, (ii) revenue expenditure, (iii) revenue collection for accounts receivables, (iv) aging of accounts receivables, (v) aging of accounts payables, and (vi) a summary of money collected for accounts receivable by GWA for fiscal years before FY2002.

The aforementioned reports shall be due thirty (30) days after each quarter.

Section 11. Line Item Budget Restriction. GWA shall *not* change nor modify any line item budget appropriation amount as contained in **Exhibit A**, including, but *not* limited to, utilities accounts, contractual services accounts or personnel services accounts without prior authorization by *I Liheslaturan Guåhan*.

Section 12. Limitation Upon Transfer Authority. The GWA Board of Directors may authorize a transfer of *up to* a total of five percent (5%) for the fiscal year any line item in the Fiscal Year 2002 budget to any

other line item in said budget, *except* that no transfer authority shall apply to the Utilities Category (Power, Water Purchases, Telephone) or Personnel Services Category (Salaries and Wages, Holiday Pay, Night Differential, Hazardous Pay, Benefits, Vacant), as identified in the attached **Exhibit A** without prior consent and appropriation of *I Liheslaturan Guåhan*. *Except* as otherwise provided for in this Act, no other government official nor entity shall have authority to transfer funds from or within GWA.

In the case of the Contractual Services Category, as identified in the attached **Exhibit A**, the GWA Board of Directors shall *only* have the authority to transfer *no more than* five percent (5%) from: (i) Contractual Services Legal and (ii) Advertising. No transfer authority is authorized for any other contractual service, as identified in the attached **Exhibit A** (Contractual Services Other, Regulatory Commission, Contractual Services Laboratory, Contractual Services Accounting, Contractual Services Insurance, Office Rental).

Notwithstanding the provisions of this Section, the GWA General Manager shall have *up to* a total of fifteen percent (15%) transfer authority for Overtime for the fiscal year in the Fiscal Year 2002 budget for GWA personnel within GWA operational business units.

Notwithstanding the provisions of this Section, the GWA General Manager shall have *up to* a total of fifteen percent (15%) transfer authority for Equipment Rental for the fiscal year in the Fiscal Year 2002 budget for GWA operational business units.

Section 13. Line of Credit-Loan Authorization.

(a) The Board of Directors of GWA may obtain with the prior approval of the PUC, a loan or line of credit for a term *not to exceed* sixty (60) months and in an amount *not to exceed* Six Million Dollars (\$6,000,000), but *only* for the capital outlays described in **Exhibit A**.

(b) This loan or line of credit referred to in Subsection (a) shall use for debt service the revenue reserves of One Million Six Hundred Fifty-five Thousand Eight Hundred Seventy-nine Dollars (\$1,655,879), which is the difference between the FY2002 revenue forecast of Thirty-seven Million Seven Hundred Twelve Thousand One Hundred Nine Dollars (\$37,712,109) and the combined total of the authorization in Subsection (c) herein and the FY2002 funding authorization of Thirty-five Million Eight Hundred Thirty-nine Thousand Five Hundred Sixty-four Dollars (\$35,839,564).

(c) Notwithstanding any other provision of this Act or the Exhibits, Two Hundred Sixteen Thousand Six Hundred Sixty-six Dollars (\$216,666.00) of the Fiscal Year 2002 revenues shall be used as payment on the One Million Three Hundred Thousand Dollars (\$1,300,000) in debt service owed in Fiscal Year 2002 for the IBM / J.D. Edwards loan. The Board of Directors shall make its best efforts to refinance this debt for a term *not to exceed* sixty (60) months, and shall inform *I Liheslaturan Guåhan* of its efforts and the status of the refinancing every twenty (20) days.

Section 14. Regulatory Compliance.

I Liheslaturan Guåhan expresses serious concern over the U.S. Environmental Protection Agency's Administrative Order on Consent in PUC Docket Number CWA-402-9-01-019 dated August 16, 2001. This Order reports chronic GWA violation of Federal environmental law and orders GWA to submit a financial plan by January 31, 2002 to secure an estimated Forty Million Six Hundred Thousand Dollars (\$40,600,000) to bring its wastewater collection, treatment and disposal systems into compliance with its NPDES permits and the Clean Water Act. Under existing law, any such financial plan shall require the approval of *I Liheslaturan Guåhan* and the PUC. Accordingly, PUC shall report to *I Liheslaturan Guåhan* during its December, 2001 regulatory session upon the following matters:

(a) A proposed GWA financial plan, including recommendations, in consultation with Gua

Economic Development Authority, as to available and appropriate sources of funding for the plan. The plan should evaluate the rate impact of each funding alternative.

(b) The feasibility of using the BOT statutes, Public Law Number 24-37, as amended by Public Law Number 26-14, to undertake the corrective actions mandated by the Administrative Order. In addressing this matter, PUC shall examine relevant operational issues.

(c) The impact of the financial plan on GWA's approved FY2002 budget.

(d) Federal grants and loan programs available for water utilities.

(e) Recommended legislation, which would be necessary to implement PUC's recommendations.

Section 15. **Severability.** *If any provision of this Law or its application to any person or circumstance is found to be invalid or contrary to law, such invalidity shall not affect other provisions or applications of this Law which can be given effect without the invalid provisions or its application, and to this end the provisions of this law are severable.*



**BEFORE THE PUBLIC UTILITIES COMMISSION
OF GUAM**

GUAM WATERWORKS AUTHORITY

DOCKET 02-02

**EPA CONSENT ORDER —
GWA FINANCIAL PLAN**

Georgetown Consulting Group, Inc., the independent consultant of the Guam Public Utilities Commission, hereby submits its response to Administrative Law Judge Harry Boertzel's October 5, 2001 letter regarding EPA Consent Order—GWA Financial Plan, and the accompanying report attached thereto.

Dated this 23rd day of November, 2001.

KLEMM, BLAIR, STERLING & JOHNSON
A Professional Corporation

By: 

WILLIAM J. BLAIR

ATTORNEYS FOR GEORGETOWN CONSULTING
GROUP, INC.

ATTACHMENTS

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Edward R. Margerison
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November 21, 2001

Harry M. Boertzel, ALJ for
The Guam Public Utilities Commission
Suite 207, GCIC Building
Hagatna, Guam 96932

Re: GWA GPUC Dockets 01-08/02-01 "Tiyan"

Dear Harry,

This letter is in response to your October 5, 2001 letter in which you incorporated this issue into Docket 02-01 (Revenue Cycle Audit) and requested that investigation into the Tiyan issue be part of the Revenue Cycle Audit. During our investigation into the accounts receivable balances of Guam Waterworks Authority (GWA) in Docket 01-08, we learned that GWA had fully reserved ("written off") approximately \$1.1 million related to past invoices issued to the Tiyan Reuse Authority (Tiyan or TRA). We had not received a timely explanation of why this had occurred nor received any documents associated with the write-off. In our report of August 22, 2001, we recommended that the Public Utilities Commission (PUC) require an explanation of GWA on this issue.

In its September 13, 2001 Decision and Order in Docket 01-08, the Public Utilities Commission (PUC or Commission) authorized the ALJ to oversee GWA's compliance with the recommendations of Georgetown Consulting Group (GCG) contained in that report. Among the recommendations was a review of the Tiyan write-off. During our investigation other issues related to the Tiyan facilities arose. The following summarizes our investigation and conclusions.

HISTORICAL BACKGROUND

The Navy Period

From the late 1940s until the early 1990s the U.S. Department of Defense had utilized the Tiyan area as a Naval Air Station. The Navy had installed a water system adequate to their needs with a limited number of master meters (five or six) to measure the water distributed to various areas of the Base. Billings for water and sewer usage were not sent to tenants of the houses and buildings, thus there was no requirement of installing individual meters on such facilities.

The Transfer to Government of Guam

In 1995 the Federal Government transferred Tiyan to the Government of Guam (GovGuam) as part of the Base Reduction and Closure (BRAC) activity. GovGuam took title to the area through five different entities; Guam International Airport Authority, Guam Economic Development Authority, Guam Housing and Urban Renewal (Chapel area), Department of Parks and Recreation (athletic fields) and Department of Public Works (proposed highway right of way). The utility transmission lines and pipes were transferred along with other assets on the Tiyan property to the five GovGuam entities. This avoided the necessity of each utility applying to the Federal Government for title to such transmission and distribution assets, which may require paying fair market value therefor. While there may have existed the assumption that GovGuam would then transfer title to the water and sewer pipes at Tiyan to GWA, this has not occurred.

Tiyan Reuse Authority Management Period

At the time of transfer (1995), GovGuam established a new entity, the Tiyan Reuse Authority (TRA) to manage the property. GWA provided water to the various buildings on Tiyan and billed TRA based upon readings of three (3) active master meters on the property. The amount billed TRA during this period went unpaid.

Sometime in 1998 an agreement was reached wherein GWA would bill directly the tenants of the various buildings at Tiyan (we've not been able to obtain anything in writing to support this understanding). Further, GWA was to back bill the tenants for water and sewer charges from 1995 forward, the outset of the TRA management period. GWA received a listing from TRA specifying the name of tenants to be billed for the period 1995 through 1998. Total Tiyan service charges for the period 1995 through 1998 were as follows:

<u>Year</u>	<u>Amount billed</u>
1995	\$ 43,406.77
1996	438,126.42
1997	531,717.03
1998	<u>559,827.49</u>
Total	<u>\$1,573,077.71</u>

Separate customer accounts were established for each Tiyan building. As there were no meter readings to support the amounts to be billed for past or future service, an engineering study was undertaken to estimate the consumption by building. Most of the unique buildings (barracks, clubs, etc.) received specific usage estimates while the generic single family dwellings and duplexes were allotted a standard water usage volume (30,000 gallons per month). The estimated usage/consumption rates have continued to be used for the Tiyan customers unless they have come forward requesting a reassessment/survey of usage. As may be assumed, this would only happen where the tenant believed the estimated consumption rate was too high.

After back billing the tenants in accordance with the supplied listing and the volumes established by the engineering study, GWA records continued to reflect an outstanding receivable from TRA of over \$800,000. This amount was never paid.

Throughout the period 1995 to September 30, 2000 GWA billed the tenants of the Tiyan buildings but received little in payment on the accounts. When water/sewer services to certain buildings/tenants were terminated the related amounts due GWA were transferred to an "inactive receivable" account. At September 30, 2000 this inactive receivable related to Tiyan accounts totaled \$1,141,173.95. A significant portion of this balance (approximately

\$900,000) is reflected as due from TRA. A decision was reached at September 30, 2000 by GWA (supported by the independent auditors) to fully reserve this amount. During the same period the "active Tiyan receivables" (accounts for tenants/buildings which had not been terminated) continued to grow. At September 30, 2001 this account reflected an accumulated unpaid balance of \$1,133,569.55. One million of the inactive receivable balance is due from customers that also have large active account balances (GIAA and TRA). The following schedule reflects amounts due from selected Tiyan customers for both active (current accounts) and inactive (terminated accounts) receivables as of September 30, 2001:

Tiyan Receivables as of September 30, 2001

<u>Agency</u>	<u>Active</u>	<u>Inactive</u>
Guam International Airport Authority	\$ 262,941.94	\$ 101,390.22
Department of Revenue and Taxation	215,523.20	
Guam Fire Department	188,359.57	
Department of Education	77,928.22	
Superior Court of Guam	55,662.16	
Guam Army National Guard	52,439.73	
Department of Parks & Recreation	48,460.15	
Tiyan Reuse Authority	41,413.31	899,572.74
Various Charities	40,392.22	
Guam Police Department	26,230.00	
Freedom Air	19,551.36	
Office of Governor, Gov't House, etc.	15,372.76	207.41
Department of Labor	15,161.20	
Guam National Olympic Committee	12,548.32	
Guam Institute of Aviation		70,619.51
PacDiv "POI"		30,306.84
Guam Museum		17,489.90
Other	<u>61,585.42</u>	<u>21,587.33</u>
Totals	<u>\$1,133,569.56</u>	<u>\$1,141.173.95</u>

\$914,907.53 of the above "active receivable" balance is over 90 days old, thus qualifying for disconnection under existing GWA policy. When queried as to the ultimate disposition of this \$1,133,569.55, the GWA controller indicated that it may have to be reserved in the same fashion as the inactive account balance.

One of the original arguments made by GWA as to why enforcement of its billing and collection policy was not applied to TRA was that GWA was not incurring rent charges at its facilities on the Tiyan property. While the receivable was accumulating, TRA decided to bill GWA for rental of certain buildings they were occupying at Tiyan. Invoices were sent by TRA to GWA for the period October 1997 through September 2000 totaling \$1,585,690. We are informed that TRA did not bill and collect rent from any of its other tenants. GWA did not record a liability for these rental billings, nor did they render payment for the amounts billed.

Transfer to Guam International Airport Authority

By Executive Order No. 2000-34 the oversight of a portion of Tiyan was transferred to Guam International Airport Authority (GIAA) effective October 1, 2000. Coincidental with this transfer, TRA ceased to exist with their personnel transferred to GIAA and other GovGuam agencies.

In a memorandum dated June 26, 2001 to the General Manager of GWA, the Executive Director of GIAA indicates that his organization "...by its federal mandate, cannot assume water and sewage obligations for those buildings and housing units occupied by the Government of Guam prior to September 29, 2000. Therefore, all prior year outstanding water and sewage charges need to be addressed directly with those entities occupying the various Tiyan buildings and housing units." In other words, GIAA concludes that it is not responsible for any liabilities of TRA (or any other tenants) related to water/sewer charges incurred prior to the beginning of fiscal year 2001.

On October 12, 2001 GIAA forwarded a "Space Lease Agreement" for eleven (11) of the buildings utilized by GWA at Tiyan. This lease is for a term of one year at a monthly rate of \$5,086.41. The lease does not cover certain buildings occupied by GWA which are located within the area of Tiyan designated for a future highway. We were informed that this area is under the purview of GovGuam Department of Public Works and that they have not expressed a desire to bill GWA for rent of these facilities. We further understand that while GWA reflected rental expense in its fiscal year 2002 budget, the proposed amount was eliminated by the Guam Legislature in anticipation that GWA would not receive rental charges from its new landlords.

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

Based on the above we reach the following conclusions and make the these recommendations:

1. The situation with regard to the extraordinary level of receivables at Tiyan and the subsequent reserving of these receivables has arisen because of gross mismanagement on the part of GWA by simply ignoring its policies for collection and disconnection. The rules call for disconnection of service if bills are not paid in approximately 60 days. In this case the receivables were allowed to accumulate for approximately 3 years without payment.
2. In examining the receivable of \$1.141 million reserved in FY 2000, we believe that there would be little chance of success in attempting to collect these receivables. The majority of these amounts are owed by TRA and the Guam Institute of Aviation which have no assets. We recommend no further action on these receivables.
3. We understand that a further \$1.134 million of receivables could possibly be reserved this year (FY 2001). These receivables existed at the same time that the \$1.141 million was reserved in FY 2000. In FY 2001 the billings for the year have been paid. The receivable balance for the year grew by \$32,613. There continues to be a dispute with regard to balances that are pre-October 2000. As indicated in our report, the billings to these accounts have been made in most part through tariffs that have not been approved by the PUC. We therefore recommend that GWA make some attempt to collect these funds. If however they are unsuccessful no further action be taken on these receivables.
4. Since GWA does not own the physical assets at Tiyan, GWA should provide service to these facilities through a master metering arrangement. This could be accomplished by GWA providing a plan to the PUC within 30 days of the PUC order in this proceeding to undertake the necessary engineering and construction. GWA would also need to provide notice to the various entities that would be master metered that the responsibility to maintain the physical assets and to bill and collect from the customers would now be their responsibility. GCG should then be instructed to propose an appropriate tariff for this wholesale service approximately 30 days before the next regulatory session. GWA should be permitted to comment on the tariff prior to a hearing at the next regulatory session. GWA and GCG should also examine whether

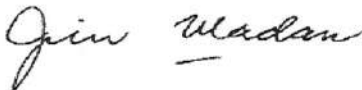
Harry M. Boertzel, Esq.
November 21, 2001
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any arrangements between GWA and the various entities are required to determine the appropriate demarcation points between each of their assets.

5. Between this regulatory session and the next, GWA in conjunction with GCG should explore whether the various entities would prefer to continue to have GWA bill and collect for utility services on Tiyan. In this scenario appropriate arrangements would have to be worked out for the use of the facilities, responsibility for the repair and replacement of existing facilities on the properties, construction of new facilities as needed and the installation of meters at each account. The parties should also explore whether transfer of the assets would offer a solution.
6. The billing methodologies that are currently in place for the various customer accounts at Tiyan have not been approved by the PUC. We recommend that GWA immediately convert to the tariff that is appropriate for each customer based upon a PUC approved tariff. GWA would certainly have the right to petition the PUC to amend the tariff if desired.

This concludes our report.

Cordially,



Jamshed K. Madan

C: Bill Blair, Esq.
Bert Johnston, GWA
Zeny Levitch, GWA
Jim Madan
Larry Gawlik
Al Pickens

**PUBLIC UTILITIES COMMISSION
OF GUAM**

EPA CONSENT ORDER -- GWA FINANCIAL PLAN

REPORT OF GEORGETOWN CONSULTING GROUP, INC.

PUC DOCKET 02-02

DECEMBER 2001

EPA CONSENT ORDER -- GWA FINANCIAL PLAN

I. INTRODUCTION

In the Environmental Protection Agency's (EPA) Administrative Order on Consent¹¹ (the "Consent Order") it is ordered that GWA shall submit a Financial Plan and schedule by January 31, 2002 to secure funds for capital, operational and maintenance costs necessary to bring certain of GWA's wastewater collection, treatment and disposal systems into compliance with their NPDES operating permits and the Clean Water Act. GWA is also required to submit compliance schedules, based on the Financial Plan, by January 31, 2002, for each of the wastewater collection, treatment, and disposal facilities and supporting activities identified in the Consent Order.¹²

Section 14 of Public Law 26-34 directs the Commission to oversee the development of the Financial Plan required by the EPA's Consent Order. This law also directs the Commission to Report to the Legislature during the December regulatory session on the following:

- A. A proposed financial plan, including appropriate sources of funding and analysis of rate impact.¹³
- B. The feasibility of using BOT to undertake corrective action mandated by the Consent Order.
- C. The impact of the Financial Plan on GWA's FY 02 budget.
- D. Recommended legislation.

This report fulfills the requirements set forth above. It is our understanding that comments from the Legislature and the Commission delivered during the December regulatory session will be taken into account and incorporated into the final Financial Plan presented to the EPA pursuant to the Consent Order on January 31, 2002. While many aspects of the two reports will be similar, the two reports will be different. It is anticipated that additional data (i.e., information from GEDA financial advisors and technical information from GWA) will become available between the December

¹¹ United States Environmental Protection Agency, Docket no. CWA-402-9-01-19, dated August 16, 2001. A complete copy of this Administrative Order on Consent will be separately provided to the members of the Legislature.

¹² *Ibid.* Order for compliance, para. 1.

¹³ The rate impact analysis should also provide some comparative review of GWA's current and projected rates with other localities. This analysis is currently under preparation and will be presented to the commission and the Legislature during the December regulatory session.

regulatory session and the Consent Order deadline of January 31, 2002. In these cases we will modify the relevant portions of our report to take into account this additional information. In addition, any section of this report that has been written to meet the requirements of the Legislature and which is not required to meet the requirements of the filing that is required on January 31, 2002 will be modified or removed. We recommend that oversight of the process to produce the final report required by the EPA be maintained by the Commission. Since there will not be a subsequent regulatory session between the December session and January 31, 2002, we recommend that the Administrative Law Judge (ALJ) be delegated the responsibility of approving the final report. A final clarification: the Consent Order requires that, "GWA shall submit a Financial Plan...". It will therefore be necessary for GWA to adopt the Financial Plan that the Legislature has directed the Commission to oversee and transmit it to the EPA.

II. REQUIREMENTS OF THE ADMINISTRATIVE ORDER ON CONSENT

There are several requirements of the Administrative Order on Consent. This section provides an overview of those requirements.

Paragraph 1 of the ordering section has several requirements. First, there is the requirement for a Financial Plan mentioned above. In addition, there is a requirement to submit compliance schedules for various facilities covered by the Consent Order.¹⁴ This paragraph also provides that where a BOT¹⁵ mechanism is chosen to bring a facility into compliance, a compliance schedule shall be submitted for the activities required to support a BOT project. Both the Financial Plan and the compliance schedules are envisioned to become a part of the EPA's Order upon review and approval by EPA in consultation with Guam Environment Protection Agency (GEPA.)

Paragraph 2 requires GWA to take all necessary actions to implement the compliance schedule requirements. It also makes the final compliance schedules submitted to EPA a part of the final Consent Order.

Paragraph 3 requires GWA to submit quarterly compliance progress reports the first of which was due on October 31, 2001. This report provides EPA with the status of GWA's progress in meeting the requirements contained in the various compliance schedules for various activities that are a part of the Consent Order. The report is to also identify any areas of non-compliance and to outline actions being taken to bring GWA into future conformity with its compliance schedules.

Paragraph 4 requires GWA to designate a Compliance Coordinator who will be the principal contact with EPA relative to the Consent Order. Under the Consent Order this person is designated the

¹⁴ A compliance schedule sets action steps and target dates by which the action steps will be accomplished.

¹⁵ Build, Operate and Transfer.

responsibility for overseeing implementation and monitoring of all compliance schedule activities and submission of the required quarterly reports. GWA has designated Danny Santos, Assistant General Manager for Operations as the Compliance Coordinator.

Paragraph 5 requires that GWA submit to EPA and GEPA a final status report within 60 days of completing the final compliance activity covered by the Consent Order.

Paragraph 6 through 12 contains various administrative and legal provisions including civil and criminal penalties for negligent or knowing violations. As outlined in Paragraph 11 the Consent Order shall terminate when EPA issues a written approval of the work required to bring GWA's various facilities into compliance with their NPDES operating permits.

This report to the Legislature principally deals with the requirements of Paragraph 1 and Public Law 26-34, which directs the Commission to Report to the Legislature during the December regulatory session on the matters identified in I. A. through I. D above.

III. PROJECT COSTS AND PRIORITIZATIONS

A. Description of Projects.

The projects and activities to be undertaken to bring GWA into compliance with its various National Pollutant Discharge Elimination System (NPDES) permits and as mandated by the Consent Order are described in Attachment I to this report. The total capital cost associated with these projects has been estimated by GWA to be \$40,600,000.¹⁶ In summary these projects are:

1. Agana Sewer Treatment Plant. This project primarily consists of bringing this major wastewater plant into compliance with NPDES operating permit guidelines. Principal activities to be undertaken include the renovation of the plant and the construction of an extension to the existing deep-water outfall for effluent disposal.
2. Agat Sewer Treatment Plant. This project primarily consists of bringing this small wastewater plant serving the Agat area into compliance with NPDES operating permit guidelines. Principal activities to be undertaken include the renovation of the plant and the design and construction of various sewer collector lines, which are subject to high levels of inflow and infiltration (I&I).
3. Baza Gardens Sewer Treatment Plant. This project consists of bringing this small wastewater plant into compliance with NPDES operating permit guidelines. Principal activities to be

¹⁶ See the Compliance Costing Worksheet, attached to the Consent Order.

undertaken include the renovation of the plant.

4. Northern District Sewer Treatment Plant. This project primarily consists of bringing this major wastewater plant into compliance with NPDES operating permit guidelines. Principal activities to be undertaken include the renovation of the plant and the construction of an extension to the existing deep-water outfall for effluent disposal.
5. Umatac/Merizo Sewer Treatment Plant. This project consists of bringing this major wastewater plant into compliance with NPDES operating permit guidelines. Principal activities to be undertaken include the correction of the high levels of I&I in the sewer collection system and the construction of the second phase of the sewer system.
6. Operator Training and Certification. This activity will involve providing proper operations and maintenance training to GWA personnel responsible for wastewater treatment. In addition, GWA plant personnel will be required to obtain requisite certification as plant operators.
7. Monitoring Requirements. This activity will involve obtaining laboratory services from certified laboratories until that time that GWA's laboratories are certified.
8. Facilities Master Plan. This activity will involve an update to the GWA Master Plan finalized in December 1994

B. Cost Evaluations.

The estimate of costs for the projects and other activities required by the Consent Order were prepared by GWA personnel without the aid of any detailed study or review by an engineering firm specializing in wastewater treatment. These cost estimates, which we believe adequate for initiating the process of preparing a Financial Plan pursuant to the EPA Consent Order, are very preliminary and should be considered as such. They were developed by GWA on the basis of certain historical information it had available concerning each of the projects or activities. In many cases the costing parameters, operating and plant data, and other information upon which the original cost estimates were developed is dated. Accordingly, the capital cost estimates present a degree of uncertainty, since GWA is obligated to undertake these improvements regardless of their final costs. Updated estimates have not been embarked upon nor have independent estimates been authorized in response to the Consent Order. Since the costs of these projects will be a critical element in the development of the Financial Plan, an independent review to determine the reasonableness of the estimate will be conducted. It is anticipated that this review will be undertaken and completed prior to the January 31, 2002 submittal of the Financial Plan to EPA.

C. Prioritization and Overall Time Frame.

In the development of the Financial Plan, it is necessary to establish a reasonable time frame over which the various projects will be implemented and to establish a reasonable prioritization of the order in which the projects will be implemented. Establishing a time frame is necessary because it is not reasonable to expect that GWA would have the financial or personnel resources to undertake all of the projects immediately and concurrently. We therefore believe that the projects should be implemented beginning this fiscal year (FY 2002) and be completed in fiscal year 2006 (FY 2006, the year ending September 30, 2006). In terms of prioritization we believe that it would be appropriate to schedule the projects with the largest beneficial impact from the point of view of reducing pollution at the earliest possible time. We recommend the following prioritization for the various projects:

1. Begin in Fiscal Year 2002 (current fiscal year): Agana and Northern District Sewer Treatment Plants. These are the largest sewer treatment plants on the island with a capacity of 12 million gallons per day (12 MGD) each. It is proposed that the activities at Agana and the Northern plants be undertaken in two phases. The first phase would see the completion of the disposal (outfall) facilities. The second phase would consist of modifications to the individual plants to bring them into compliance with their NPDES permits.

Additionally in fiscal year 2002, it is necessary to undertake the necessary engineering activities required to design and construct the improvements at the Agana and Northern treatment plants. It will also be necessary to initiate the necessary monitoring requirements of the Consent Order.

Finally, in fiscal year 2002, it will be necessary to initiate the necessary training and certification activities required of the GWA treatment plant personnel. Also, GWA should undertake the necessary activities to procure an independent certified laboratory for water quality testing while seeking to obtain certification for its own laboratories.

2. Begin in Fiscal Year 2003: Baza Gardens Sewer Treatment Plant. Activities would consist of modifications to the plant to bring it into compliance with its NPDES permit.
3. Begin in Fiscal Year 2004: Agat and Umatac/Merizo Sewer Treatment Plants. Both of these facilities are relatively small in terms of treatment capacity. Activities would consist of modifications to the individual plants to bring them into compliance with their NPDES permits. Activities at these facilities and locations will also involve a substantial investment in correcting the infiltration and inflow problems that carry a substantial capital cost. Appropriate planning for these projects will be critical.
4. Begin in Fiscal Year 2005: Facilities Master Plan. The current wastewater Master Plan was completed in 1994. While it has been seven years since the preparation of the Master Plan, the increase in population since that time and growth in tourism related facilities has been vastly

less than estimated in the original plan due to economic conditions in Japan and Guam. The 1994 Master Plan, which is very comprehensive, is still relatively current. In fact, many of the projects identified are still not required given the change in Guam economic activity. We believe that it would be appropriate to have an updated version complete by FY 2006, when all of the projects related to this Consent Order are completed and implemented.

We point out that further review of the prioritization of the projects with GWA between the December regulatory session and January 31, 2002 could modify the prioritization described above. We believe that any modification will not impact the major conclusions of this report.

D. Other Items Considered in the Financial Plan.

The ability to craft a successful Financial Plan will be dependent not only on the requirements of the projects in the Consent Order but also on other capital and operating requirements of GWA. The ability to raise capital will be dependent on the overall financial condition of GWA. In crafting the recommended Financial Plan, consideration was given to the following items:

1. GWA operates an integrated water and wastewater utility. As such, resources are deployed in manner that meets the requirements of both the water and wastewater systems. In addition, many common and joint costs are shared between the two utilities. Important to this Financial Plan is the fact that GWA's total revenues are pledged when accessing the capital markets. Accordingly, in the development of an overall financial plan it is necessary to consider both systems.
2. Capital funding required to support the activities mandated by the Consent Order.
3. Routine capital improvement projects (CIPs). An annual CIP level of \$6 million has been reflected for the purpose of day-to-day system renewal and replacements for the water and wastewater system. This represents \$30 million in additional capital requirements over the time frame of this Financial Plan (or 75% of the capital requirements of the projects required by the consent Order). The level of appropriate CIP funding on a going forward basis would be reviewed when the Master Plan is being updated.
4. Growth related CIPs. There will be some level of CIPs required to connect new customers each year. For purposes of this projection we have assumed that the revenues collected from customers will roughly equal the costs for such activities and have not provided specific figures for these amounts.
5. Water Meter Maintenance and Replacement and Sewer Connections CIP projects have been identified by both the Commission and GWA as having a significant financial benefit to GWA. The requirements for these projects were determined from recent studies undertaken by GWA. The meter replacement project is projected to cost \$4.5 million and the sewer

connection project is estimated to cost \$6 million. There is currently legislation that provides relief to certain customers' connection fees which if implemented would result in a number of new customers being connected to the sewer system.¹⁷

6. Appropriate costs for regulatory management, engineering and construction management are also included in the Financial Plan. It is anticipated that these costs will be capitalized.

Exhibit I, page 1 attached to this report reflects all of the capital costs that we estimate are associated with the Financial Plan for the next five fiscal years (fiscal years 2002 through 2006).

In addition to the capital costs discussed above, the Financial Plan also takes into account other costs of an operations and maintenance account nature. We have used the approved budget for FO 2002 as a base to project the operations and maintenance expenses for the period covered in the Financial Plan using an escalation factor of 4% per annum. There is some degree of uncertainty with this projection since the operations and maintenance expenses for the entire system with the normal operation of the facilities that are being rehabilitated could be greater than the figures that we estimate net of the savings from a properly functioning system. In that event greater revenues will be needed from the system.

IV. FINANCING CONSIDERATIONS

As has been discussed above, the following are the key considerations in meeting the requirements of the Consent Order:

Uses of Capital

1. Undertake the activities required by the Consent Order in the time frame discussed above. The capital requirements for these projects over five fiscal years are \$40,300,000.
2. Provide for routine renewal and replacements CIPs for GWA. Over the five fiscal year time horizon the CIP requirement is \$30,000,000.
3. Provide for the CIPs necessary to support new customers. Over the five fiscal year time horizon we have assumed that these capital requirements will be met through connection fees.
3. Implement revenue enhancement capital projects that would improve the long-term financial condition and operating efficiencies of GWA. Two such projects that have been identified for implementation over this time frame are the meter management program and the sewer

¹⁷ 10 GCA § 48101 *et seq.*

connections program. The capital requirements for these programs are \$10,500,000.

4. Appropriately maintain and operate the GWA water and wastewater systems in an efficient manner. The FY 2002 operating and capital budget provides an appropriate starting point for the budgets required. Future years are to be based on appropriate escalations.

Sources of Capital

1. The refunding of the 1989 Water bonds, which is anticipated to close in December 2001 is anticipated to provide GWA with \$6,000,000.
2. Internally generated revenues from user charges will be used to offset short and long-term financing.
3. GWA will avail itself to the short and long-term financing markets.
4. Other financial options such as financing or grants from the Rural Utility Service (RUS) and project financing through the Build Operate and Transfer (BOT) mechanism will be considered if the economics appear more favorable than using the long term and short term financing markets.
5. The Commission has studied and made recommendations to the Legislature with regard to appropriately modifying the existing legislation regarding the System Development Charge (SDC) so that it can be an important source of new capital for GWA. If appropriate legislation is passed, the SDC could be a source of capital over the next five years that could be considered in the Financial Plan.

Based on the above, the total capital requirement over the five-year time horizon is \$83.8 million. Of this amount, \$6 million has been provided for in the stated use of the refunding of the 1989 Water Bonds. This would leave approximately \$77.8 million to be funded over the five years through external debt financing or through internally generated funds resulting from rate increases.¹⁸

GWA's financial advisors have determined that in its current financial condition GWA can not immediately access the financial markets for long-term debt financing.¹⁹ Letters from GWA's financial advisors have been attached as Attachment II to this report (these letters are currently in

¹⁸ To the extent that bond financing would require GWA to achieve a debt service coverage ratio of 1.5 times, there would be internal cash generated from the excess in the debt coverage ratio over 1 time that could be used to fund capital needs. In the proposed Financial Plan there would be approximately \$10.9 million of internally generated capital.

¹⁹ GWA's financial advisors are Guam Economic Development Agency (GEDA) and First Union, who is retained by GEDA on financial issues.

draft form and will be finalized prior to the January 31, 2001 filing to EPA). In order to accomplish the capital program that is required, GWA's financial advisors have recommended that GWA consider a program that combines rate increases to generate some cash as well as net income that will be required to access the bond markets. In addition, short-term debt from the present to when the long-term debt market can be accessed will be required. Long-term debt will replace the short-term debt when GWA is able to do so. It is the opinion of the financial advisors that GWA can access the financial markets at reasonable interest rates if the program that they have outlined is followed. A discussion of the various financing alternatives is contained below.

A. Increased Rates.

Increased rates can be used as a financing instrument in one of two ways. Increased rates may be used to generate all of the financing requirements over the five year period. This would be the case if GWA did not have access to any form of external financing because its financial condition was and continued to be unacceptable to any lender. This would be a very expensive option since all of the capital requirements of \$77.8 million over the next five years would be raised through increased rates. GWA's financial advisors believe that this scenario can be avoided. To provide an estimate as to what the impact on customers would be under this scenario, Exhibit I, page 5 shows the magnitude of rate increases that will be required. A rate increase of approximately 12% would be required in FY 2002 with additional increases of approximately 56% in FY 2003 and 46% in FY 2004. A cumulative increase of over 115%.

In the alternative, rates can be used to sufficiently improve GWA's financial condition to the point where GWA can access the long-term debt markets, which is the alternative that GWA's financial advisors recommend. This requires that rates be raised to a level where there would be sufficient income to produce a debt service coverage ratio of at least 1.5 times with the debt outstanding. To provide an estimate as to what the impact on customers would be under this scenario, Exhibit I, page 4 shows the magnitude of the rate increases that will be required. A rate increase of approximately 16.6% would be required in mid FY 2003 (April 2003). A further increase of approximately 9% could be required in FY 2006 which could be mitigated by significant increased efficiencies at that time. This would enable a bond issue of approximately \$49 million in October 2003 and \$25 million in October 2004.

In either scenario it is important for the Commission to issue a resolution or an Order stating that it is committed to provide the required rate relief to permit GWA to access the long-term debt market. We recommend that this be accomplished during the December regulatory session.

B. Short Term Debt.

Short-term debt provides the flexibility for GWA to begin implementing the required capital program without having to immediately raise rates or access the long-term debt financial markets.

There are several types of short-term debt that could be considered. There are bank loans, revolving lines of credits as well as Tax Exempt commercial Paper (TECP), which has been used effectively by GPA. While setting up a TECP program should be evaluated, there is a time delay with this option. The two most immediate options would therefore be a bank loan or a revolving line of credit. GWA's financial advisors have indicated that PUC support of such a financing option will be important given the weak current financial condition of GWA.

It will therefore be important for the Commission to issue a resolution or an Order stating that it is committed to provide any required rate relief to keep GWA current on its obligations related to any short term debt acquired. We recommend that this be accomplished during the December regulatory session.

Currently, GWA has a limit on the amount of short term debt that it can obtain.¹¹⁰ In order to provide the flexibility required to undertake the required capital program it will be necessary to amend current legislation and provide for a ceiling of \$25 million for short term debt.

C. Long Term Debt.

GWA's financial advisors indicate that GWA can access the long-term debt markets and secure financing at reasonable interest rates. As stated previously this will require action by the Commission to increase rates to provide for the required debt service coverage. The use of long-term debt provides the ability to spread out the rate impact over the life of the bonds that also approximates the period over which the customers get the benefit of the capital projects, providing for an equitable distribution of the costs. Given the current weak financial condition of GWA it will require a period of time before GWA can successfully access the financial markets. Short-term debt will provide the bridge financing. Legislation will be required to permit GWA to issue long-term debt. The amounts required for this five year period would be approximately \$75 million.¹¹¹ It is suggested that the PUC be empowered to approve the specific terms and conditions of the financing and the specific used to which it would be put.

¹¹⁰ 12 GCA Section 14201 (b), which is part of GWA's enabling legislation.

¹¹¹ This amount of \$75 million includes a debt service reserve of one year's interest and principal of \$5.8 million which will be maintained by the trustee.

D. Rural Utility Service (RUS) Loans/Grants.

GWA is eligible to apply to RUS for loans and grants under several programs. A letter from the local administrator of the RUS office in Guam has been attached as Attachment III (this is in draft form and will be finalized before the January 31, 2002 filing to EPA). GWA currently has pending two applications to RUS for loans/grants.

While the letter in Attachment III is encouraging, there is no assurance that GWA will be successful in securing loans or grants from RUS. GWA will therefore aggressively seek such loans and grants with the plan that if the applications are successful and economically beneficial, GWA will accept the loan or grant and reduce the amount of long-term debt that it would have otherwise borrowed. If successful, this program will reduce the rate relief that will be required to support the capital program.

The legislation that permits GWA to assume long-term debt should be made flexible enough to permit GWA to accept RUS loans and grants. As before the PUC should be empowered to approve the specific terms and conditions of the financing and the uses to which it would be put.

E. Build Operate and Transfer (BOT)

GWA is currently permitted to enter into BOT arrangements with the approval of the Commission. Many of the projects required by the Consent Order could be accomplished by a BOT mechanism. As with the situation with the RUS loan and grant programs, there is no assurance at this time that such an arrangement would actually materialize. GWA will therefore aggressively seek such arrangements with the plan that if the process is successful and economically beneficial, GWA will enter into a BOT arrangement and reduce the amount of long-term debt that it would have otherwise borrowed. Any BOT arrangement would have to meet the requirements of the Consent Order, while also necessitating that the BOT meet or beat any milestone requirements set by the EPA.

V. Proposed Financial Plan.

GWA's Financial Plan is based on the recommendations of its financial advisors. The advice of these financial advisors is to access the long term financial markets after the financial condition of GWA has been improved by securing a rate increase to provide the debt service coverage required to support long term debt. To provide bridge financing GWA will obtain a loan or a revolving line of credit. GWA's proposed financial Plan will be as follows:

1. Long Term Debt Financing. Issue long-term debt in two tranches:
 - Series A of \$49.2 million issued October 2003
 - Series B of \$24.8 million issued October 2004
2. Short Term Loan Requirements:
 - Draw down of approximately \$18 million through September 2003
 - Roll into Series A long-term debt issue of \$49.2 million

The short-term loan or revolving line of credit will be in place by April 2002.

The financial advisors will study and recommend on the feasibility of issuing TECP as an alternative for a short-term loan or revolving line of credit.

3. Apply for RUS loans and grants immediately. To the extent successful and economically viable, reduce the amount of long-term debt accordingly.
4. Structure Requests for Bids on projects that could be awarded on a BOT basis. To the extent successful and economically viable, reduce the amount of long-term debt accordingly.
5. Initiate a rate proceeding to increase rates by \$6.5 million (approximately 16.6% on overall water and waste water revenues) to be effective April 2003 to provide for debt service coverage for long-term bonds to be issued in October 2003. An additional rate increase to take effect on October 2005 for approximately \$3.8 million (approximately an additional 9% on overall water and wastewater revenues).

Exhibit I, pages 2 and 4 summarize the Financial Plan described above.

VI. Compliance Schedules.

The consent Order requires that compliance schedules be filed for all the required projects. The compliance schedules will be worked up in collaboration with GWA and be attached to the report filed with EPA on January 31, 2002.

VII. Legislative Requirements.

The following is a summary of the legislative changes that are recommended to implement the Financial Plan required by the Consent Order. These have been discussed in the relevant portions of the report above:

1. Raise the ceiling on the level of the amount of short-term debt that GWA can acquire to \$25 million. Empower the PUC to authorize the assumption of the short-term debt and approve the uses to which it can be put. The authorization to acquire short-term debt should be flexible enough to include TECP.

2. Authorize the issuance of \$75 million in long-term debt. Empower the PUC to authorize issuance of the long-term debt and approve the uses to which it can be put. This legislation should be flexible enough to permit GWA to enter into RUS loans.
3. Authorize amendments to the FY 2002 budget to meet the requirements of the Financial Plan. These amendments would be to initiate the renovation of the Agana and Northern District Sewer Treatment Plants and the construction of Outfall Extensions for each, to retain the necessary engineering support required, to initiate wastewater operations and maintenance training, to obtain laboratory services, and to initiate those activities necessary to obtain certification for GWA laboratories.. In addition any effort and related expense related to implementation of the Financial Plan should also be provided for. This would include acquisition of short term financing; acquisition of TECP if feasible; initiation of the meter replacement and sewer connections projects. These amounts, for FY 2002, could be funded by the reserve that was set up in the FY 2002 budget to pay for the debt service on a \$6 million loan that was anticipated in the budget but which funds are now being provided by the refunding of the 1989 Water Bonds.
4. Review and amend the System Development Charge legislation as appropriate.

VIII Recommended Commission Actions

The following is a summary of Commission actions recommended:

1. Issue a resolution or an Order stating that it is committed to provide the required rate relief to permit GWA to access the long term and short term debt markets. This should be accomplished during the December regulatory session. We recommend that the Commission seek input from GWA's financial advisors as to the appropriate language that would provide comfort to potential lenders.
2. Recommend to the Legislature that the Commission be empowered to approve the specific terms and conditions of the long and short term financing and the specific uses to which it would be put. This should be accomplished during the December regulatory session.
3. Recommend to the Legislature that the proposed legislation that permits GWA to assume long term debt should be made flexible enough to permit GWA to accept RUS loans and grants. The Commission should be empowered to approve the specific terms and conditions of the financing and the uses to which it would be put.
4. Issue a ruling that the Commission will set a process and schedule for GWA to seek BOT financing for required capital projects. The implementation of this should be delegated to the ALJ and be completed prior to January 31, 2002 if possible.

5. Issue a ruling that the Commission will use its management audit powers to oversee the implementation of the proposed Financial Plan and construction of the required capital projects. The Commission in conjunction with staff should develop appropriate reporting and surveillance mechanisms.

EXHIBIT 1

GUAM WATERWORKS AUTHORITY

SUMMARY FINANCIAL PLAN

GUAM WATERWORKS AUTHORITY
Summary Financial Plan
(\$000's)

Exhibit I, page 1
Capital Projects

Project:	Estimated Cost	Start Year	2002	2003	2004	2005	2006	TOTAL
Agana STP	\$ 8,300	2002	\$ 2,075	\$ 4,150	\$ 2,075			\$ 8,300
Agat STP	18,700	2004			9,350	9,350		18,700
Baza Garden STP	1,100	2003		550	550			1,100
Northern District STP	6,400	2002	1,600	3,200	1,600			6,400
Umatac/Merizo STP	2,900	2004			1,450	1,450		2,900
Regulatory Management	1%	2002	75	75	75	75	75	374
Engineering	4.5%	2002	421	421	421	210	210	1,683
Construction Management	2.5%	2002	117	117	234	234	234	935
Operator Certification ¹	300	2004						-
Monitoring Requirements	600	2002	120	120	120	120	120	600
Facilities Master Plan	2,300	2005				1,150	1,150	2,300
Sub-Total EPA Projects	\$ 40,600		\$ 4,407	\$ 8,632	\$ 15,874	\$ 12,589	\$ 1,789	\$ 43,292
Ongoing Capital Projects ²			6,000	6,000	6,000	6,000	6,000	30,000
Water Bond Contribution			(6,000)					(6,000)
Funded Internally ³			(313)	(2,154)	(2,534)	(2,404)	(3,455)	(10,859)
Meter Replacement ⁴				1,500	1,500	1,500		4,500
Sewer Connections ⁵					2,000	2,000	2,000	6,000
Total Required Capital			\$ 4,095	\$ 13,979	\$ 22,840	\$ 19,685	\$ 6,334	\$ 66,933

Notes

- ¹ Amount contained in GWA's O&M Budget
- ² GWA 2002 budget approved by legislature (PL26-49)
- ³ See Pro Forma Income Statement
- ⁴ Per GWA's SIP Implementation Plan (April 2000)
- ⁵ Per GWA's SIP Implementation Plan (April 2000)

GUAM WATERWORKS AUTHORITY
Summary Financial Plan
(\$000's)

Exhibit 1, page 2
Construction Funds

2002	2003	2004	2005	2006	TOTAL
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Uses of Capital:

Total Required Capital	\$ 4,095	\$ 13,979	\$ 22,840	\$ 19,685	\$ 6,334	\$ 66,933
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Sources of Capital:

Short Term Debt	\$ 4,095	\$ 18,074	\$ -	\$ -	\$ -	
Series A Proceeds			\$ 44,500	\$ 4,043		
Pay Down LOC			(18,074)			
Series A Construction			(22,840)	(4,043)		
Series B Proceeds				22,500	7,024	
Series B Construction				(15,642)	(6,334)	
Interest on Fund	3%		457	166	11	
Construction Fund			\$ 4,043	\$ 7,024	\$ 701	
Bond Funding:			\$ 44,500	\$ 22,500		
Debt Service Reserve	1 yr DS		3,848	1,946		
Issuance & Regulatory Co	1.75%		846	428		
Total Bond			\$ 49,194	\$ 24,874		\$ 74,068
Term	25 years					
Interest Rate	6%					

GUAM WATERWORKS AUTHORITY
Summary Financial Plan
(\$000's)

Exhibit 1, page 3
Amortization Schedules

Series A
Principal \$ 49,194
Amortization 25
Interest Assumption 6%
Annual Debt Service \$3,848

Series B
Principal \$ 24,874
Amortization 25
Interest Assumption 6%
Annual Debt Service \$1,946

								TOTAL		
Payment	Interest	Principal	Balance	Payment	Interest	Principal	Balance	Debt Svce	Interest	Principal
\$ 49,194										
1	3,848	2,952	897					3,848	2,952	897
2	3,848	2,898	950					3,848	2,898	950
3	3,848	2,841	1,007	1	1,946	1,492	453	5,794	4,333	1,461
4	3,848	2,780	1,068	2	1,946	1,465	481	5,794	4,246	1,548
5	3,848	2,716	1,132	3	1,946	1,436	509	5,794	4,153	1,641
6	3,848	2,648	1,200	4	1,946	1,406	540	5,794	4,054	1,740
7	3,848	2,576	1,272	5	1,946	1,373	572	5,794	3,950	1,844
8	3,848	2,500	1,348	6	1,946	1,339	607	5,794	3,839	1,955
9	3,848	2,419	1,429	7	1,946	1,303	643	5,794	3,722	2,072
10	3,848	2,333	1,515	8	1,946	1,264	682	5,794	3,598	2,197
11	3,848	2,243	1,606	9	1,946	1,223	723	5,794	3,466	2,328
12	3,848	2,146	1,702	10	1,946	1,180	766	5,794	3,326	2,468
13	3,848	2,044	1,804	11	1,946	1,134	812	5,794	3,178	2,616
14	3,848	1,936	1,912	12	1,946	1,085	861	5,794	3,021	2,773
15	3,848	1,821	2,027	13	1,946	1,034	912	5,794	2,855	2,940
16	3,848	1,699	2,149	14	1,946	979	967	5,794	2,678	3,116
17	3,848	1,571	2,278	15	1,946	921	1,025	5,794	2,491	3,303
18	3,848	1,434	2,414	16	1,946	859	1,087	5,794	2,293	3,501
19	3,848	1,289	2,559	17	1,946	794	1,152	5,794	2,083	3,711
20	3,848	1,135	2,713	18	1,946	725	1,221	5,794	1,860	3,934
21	3,848	973	2,876	19	1,946	652	1,294	5,794	1,624	4,170
22	3,848	800	3,048	20	1,946	574	1,372	5,794	1,374	4,420
23	3,848	617	3,231	21	1,946	492	1,454	5,794	1,109	4,685
24	3,848	423	3,425	22	1,946	405	1,541	5,794	828	4,966
25	3,848	218	3,630	23	1,946	312	1,634	5,794	530	5,264
				24	1,946	214	1,732	1,946	214	1,732
				25	1,946	110	1,836	1,946	110	1,836

GUAM WATERWORKS AUTHORITY
Summary Financial Plan
(\$000's)

Exhibit 1, page 4
Funding through debt

	2002	2003	2004	2005	2006
Water Revenues	\$24,698	\$24,945	\$25,194	\$25,446	\$25,701
Wastewater Revenues	14,182	14,324	14,467	14,612	14,758
Add'l Sewer Revenues	-	-	80	470	1,190
Meter Management	-	113	508	961	961
Rate Increase (1)		3,250	6,500	6,565	6,631
Rate Increase (2)					3,750
Allowance	(2,333)	(1,705)	(1,870)	(1,442)	(1,590)
Other Revenues	351	351	351	351	351

TOTAL \$36,898 \$41,278 \$45,231 \$46,963 \$51,752

Operating Expense	\$35,840	\$37,274	\$38,765	\$40,315	\$41,928
Depreciation	10,000	11,000	12,000	13,000	14,000
Interest on Const. Fund	-	-	(457)	(166)	(11)
Training	500	520	541	562	585
IMC/PMC	500	520	541	562	585
Construction Management	500	500	500	250	250

Net Income (\$9,442) (\$7,516) (\$5,618) (\$6,748) (\$4,751)

Interest (ST)	246	1,330	-	-	-
Interest (LT)			2,952	2,898	4,333
Total Interest	\$246	\$1,330	\$2,952	\$2,898	\$4,333

Net Income (\$9,687) (\$8,846) (\$8,569) (\$9,646) (\$9,084)

DSCR Calculation					
Income	(\$9,687)	(\$8,846)	(\$8,569)	(\$9,646)	(9,084)
Interest	246	1,330	2,952	2,898	4,333
Depreciation	10,000	11,000	12,000	13,000	14,000
Total Available	\$558	\$3,484	\$6,382	\$6,252	9,249
Interest	\$246	\$1,330	\$2,952	\$2,898	\$4,333
Principal			897	950	1,461
Total Debt Service	\$246	\$1,330	\$3,848	\$3,848	\$5,794
DSCR	2.27	2.62	1.66	1.62	1.60

Logic for Rate Increase 1.60 1.60 1.60 1.60 1.60

Cash Generated:					
Earnings	(\$9,687)	(\$8,846)	(\$8,569)	(\$9,646)	(\$9,084)
Plus: Depreciation	10,000	11,000	12,000	13,000	14,000
Less: Principal Pymts	-	-	(897)	(950)	(1,461)
Cash Generated to Fund Projects:	\$313	\$2,154	\$2,534	\$2,404	\$3,455

Percent Increase (annual.)¹ 16.6% 16.4% 16.4% 25.7%

¹ First Year Increase assumed six months

Assumptions:

FY02 Budget-Growth 1%
FY02 Budget-Growth 1%
GWA Strategic Initiative Plan
GWA Strategic Initiative Plan

Decreasing Allowance 6% 4% 4% 3% 3%

Growth 4%
Does not impact DSCR
Sources and Uses Table
Growth 4%
Growth 4%

6% on average balance
Amortization Table

See Amortization Tables
See Amortization Tables

GUAM WATERWORKS AUTHORITY
Financial Plan
(\$000's)

Exhibit 1, page 5
Funding by Rates

	2002	2003	2004	2005	2006
Water Revenues	\$24,698	\$24,945	\$25,194	\$25,446	\$25,701
Wastewater Revenues	14,182	14,324	14,467	14,612	14,758
Add'l Sewer Revenues	-	-	80	470	1,190
Meter Management	-	113	508	961	961
Rate Increase (1)	5,000	5,050	5,101	5,152	5,203
Rate Increase (2)		10,500	10,605	10,711	10,818
Rate Increase (3)			9,500	9,595	9,691
Allowance	(2,633)	(2,197)	(2,618)	(2,008)	(2,050)
Other Revenues	351	351	351	351	351
TOTAL	\$41,598	\$53,086	\$63,188	\$65,289	\$66,623
Operating Expense	35,840	37,274	38,765	40,315	41,928
Depreciation	10,000	11,000	12,000	13,000	14,000
Interest on Const. Fund	-	-	-	-	-
Training	500	520	541	562	585
IMC/PMC	500	520	541	562	585
Construction Management	500	500	500	250	250
Net Income:	(\$5,742)	\$3,272	\$10,842	\$10,599	\$9,276
Add: Depreciation	10,000	11,000	12,000	13,000	14,000
Opening Cash	0	163	457	458	4,372
Cash Available	\$4,258	\$14,435	\$23,298	\$24,057	\$27,647
Required Capital	4,095	13,979	22,840	19,685	6,334
Closing Cash	\$163	\$457	\$458	\$4,372	\$21,314
Cumulative Increase (annual.) ¹	12.2%	68.0%	113.9%	117.1%	117.0%

Assumptions:

FY02 Budget-Growth 1%
FY02 Budget-Growth 1%
GWA Strategic Initiative Plan
GWA Strategic Initiative Plan

Decreasing Allowance 6% 4% 4% 3% 3%
Static

Growth 4%
Does not impact DSCR

Growth 4%
Growth 4%

¹ First Year Increase assumed six months

ATTACHMENT I

DESCRIPTION OF PROJECTS REQUIRED BY THE EPA CONSENT ORDER

Agana Sewer Treatment Plant: The Agana STP was put into service in 1979. It provides primary treatment with a design average daily capacity of 12.0 MGD and a peak flow of 21.0 MGD. The Agana STP also receives waste sludge from Baza Gardens STP, Umatac/Merizo STP, and Agat STP. The primary treatment processes at Agana STP consist of flow measurement, primary clarification, scum removal, aerobic digestion, centrifuges for sludge dewatering, and effluent disposal via a deep-water outfall.

Agat Sewer Treatment Plant: The Agat STP was originally put into service in 1972. The facility is a small secondary treatment plant. The secondary treatment processes at Agat STP consist of preliminary treatment and secondary treatment including an extended aeration system with a secondary clarifier, sludge holding, and effluent disposal via an ocean outfall shared with the Navy. The Agat STP is the most recent addition to the treatment capacity of GWA. It is also proposed that the excessive infiltration/inflow be reduced to a more acceptable level. Inflow is defined as surface water that enters the wastewater system through sources such as manhole covers, lift station wet wells, and direct interconnections between the sewer system and yard, roof, and storm drains. Infiltration is defined as groundwater that leaks into a sewer pipe through joints, porous wall, or breaks. Fixing the problems at Agat will require modifications to the existing collection systems in the Agat and Santa Rita area. The inflow/infiltration problems in these areas are the result of private laterals owned by consumers and GWA collection facilities and mains.

Baza Gardens Sewer Treatment Plant: The Baza Gardens STP is located on the eastern side of the southern-central portion of Guam, just south of Route 17 adjacent to the Baza Gardens residential area. The Baza Gardens STP was put into service 1975 and renovated in 1992. The plant is a very small secondary treatment plant with a design average daily capacity of 0.6 MGD. The Baza Gardens STP consist of preliminary treatment of comminutor and an aerated grit chamber, secondary treatment consisting of contract stabilization with secondary clarification, sludge holding, and effluent discharge to the Togcha River.

Northern District Sewer Treatment Plant: The Northern District STP is the only wastewater treatment plant in the north and is located on the Old Harmon Village area above the Tanguisson Power Plant. The Northern STP is one of GWA's two major STPs. The plant was originally put into service in 1979. It provides service to Andersen Air Force Base, the Agafa Gumas area, Naval Communications Station, Yigo, Dededo, Barrigada Heights, Harmon, Liguana Terrace, and Tumon Bay. The Northern District STP is a primary treatment plant with a design average daily capacity

of 12.0 MGD and a peak flow of 27.0 MGD. The primary treatment processes at Northern District STP consist of headworks preliminary treatment consisting of comminution with standby manual bar screen, preaeration and grit removal, primary clarification and scum removal. Sludge is anaerobically digested and dewatered by centrifuges. Effluent disposal of treated wastewater is via a deep-water outfall.

Umatac/Merizo Sewer Treatment Plant: The Umatac/Merizo STP is located on the southern end of Guam along Route 4, between the villages of Umatac and Merizo. The Umatac/Merizo STP was put into service in 1981. The facility is an extremely small secondary treatment plant with a design average daily capacity of 0.25 MGD. The Umatac/Merizo STP facility is a secondary aerobic facultative lagoon treatment system followed by an overland treatment/disposal system. Effluent disposal is via percolation/transpiration in the overland treatment/disposal system. This plant frequently experiences hydraulic overloading and has experienced sewer main backups, and surcharging of manholes. Previous studies indicate that the primary sources of inflow/infiltration are located at sewer cleanouts and laterals in need of rehabilitation on the customer side of the connection with GWA.

Operator Training and Certification. As part of GWA's commitment to meet the objectives of the EPA Consent Order it will be necessary for GWA to institute a strong training and certification program for its wastewater treatment plant personnel. This program will consist of both traditional classroom training as well as on-the-job-training activities. It is anticipated that GWA will retain the services of a performance management contractor (PMC) during the next three years to assist in not only rehabilitating the treatment plants, but also training operating personnel. Finally, these activities will lead to the certification of plant operations personnel.

Monitoring Requirements. As part of GWA's commitment to meet the objectives of the EPA Consent Order it will be necessary for GWA to upgrade the capabilities of its laboratory services. Ideally these services would be accomplished by its own lab, which would obtain the necessary certification status to be acceptable to EPA. In the near-term it will be necessary for GWA to rely on private laboratories in Guam that possess the requisite certification status.

Facilities Master Plan. This activity is intended to update the previous master plan for GWA's wastewater system. The last master plan was prepared in December 1994, or seven years ago. While the 1994 plan was very comprehensive it was based upon a very optimistic growth forecast, which has failed to materialize. Ideally, the revised master plan should be completed prior to embarking on major new investments in GWA wastewater facilities. These would be system investments required to support future growth and would not be undertaken until GWA has complied with the requirements of the Consent Order for the purpose of meeting its various NDPES operating permit conditions.

ATTACHMENT II

LETTERS FROM GWA'S FINANCIAL ADVISORS -- GEDA AND FIRST UNION

ATTACHMENT III

LETTER FROM ADMINISTRATOR OF THE GUAM RUS OFFICE



Guam Area Office - Western Pacific Region
Room 303, FHB Building
400 Route 8
Hagatna, GU 96910

Telephone: (671) 472-7361
FAX: (671) 472-7366

DRAFT

November 23, 2001

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v
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Dear

Thank you for allowing USDA Rural Development to provide comments relative to the Consent Order from U.S. Environmental Protection Agency (EPA) that addresses several projects that the Guam Waterworks Authority (GWA) is required to implement. We understand that a financing plan needs to be in place in order to address required project implementation.

Funds are available to public entities, such as municipalities, counties, special-purpose districts, and Indian tribes. In addition, funds may be made available to corporations operated on a not-for-profit basis. Priority will be given to public entities, in areas with less than 5,500 people, to restore a deteriorating water supply, or to improve, enlarge, or modify a water facility or an inadequate waste facility. Applicants must be unable to obtain funds from other sources at reasonable rates and terms. The maximum term for all loans is 40 years; however, no repayment period will exceed state statutes or the useful life of the facility.

As a public entity, GWA would be eligible for Rural Utilities Service (RUS) financing under the Water and WasteWater loan and grant program (<http://www.usda.gov/rus/water/index.htm>). RUS provides loans, grants and loan guarantees for drinking water, sanitary sewer, solid waste and storm drainage facilities in rural areas and cities and towns of 10,000 or less. Maximum grant per project is 75% of eligible project costs, depending on the eligible area's median household income as a percentage of Guam's overall median household income. The remaining 25% would be in the form of a low interest loan.

The administrative funding allocation for Guam and the Western Pacific has traditionally been approximately \$800,000 in loans and \$800,000 in grants for this program. However, additional funds above and beyond this figure may be available from the National Reserve in Washington, D.C. on a competitive basis. The National Reserve represents a pool of funds that is made available for all States that have utilized their initial administrative allocation. The National Office ordinarily "pools" funds at least twice a year from those states that have not used their initial administrative allocations to add to the National Reserve.

A potential resource where additional funds may be obtained is in the event that a Presidential or Secretary of Agriculture declares a disaster for Guam. The Governor of Guam on November 2001

DRAFT

had requested for a Presidential Disaster Declaration for Guam as a result of the 7.0 earthquake that struck Guam in October. Should disaster funds be made available for FY 2002, I see this as a potential resource to address more of GWA's project implementation needs.

Another potential resource would be in the form of a guaranteed loan, whereby RUS can guarantee up to 90% of a loan made by a lender. Guaranteed funds are more readily available when compared to our direct loan and grant funding. This could potentially address a majority of GWA's project implementation requirements. However, since it is a loan made by a lender and guaranteed by the Government, market rates would likely apply.

Understanding the formidable tasks of identifying a Financing Plan to address long and short term financing requirements, so long as a reliable repayment source is identified to service any RUS debt, we would have no difficulty with other traditional financing existing for GWA.

Our review of an application will be completed within 60 days of receipt of a completed application. The Agency conducts its own environmental assessment per project. This assessment would be completed prior to approval. Should a favorable determination be made on the application, then a formal approval will be issued to the applicant should funds be made available.

Our office is currently in receipt of 2 preapplications submitted by GWA. A \$2.8 million request was submitted for the Umatac/Merizo STP. Also, we recently received a second application for approximately \$9.2 million; the breakdown of the request includes approximately \$7.0 million to purchase equipment and \$2.2 million to refinance the IBM/JD Edwards loan.

As of this date, our Agency has not received RUS program funding for FY '02. In addition to determining the administrative allocations for all states to include the Western Pacific, information on the availability of disaster funding and emergency funding availability for FY '02 will be announced. Once published, then a more certain position on RUS funding availability can be provided.

Should you have any questions or comments on this matter, please contact me.

Sincerely,

JOSEPH M. DIEGO
Rural Development Manager

cc: State Director, Hilo, HI
RUS Program Director, Hilo, HI

**PUBLIC UTILITIES COMMISSION
OF GUAM**

EPA CONSENT ORDER -- GWA FINANCIAL PLAN

REPORT OF GEORGETOWN CONSULTING GROUP, INC.

PUC DOCKET 02-02

DECEMBER 2001

EPA CONSENT ORDER -- GWA FINANCIAL PLAN

I. INTRODUCTION

In the Environmental Protection Agency's (EPA) Administrative Order on Consent¹¹ (the "Consent Order") it is ordered that GWA shall submit a Financial Plan and schedule by January 31, 2002 to secure funds for capital, operational and maintenance costs necessary to bring certain of GWA's wastewater collection, treatment and disposal systems into compliance with their NPDES operating permits and the Clean Water Act. GWA is also required to submit compliance schedules, based on the Financial Plan, by January 31, 2002, for each of the wastewater collection, treatment, and disposal facilities and supporting activities identified in the Consent Order.¹²

Section 14 of Public Law 26-34 directs the Commission to oversee the development of the Financial Plan required by the EPA's Consent Order. This law also directs the Commission to Report to the Legislature during the December regulatory session on the following:

- A. A proposed financial plan, including appropriate sources of funding and analysis of rate impact.¹³
- B. The feasibility of using BOT to undertake corrective action mandated by the Consent Order.
- C. The impact of the Financial Plan on GWA's FY 02 budget.
- D. Recommended legislation.

This report fulfills the requirements set forth above. It is our understanding that comments from the Legislature and the Commission delivered during the December regulatory session will be taken into account and incorporated into the final Financial Plan presented to the EPA pursuant to the Consent Order on January 31, 2002. While many aspects of the two reports will be similar, the two reports will be different. It is anticipated that additional data (i.e., information from GEDA financial advisors and technical information from GWA) will become available between the December

¹¹ United States Environmental Protection Agency, Docket no. CWA-402-9-01-19, dated August 16, 2001. A complete copy of this Administrative Order on Consent will be separately provided to the members of the Legislature.

¹² *Ibid.* Order for compliance, para. 1.

¹³ The rate impact analysis should also provide some comparative review of GWA's current and projected rates with other localities. This analysis is currently under preparation and will be presented to the commission and the Legislature during the December regulatory session.

regulatory session and the Consent Order deadline of January 31, 2002. In these cases we will modify the relevant portions of our report to take into account this additional information. In addition, any section of this report that has been written to meet the requirements of the Legislature and which is not required to meet the requirements of the filing that is required on January 31, 2002 will be modified or removed. We recommend that oversight of the process to produce the final report required by the EPA be maintained by the Commission. Since there will not be a subsequent regulatory session between the December session and January 31, 2002, we recommend that the Administrative Law Judge (ALJ) be delegated the responsibility of approving the final report. A final clarification: the Consent Order requires that, "GWA shall submit a Financial Plan...". It will therefore be necessary for GWA to adopt the Financial Plan that the Legislature has directed the Commission to oversee and transmit it to the EPA.

II. REQUIREMENTS OF THE ADMINISTRATIVE ORDER ON CONSENT

There are several requirements of the Administrative Order on Consent. This section provides an overview of those requirements.

Paragraph 1 of the ordering section has several requirements. First, there is the requirement for a Financial Plan mentioned above. In addition, there is a requirement to submit compliance schedules for various facilities covered by the Consent Order.¹⁴ This paragraph also provides that where a BOT¹⁵ mechanism is chosen to bring a facility into compliance, a compliance schedule shall be submitted for the activities required to support a BOT project. Both the Financial Plan and the compliance schedules are envisioned to become a part of the EPA's Order upon review and approval by EPA in consultation with Guam Environment Protection Agency (GEPA.)

Paragraph 2 requires GWA to take all necessary actions to implement the compliance schedule requirements. It also makes the final compliance schedules submitted to EPA a part of the final Consent Order.

Paragraph 3 requires GWA to submit quarterly compliance progress reports the first of which was due on October 31, 2001. This report provides EPA with the status of GWA's progress in meeting the requirements contained in the various compliance schedules for various activities that are a part of the Consent Order. The report is to also identify any areas of non-compliance and to outline actions being taken to bring GWA into future conformity with its compliance schedules.

Paragraph 4 requires GWA to designate a Compliance Coordinator who will be the principal contact with EPA relative to the Consent Order. Under the Consent Order this person is designated the

¹⁴ A compliance schedule sets action steps and target dates by which the action steps will be accomplished.

¹⁵ Build, Operate and Transfer.

responsibility for overseeing implementation and monitoring of all compliance schedule activities and submission of the required quarterly reports. GWA has designated Danny Santos, Assistant General Manager for Operations as the Compliance Coordinator.

Paragraph 5 requires that GWA submit to EPA and GEPA a final status report within 60 days of completing the final compliance activity covered by the Consent Order.

Paragraph 6 through 12 contains various administrative and legal provisions including civil and criminal penalties for negligent or knowing violations. As outlined in Paragraph 11 the Consent Order shall terminate when EPA issues a written approval of the work required to bring GWA's various facilities into compliance with their NPDES operating permits.

This report to the Legislature principally deals with the requirements of Paragraph 1 and Public Law 26-34, which directs the Commission to Report to the Legislature during the December regulatory session on the matters identified in I. A. through I. D above.

III. PROJECT COSTS AND PRIORITIZATIONS

A. Description of Projects.

The projects and activities to be undertaken to bring GWA into compliance with its various National Pollutant Discharge Elimination System (NPDES) permits and as mandated by the Consent Order are described in Attachment I to this report. The total capital cost associated with these projects has been estimated by GWA to be \$40,600,000.¹⁶ In summary these projects are:

1. Agana Sewer Treatment Plant. This project primarily consists of bringing this major wastewater plant into compliance with NPDES operating permit guidelines. Principal activities to be undertaken include the renovation of the plant and the construction of an extension to the existing deep-water outfall for effluent disposal.
2. Agat Sewer Treatment Plant. This project primarily consists of bringing this small wastewater plant serving the Agat area into compliance with NPDES operating permit guidelines. Principal activities to be undertaken include the renovation of the plant and the design and construction of various sewer collector lines, which are subject to high levels of inflow and infiltration (I&I).
3. Baza Gardens Sewer Treatment Plant. This project consists of bringing this small wastewater plant into compliance with NPDES operating permit guidelines. Principal activities to be

¹⁶ See the Compliance Costing Worksheet, attached to the Consent Order.

undertaken include the renovation of the plant.

4. Northern District Sewer Treatment Plant. This project primarily consists of bringing this major wastewater plant into compliance with NPDES operating permit guidelines. Principal activities to be undertaken include the renovation of the plant and the construction of an extension to the existing deep-water outfall for effluent disposal.
5. Umatac/Merizo Sewer Treatment Plant. This project consists of bringing this major wastewater plant into compliance with NPDES operating permit guidelines. Principal activities to be undertaken include the correction of the high levels of I&I in the sewer collection system and the construction of the second phase of the sewer system.
6. Operator Training and Certification. This activity will involve providing proper operations and maintenance training to GWA personnel responsible for wastewater treatment. In addition, GWA plant personnel will be required to obtain requisite certification as plant operators.
7. Monitoring Requirements. This activity will involve obtaining laboratory services from certified laboratories until that time that GWA's laboratories are certified.
8. Facilities Master Plan. This activity will involve an update to the GWA Master Plan finalized in December 1994

B. Cost Evaluations.

The estimate of costs for the projects and other activities required by the Consent Order were prepared by GWA personnel without the aid of any detailed study or review by an engineering firm specializing in wastewater treatment. These cost estimates, which we believe adequate for initiating the process of preparing a Financial Plan pursuant to the EPA Consent Order, are very preliminary and should be considered as such. They were developed by GWA on the basis of certain historical information it had available concerning each of the projects or activities. In many cases the costing parameters, operating and plant data, and other information upon which the original cost estimates were developed is dated. Accordingly, the capital cost estimates present a degree of uncertainty, since GWA is obligated to undertake these improvements regardless of their final costs. Updated estimates have not been embarked upon nor have independent estimates been authorized in response to the Consent Order. Since the costs of these projects will be a critical element in the development of the Financial Plan, an independent review to determine the reasonableness of the estimate will be conducted. It is anticipated that this review will be undertaken and completed prior to the January 31, 2002 submittal of the Financial Plan to EPA.

C. Prioritization and Overall Time Frame.

In the development of the Financial Plan, it is necessary to establish a reasonable time frame over which the various projects will be implemented and to establish a reasonable prioritization of the order in which the projects will be implemented. Establishing a time frame is necessary because it is not reasonable to expect that GWA would have the financial or personnel resources to undertake all of the projects immediately and concurrently. We therefore believe that the projects should be implemented beginning this fiscal year (FY 2002) and be completed in fiscal year 2006 (FY 2006, the year ending September 30, 2006). In terms of prioritization we believe that it would be appropriate to schedule the projects with the largest beneficial impact from the point of view of reducing pollution at the earliest possible time. We recommend the following prioritization for the various projects:

1. Begin in Fiscal Year 2002 (current fiscal year): Agana and Northern District Sewer Treatment Plants. These are the largest sewer treatment plants on the island with a capacity of 12 million gallons per day (12 MGD) each. It is proposed that the activities at Agana and the Northern plants be undertaken in two phases. The first phase would see the completion of the disposal (outfall) facilities. The second phase would consist of modifications to the individual plants to bring them into compliance with their NPDES permits.

Additionally in fiscal year 2002, it is necessary to undertake the necessary engineering activities required to design and construct the improvements at the Agana and Northern treatment plants. It will also be necessary to initiate the necessary monitoring requirements of the Consent Order.

Finally, in fiscal year 2002, it will be necessary to initiate the necessary training and certification activities required of the GWA treatment plant personnel. Also, GWA should undertake the necessary activities to procure an independent certified laboratory for water quality testing while seeking to obtain certification for its own laboratories.

2. Begin in Fiscal Year 2003: Baza Gardens Sewer Treatment Plant. Activities would consist of modifications to the plant to bring it into compliance with its NPDES permit.
3. Begin in Fiscal Year 2004: Agat and Umatac/Merizo Sewer Treatment Plants. Both of these facilities are relatively small in terms of treatment capacity. Activities would consist of modifications to the individual plants to bring them into compliance with their NPDES permits. Activities at these facilities and locations will also involve a substantial investment in correcting the infiltration and inflow problems that carry a substantial capital cost. Appropriate planning for these projects will be critical.
4. Begin in Fiscal Year 2005: Facilities Master Plan. The current wastewater Master Plan was completed in 1994. While it has been seven years since the preparation of the Master Plan, the increase in population since that time and growth in tourism related facilities has been vastly

less than estimated in the original plan due to economic conditions in Japan and Guam. The 1994 Master Plan, which is very comprehensive, is still relatively current. In fact, many of the projects identified are still not required given the change in Guam economic activity. We believe that it would be appropriate to have an updated version complete by FY 2006, when all of the projects related to this Consent Order are completed and implemented.

We point out that further review of the prioritization of the projects with GWA between the December regulatory session and January 31, 2002 could modify the prioritization described above. We believe that any modification will not impact the major conclusions of this report.

D. Other Items Considered in the Financial Plan.

The ability to craft a successful Financial Plan will be dependent not only on the requirements of the projects in the Consent Order but also on other capital and operating requirements of GWA. The ability to raise capital will be dependent on the overall financial condition of GWA. In crafting the recommended Financial Plan, consideration was given to the following items:

1. GWA operates an integrated water and wastewater utility. As such, resources are deployed in manner that meets the requirements of both the water and wastewater systems. In addition, many common and joint costs are shared between the two utilities. Important to this Financial Plan is the fact that GWA's total revenues are pledged when accessing the capital markets. Accordingly, in the development of an overall financial plan it is necessary to consider both systems.
2. Capital funding required to support the activities mandated by the Consent Order.
3. Routine capital improvement projects (CIPs). An annual CIP level of \$6 million has been reflected for the purpose of day-to-day system renewal and replacements for the water and wastewater system. This represents \$30 million in additional capital requirements over the time frame of this Financial Plan (or 75% of the capital requirements of the projects required by the consent Order). The level of appropriate CIP funding on a going forward basis would be reviewed when the Master Plan is being updated.
4. Growth related CIPs. There will be some level of CIPs required to connect new customers each year. For purposes of this projection we have assumed that the revenues collected from customers will roughly equal the costs for such activities and have not provided specific figures for these amounts.
5. Water Meter Maintenance and Replacement and Sewer Connections CIP projects have been identified by both the Commission and GWA as having a significant financial benefit to GWA. The requirements for these projects were determined from recent studies undertaken by GWA. The meter replacement project is projected to cost \$4.5 million and the sewer

connection project is estimated to cost \$6 million. There is currently legislation that provides relief to certain customers' connection fees which if implemented would result in a number of new customers being connected to the sewer system.¹⁷

6. Appropriate costs for regulatory management, engineering and construction management are also included in the Financial Plan. It is anticipated that these costs will be capitalized.

Exhibit I, page 1 attached to this report reflects all of the capital costs that we estimate are associated with the Financial Plan for the next five fiscal years (fiscal years 2002 through 2006).

In addition to the capital costs discussed above, the Financial Plan also takes into account other costs of an operations and maintenance account nature. We have used the approved budget for FO 2002 as a base to project the operations and maintenance expenses for the period covered in the Financial Plan using an escalation factor of 4% per annum. There is some degree of uncertainty with this projection since the operations and maintenance expenses for the entire system with the normal operation of the facilities that are being rehabilitated could be greater than the figures that we estimate net of the savings from a properly functioning system. In that event greater revenues will be needed from the system.

IV. FINANCING CONSIDERATIONS

As has been discussed above, the following are the key considerations in meeting the requirements of the Consent Order:

Uses of Capital

1. Undertake the activities required by the Consent Order in the time frame discussed above. The capital requirements for these projects over five fiscal years are \$40,300,000.
2. Provide for routine renewal and replacements CIPs for GWA. Over the five fiscal year time horizon the CIP requirement is \$30,000,000.
3. Provide for the CIPs necessary to support new customers. Over the five fiscal year time horizon we have assumed that these capital requirements will be met through connection fees.
3. Implement revenue enhancement capital projects that would improve the long-term financial condition and operating efficiencies of GWA. Two such projects that have been identified for implementation over this time frame are the meter management program and the sewer connections program. The capital requirements for these programs are \$10,500,000.

¹⁷ 10 GCA § 48101 *et seq.*

4. Appropriately maintain and operate the GWA water and wastewater systems in an efficient manner. The FY 2002 operating and capital budget provides an appropriate starting point for the budgets required. Future years are to be based on appropriate escalations.

Sources of Capital

1. The refunding of the 1989 Water bonds, which is anticipated to close in December 2001 is anticipated to provide GWA with \$6,000,000.
2. Internally generated revenues from user charges will be used to offset short and long-term financing.
3. GWA will avail itself to the short and long-term financing markets.
4. Other financial options such as financing or grants from the Rural Utility Service (RUS) and project financing through the Build Operate and Transfer (BOT) mechanism will be considered if the economics appear more favorable than using the long term and short term financing markets.
5. The Commission has studied and made recommendations to the Legislature with regard to appropriately modifying the existing legislation regarding the System Development Charge (SDC) so that it can be an important source of new capital for GWA. If appropriate legislation is passed, the SDC could be a source of capital over the next five years that could be considered in the Financial Plan.

Based on the above, the total capital requirement over the five-year time horizon is \$83.8 million. Of this amount, \$6 million has been provided for in the stated use of the refunding of the 1989 Water Bonds. This would leave approximately \$77.8 million to be funded over the five years through external debt financing or through internally generated funds resulting from rate increases.¹⁸

GWA's financial advisors have determined that in its current financial condition GWA can not immediately access the financial markets for long-term debt financing.¹⁹ Letters from GWA's financial advisors have been attached as Attachment II to this report (these letters are currently in draft form and will be finalized prior to the January 31, 2001 filing to EPA). In order to accomplish the capital program that is required, GWA's financial advisors have recommended that GWA

¹⁸ To the extent that bond financing would require GWA to achieve a debt service coverage ratio of 1.5 times, there would be internal cash generated from the excess in the debt coverage ratio over 1 time that could be used to fund capital needs. In the proposed Financial Plan there would be approximately \$10.9 million of internally generated capital.

¹⁹ GWA's financial advisors are Guam Economic Development Agency (GEDA) and First Union, who is retained by GEDA on financial issues.

consider a program that combines rate increases to generate some cash as well as net income that will be required to access the bond markets. In addition, short-term debt from the present to when the long-term debt market can be accessed will be required. Long-term debt will replace the short-term debt when GWA is able to do so. It is the opinion of the financial advisors that GWA can access the financial markets at reasonable interest rates if the program that they have outlined is followed. A discussion of the various financing alternatives is contained below.

A. Increased Rates.

Increased rates can be used as a financing instrument in one of two ways. Increased rates may be used to generate all of the financing requirements over the five year period. This would be the case if GWA did not have access to any form of external financing because its financial condition was and continued to be unacceptable to any lender. This would be a very expensive option since all of the capital requirements of \$77.8 million over the next five years would be raised through increased rates. GWA's financial advisors believe that this scenario can be avoided. To provide an estimate as to what the impact on customers would be under this scenario, Exhibit I, page 5 shows the magnitude of rate increases that will be required. A rate increase of approximately 12% would be required in FY 2002 with additional increases of approximately 56% in FY 2003 and 46% in FY 2004. A cumulative increase of over 115%.

In the alternative, rates can be used to sufficiently improve GWA's financial condition to the point where GWA can access the long-term debt markets, which is the alternative that GWA's financial advisors recommend. This requires that rates be raised to a level where there would be sufficient income to produce a debt service coverage ratio of at least 1.5 times with the debt outstanding. To provide an estimate as to what the impact on customers would be under this scenario, Exhibit I, page 4 shows the magnitude of the rate increases that will be required. A rate increase of approximately 16.6% would be required in mid FY 2003 (April 2003). A further increase of approximately 9% could be required in FY 2006 which could be mitigated by significant increased efficiencies at that time. This would enable a bond issue of approximately \$49 million in October 2003 and \$25 million in October 2004.

In either scenario it is important for the Commission to issue a resolution or an Order stating that it is committed to provide the required rate relief to permit GWA to access the long-term debt market. We recommend that this be accomplished during the December regulatory session.

B. Short Term Debt.

Short-term debt provides the flexibility for GWA to begin implementing the required

capital program without having to immediately raise rates or access the long-term debt financial markets.

There are several types of short-term debt that could be considered. There are bank loans, revolving lines of credits as well as Tax Exempt commercial Paper (TECP), which has been used effectively by GPA. While setting up a TECP program should be evaluated, there is a time delay with this option. The two most immediate options would therefore be a bank loan or a revolving line of credit. GWA's financial advisors have indicated that PUC support of such a financing option will be important given the weak current financial condition of GWA.

It will therefore be important for the Commission to issue a resolution or an Order stating that it is committed to provide any required rate relief to keep GWA current on its obligations related to any short term debt acquired. We recommend that this be accomplished during the December regulatory session.

Currently, GWA has a limit on the amount of short term debt that it can obtain.¹¹⁰ In order to provide the flexibility required to undertake the required capital program it will be necessary to amend current legislation and provide for a ceiling of \$25 million for short term debt.

C. Long Term Debt.

GWA's financial advisors indicate that GWA can access the long-term debt markets and secure financing at reasonable interest rates. As stated previously this will require action by the Commission to increase rates to provide for the required debt service coverage. The use of long-term debt provides the ability to spread out the rate impact over the life of the bonds that also approximates the period over which the customers get the benefit of the capital projects, providing for an equitable distribution of the costs. Given the current weak financial condition of GWA it will require a period of time before GWA can successfully access the financial markets. Short-term debt will provide the bridge financing. Legislation will be required to permit GWA to issue long-term debt. The amounts required for this five year period would be approximately \$75 million.¹¹¹ It is suggested that the PUC be empowered to approve the specific terms and conditions of the financing and the specific used to which it would be put.

¹¹⁰ 12 GCA Section 14201 (b), which is part of GWA's enabling legislation.

¹¹¹ This amount of \$75 million includes a debt service reserve of one year's interest and principal of \$5.8 million which will be maintained by the trustee.

D. Rural Utility Service (RUS) Loans/Grants.

GWA is eligible to apply to RUS for loans and grants under several programs. A letter from the local administrator of the RUS office in Guam has been attached as Attachment III (this is in draft form and will be finalized before the January 31, 2002 filing to EPA). GWA currently has pending two applications to RUS for loans/grants.

While the letter in Attachment III is encouraging, there is no assurance that GWA will be successful in securing loans or grants from RUS. GWA will therefore aggressively seek such loans and grants with the plan that if the applications are successful and economically beneficial, GWA will accept the loan or grant and reduce the amount of long-term debt that it would have otherwise borrowed. If successful, this program will reduce the rate relief that will be required to support the capital program.

The legislation that permits GWA to assume long-term debt should be made flexible enough to permit GWA to accept RUS loans and grants. As before the PUC should be empowered to approve the specific terms and conditions of the financing and the uses to which it would be put.

E. Build Operate and Transfer (BOT)

GWA is currently permitted to enter into BOT arrangements with the approval of the Commission. Many of the projects required by the Consent Order could be accomplished by a BOT mechanism. As with the situation with the RUS loan and grant programs, there is no assurance at this time that such an arrangement would actually materialize. GWA will therefore aggressively seek such arrangements with the plan that if the process is successful and economically beneficial, GWA will enter into a BOT arrangement and reduce the amount of long-term debt that it would have otherwise borrowed. Any BOT arrangement would have to meet the requirements of the Consent Order, while also necessitating that the BOT meet or beat any milestone requirements set by the EPA.

V. Proposed Financial Plan.

GWA's Financial Plan is based on the recommendations of its financial advisors. The advice of these financial advisors is to access the long term financial markets after the financial condition of GWA has been improved by securing a rate increase to provide the debt service coverage required to support long term debt. To provide bridge financing GWA will obtain a loan or a revolving line of credit. GWA's proposed financial Plan will be as follows:

1. Long Term Debt Financing. Issue long-term debt in two tranches:
 - Series A of \$49.2 million issued October 2003

- Series B of \$24.8 million issued October 2004
2. Short Term Loan Requirements:
 - Draw down of approximately \$18 million through September 2003
 - Roll into Series A long-term debt issue of \$49.2 million

The short-term loan or revolving line of credit will be in place by April 2002.

The financial advisors will study and recommend on the feasibility of issuing TECP as an alternative for a short-term loan or revolving line of credit.

3. Apply for RUS loans and grants immediately. To the extent successful and economically viable, reduce the amount of long-term debt accordingly.
4. Structure Requests for Bids on projects that could be awarded on a BOT basis. To the extent successful and economically viable, reduce the amount of long-term debt accordingly.
5. Initiate a rate proceeding to increase rates by \$6.5 million (approximately 16.6% on overall water and waste water revenues) to be effective April 2003 to provide for debt service coverage for long-term bonds to be issued in October 2003. An additional rate increase to take effect on October 2005 for approximately \$3.8 million (approximately an additional 9% on overall water and wastewater revenues).

Exhibit I, pages 2 and 4 summarize the Financial Plan described above.

VI. Compliance Schedules.

The consent Order requires that compliance schedules be filed for all the required projects. The compliance schedules will be worked up in collaboration with GWA and be attached to the report filed with EPA on January 31, 2002.

VII. Legislative Requirements.

The following is a summary of the legislative changes that are recommended to implement the Financial Plan required by the Consent Order. These have been discussed in the relevant portions of the report above:

1. Raise the ceiling on the level of the amount of short-term debt that GWA can acquire to \$25 million. Empower the PUC to authorize the assumption of the short-term debt and approve the uses to which it can be put. The authorization to acquire short-term debt should be flexible enough to include TECP.
2. Authorize the issuance of \$75 million in long-term debt. Empower the PUC to authorize

issuance of the long-term debt and approve the uses to which it can be put. This legislation should be flexible enough to permit GWA to enter into RUS loans.

3. Authorize amendments to the FY 2002 budget to meet the requirements of the Financial Plan. These amendments would be to initiate the renovation of the Agana and Northern District Sewer Treatment Plants and the construction of Outfall Extensions for each, to retain the necessary engineering support required, to initiate wastewater operations and maintenance training, to obtain laboratory services, and to initiate those activities necessary to obtain certification for GWA laboratories.. In addition any effort and related expense related to implementation of the Financial Plan should also be provided for. This would include acquisition of short term financing; acquisition of TECP if feasible; initiation of the meter replacement and sewer connections projects. These amounts, for FY 2002, could be funded by the reserve that was set up in the FY 2002 budget to pay for the debt service on a \$6 million loan that was anticipated in the budget but which funds are now being provided by the refunding of the 1989 Water Bonds.
4. Review and amend the System Development Charge legislation as appropriate.

VIII Recommended Commission Actions

The following is a summary of Commission actions recommended:

1. Issue a resolution or an Order stating that it is committed to provide the required rate relief to permit GWA to access the long term and short term debt markets. This should be accomplished during the December regulatory session. We recommend that the Commission seek input from GWA's financial advisors as to the appropriate language that would provide comfort to potential lenders.
2. Recommend to the Legislature that the Commission be empowered to approve the specific terms and conditions of the long and short term financing and the specific uses to which it would be put. This should be accomplished during the December regulatory session.
3. Recommend to the Legislature that the proposed legislation that permits GWA to assume long term debt should be made flexible enough to permit GWA to accept RUS loans and grants. The Commission should be empowered to approve the specific terms and conditions of the financing and the uses to which it would be put.
4. Issue a ruling that the Commission will set a process and schedule for GWA to seek BOT financing for required capital projects. The implementation of this should be delegated to the ALJ and be completed prior to January 31, 2002 if possible.
5. Issue a ruling that the Commission will use its management audit powers to oversee the

implementation of the proposed Financial Plan and construction of the required capital projects. The Commission in conjunction with staff should develop appropriate reporting and surveillance mechanisms.

EXHIBIT 1

GUAM WATERWORKS AUTHORITY

SUMMARY FINANCIAL PLAN

GUAM WATERWORKS AUTHORITY
Summary Financial Plan
(\$000's)

Exhibit I, page 1
Capital Projects

Project:	Estimated Cost	Start Year	2002	2003	2004	2005	2006	TOTAL
Agana STP	\$ 8,300	2002	\$ 2,075	\$ 4,150	\$ 2,075			\$ 8,300
Agat STP	18,700	2004			9,350	9,350		18,700
Baza Garden STP	1,100	2003		550	550			1,100
Northern District STP	6,400	2002	1,600	3,200	1,600			6,400
Umatac/Merizo STP	2,900	2004			1,450	1,450		2,900
Regulatory Management	1%	2002	75	75	75	75	75	374
Engineering	4.5%	2002	421	421	421	210	210	1,683
Construction Management	2.5%	2002	117	117	234	234	234	935
Operator Certification ¹	300	2004						-
Monitoring Requirements	600	2002	120	120	120	120	120	600
Facilities Master Plan	2,300	2005				1,150	1,150	2,300
Sub-Total EPA Projects	\$ 40,600		\$ 4,407	\$ 8,632	\$ 15,874	\$ 12,589	\$ 1,789	\$ 43,292
Ongoing Capital Projects ²			6,000	6,000	6,000	6,000	6,000	30,000
Water Bond Contribution			(6,000)					(6,000)
Funded Internally ³			(313)	(2,154)	(2,534)	(2,404)	(3,455)	(10,859)
Meter Replacement ⁴				1,500	1,500	1,500		4,500
Sewer Connections ⁵					2,000	2,000	2,000	6,000
Total Required Capital			\$ 4,095	\$ 13,979	\$ 22,840	\$ 19,685	\$ 6,334	\$ 66,933

Notes

- ¹ Amount contained in GWA's O&M Budget
- ² GWA 2002 budget approved by legislature (PL26-49)
- ³ See Pro Forma Income Statement
- ⁴ Per GWA's SIP Implementation Plan (April 2000)
- ⁵ Per GWA's SIP Implementation Plan (April 2000)

GUAM WATERWORKS AUTHORITY
Summary Financial Plan
(\$000's)

Exhibit 1, page 2
Construction Funds

2002	2003	2004	2005	2006	TOTAL
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Uses of Capital:

Total Required Capital	\$ 4,095	\$ 13,979	\$ 22,840	\$ 19,685	\$ 6,334	\$ 66,933
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Sources of Capital:

Short Term Debt	\$ 4,095	\$ 18,074	\$ -	\$ -	\$ -	
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Series A Proceeds			\$ 44,500	\$ 4,043		
Pay Down LOC			(18,074)			
Series A Construction			(22,840)	(4,043)		
Series B Proceeds				22,500	7,024	
Series B Construction				(15,642)	(6,334)	
Interest on Fund	3%		457	166	11	
Construction Fund			\$ 4,043	\$ 7,024	\$ 701	

Bond Funding:			\$ 44,500	\$ 22,500		
Debt Service Reserve	1 yr DS		3,848	1,946		
Issuance & Regulatory C	1.75%		846	428		
Total Bond			\$ 49,194	\$ 24,874		\$ 74,068

Term	25 years
Interest Rate	6%

GUAM WATERWORKS AUTHORITY
Summary Financial Plan
(\$000's)

Exhibit 1, page 3
Amortization Schedules

Series A
Principal \$ 49,194
Amortization 25
Interest Assumption 6%
Annual Debt Service \$3,848

Series B
Principal \$ 24,874
Amortization 25
Interest Assumption 6%
Annual Debt Service \$1,946

								TOTAL		
Payment	Interest	Principal	Balance	Payment	Interest	Principal	Balance	Debt Svce	Interest	Principal
			\$ 49,194							
1	3,848	2,952	897					3,848	2,952	897
2	3,848	2,898	950					3,848	2,898	950
3	3,848	2,841	1,007					5,794	4,333	1,461
4	3,848	2,780	1,068					5,794	4,246	1,548
5	3,848	2,716	1,132					5,794	4,153	1,641
6	3,848	2,648	1,200					5,794	4,054	1,740
7	3,848	2,576	1,272					5,794	3,950	1,844
8	3,848	2,500	1,348					5,794	3,839	1,955
9	3,848	2,419	1,429					5,794	3,722	2,072
10	3,848	2,333	1,515					5,794	3,598	2,197
11	3,848	2,243	1,606					5,794	3,466	2,328
12	3,848	2,146	1,702					5,794	3,326	2,468
13	3,848	2,044	1,804					5,794	3,178	2,616
14	3,848	1,936	1,912					5,794	3,021	2,773
15	3,848	1,821	2,027					5,794	2,855	2,940
16	3,848	1,699	2,149					5,794	2,678	3,116
17	3,848	1,571	2,278					5,794	2,491	3,303
18	3,848	1,434	2,414					5,794	2,293	3,501
19	3,848	1,289	2,559					5,794	2,083	3,711
20	3,848	1,135	2,713					5,794	1,860	3,934
21	3,848	973	2,876					5,794	1,624	4,170
22	3,848	800	3,048					5,794	1,374	4,420
23	3,848	617	3,231					5,794	1,109	4,685
24	3,848	423	3,425					5,794	828	4,966
25	3,848	218	3,630					5,794	530	5,264
			0					1,946	214	1,732
								1,946	110	1,836

GUAM WATERWORKS AUTHORITY
Summary Financial Plan
(\$000's)

Exhibit 1, page 4
Funding through debt

	2002	2003	2004	2005	2006
Water Revenues	\$24,698	\$24,945	\$25,194	\$25,446	\$25,701
Wastewater Revenues	14,182	14,324	14,467	14,612	14,758
Add'l Sewer Revenues	-	-	80	470	1,190
Meter Management	-	113	508	961	961
Rate Increase (1)		3,250	6,500	6,565	6,631
Rate Increase (2)					3,750
Allowance	(2,333)	(1,705)	(1,870)	(1,442)	(1,590)
Other Revenues	351	351	351	351	351

TOTAL \$36,898 \$41,278 \$45,231 \$46,963 \$51,752

Operating Expense	\$35,840	\$37,274	\$38,765	\$40,315	\$41,928
Depreciation	10,000	11,000	12,000	13,000	14,000
Interest on Const. Fund	-	-	(457)	(166)	(11)
Training	500	520	541	562	585
IMC/PMC	500	520	541	562	585
Construction Management	500	500	500	250	250

Net Income (\$9,442) (\$7,516) (\$5,618) (\$6,748) (\$4,751)

Interest (ST)	246	1,330	-	-	-
Interest (LT)			2,952	2,898	4,333
Total Interest	\$246	\$1,330	\$2,952	\$2,898	\$4,333

Net Income (\$9,687) (\$8,846) (\$8,569) (\$9,646) (\$9,084)

DSCR Calculation					
Income	(\$9,687)	(\$8,846)	(\$8,569)	(\$9,646)	(\$9,084)
Interest	246	1,330	2,952	2,898	4,333
Depreciation	10,000	11,000	12,000	13,000	14,000
Total Available	\$558	\$3,484	\$6,382	\$6,252	9,249
Interest	\$246	\$1,330	\$2,952	\$2,898	\$4,333
Principal			897	950	1,461
Total Debt Service	\$246	\$1,330	\$3,848	\$3,848	\$5,794
DSCR	2.27	2.62	1.66	1.62	1.60

Logic for Rate Increase 1.60 1.60 1.60 1.60 1.60

Cash Generated:					
Earnings	(\$9,687)	(\$8,846)	(\$8,569)	(\$9,646)	(\$9,084)
Plus: Depreciation	10,000	11,000	12,000	13,000	14,000
Less: Principal Pymts	-	-	(897)	(950)	(1,461)
Cash Generated to Fund Projects:	\$313	\$2,154	\$2,534	\$2,404	\$3,455

Percent Increase (annual.) ¹ 16.6% 16.4% 16.4% 25.7%

¹ First Year Increase assumed six months

Assumptions:

FY02 Budget-Growth 1%
FY02 Budget-Growth 1%
GWA Strategic Initiative Plan
GWA Strategic Initiative Plan

Decreasing Allowance 6% 4% 4% 3% 3%

Growth 4%
Does not impact DSCR
Sources and Uses Table
Growth 4%
Growth 4%

6% on average balance
Amortization Table

See Amortization Tables
See Amortization Tables

GUAM WATERWORKS AUTHORITY
Financial Plan
(\$000's)

Exhibit 1, page 5
Funding by Rates

	2002	2003	2004	2005	2006
Water Revenues	\$24,698	\$24,945	\$25,194	\$25,446	\$25,701
Wastewater Revenues	14,182	14,324	14,467	14,612	14,758
Add'l Sewer Revenues	-	-	80	470	1,190
Meter Management	-	113	508	961	961
Rate Increase (1)	5,000	5,050	5,101	5,152	5,203
Rate Increase (2)		10,500	10,605	10,711	10,818
Rate Increase (3)			9,500	9,595	9,691
Allowance	(2,633)	(2,197)	(2,618)	(2,008)	(2,050)
Other Revenues	351	351	351	351	351
TOTAL	\$41,598	\$53,086	\$63,188	\$65,289	\$66,623
Operating Expense	35,840	37,274	38,765	40,315	41,928
Depreciation	10,000	11,000	12,000	13,000	14,000
Interest on Const. Fund	-	-	-	-	-
Training	500	520	541	562	585
IMC/PMC	500	520	541	562	585
Construction Management	500	500	500	250	250
Net Income:	(\$5,742)	\$3,272	\$10,842	\$10,599	\$9,276
Add: Depreciation	10,000	11,000	12,000	13,000	14,000
Opening Cash	0	163	457	458	4,372
Cash Available	\$4,258	\$14,435	\$23,298	\$24,057	\$27,647
Required Capital	4,095	13,979	22,840	19,685	6,334
Closing Cash	\$163	\$457	\$458	\$4,372	\$21,314
Cumulative Increase (annual.) ¹	12.2%	68.0%	113.9%	117.1%	117.0%

¹ First Year Increase assumed six months

Assumptions:

FY02 Budget-Growth 1%
FY02 Budget-Growth 1%
GWA Strategic Initiative Plan
GWA Strategic Initiative Plan

Decreasing Allowance 6% 4% 4% 3% 3%
Static

Growth 4%
Does not impact DSCR

Growth 4%
Growth 4%

ATTACHMENT I

DESCRIPTION OF PROJECTS REQUIRED BY THE EPA CONSENT ORDER

Agana Sewer Treatment Plant: The Agana STP was put into service in 1979. It provides primary treatment with a design average daily capacity of 12.0 MGD and a peak flow of 21.0 MGD. The Agana STP also receives waste sludge from Baza Gardens STP, Umatac/Merizo STP, and Agat STP. The primary treatment processes at Agana STP consist of flow measurement, primary clarification, scum removal, aerobic digestion, centrifuges for sludge dewatering, and effluent disposal via a deep-water outfall.

Agat Sewer Treatment Plant: The Agat STP was originally put into service in 1972. The facility is a small secondary treatment plant. The secondary treatment processes at Agat STP consist of preliminary treatment and secondary treatment including an extended aeration system with a secondary clarifier, sludge holding, and effluent disposal via an ocean outfall shared with the Navy. The Agat STP is the most recent addition to the treatment capacity of GWA. It is also proposed that the excessive infiltration/inflow be reduced to a more acceptable level. Inflow is defined as surface water that enters the wastewater system through sources such as manhole covers, lift station wet wells, and direct interconnections between the sewer system and yard, roof, and storm drains. Infiltration is defined as groundwater that leaks into a sewer pipe through joints, porous wall, or breaks. Fixing the problems at Agat will require modifications to the existing collection systems in the Agat and Santa Rita area. The inflow/infiltration problems in these areas are the result of private laterals owned by consumers and GWA collection facilities and mains.

Baza Gardens Sewer Treatment Plant: The Baza Gardens STP is located on the eastern side of the southern-central portion of Guam, just south of Route 17 adjacent to the Baza Gardens residential area. The Baza Gardens STP was put into service 1975 and renovated in 1992. The plant is a very small secondary treatment plant with a design average daily capacity of 0.6 MGD. The Baza Gardens STP consist of preliminary treatment of comminutor and an aerated grit chamber, secondary treatment consisting of contract stabilization with secondary clarification, sludge holding, and effluent discharge to the Togcha River.

Northern District Sewer Treatment Plant: The Northern District STP is the only wastewater treatment plant in the north and is located on the Old Harmon Village area above the Tanguisson Power Plant. The Northern STP is one of GWA's two major STPs. The plant was originally put into service in 1979. It provides service to Andersen Air Force Base, the Agafa Gumas area, Naval Communications Station, Yigo, Dededo, Barrigada Heights, Harmon, Liguana Terrace, and Tumon Bay. The Northern District STP is a primary treatment plant with a design average daily capacity of

12.0 MGD and a peak flow of 27.0 MGD. The primary treatment processes at Northern District STP consist of headworks preliminary treatment consisting of comminution with standby manual bar screen, preaeration and grit removal, primary clarification and scum removal. Sludge is anaerobically digested and dewatered by centrifuges. Effluent disposal of treated wastewater is via a deep-water outfall.

Umatac/Merizo Sewer Treatment Plant: The Umatac/Merizo STP is located on the southern end of Guam along Route 4, between the villages of Umatac and Merizo. The Umatac/Merizo STP was put into service in 1981. The facility is an extremely small secondary treatment plant with a design average daily capacity of 0.25 MGD. The Umatac/Merizo STP facility is a secondary aerobic facultative lagoon treatment system followed by an overland treatment/disposal system. Effluent disposal is via percolation/transpiration in the overland treatment/disposal system. This plant frequently experiences hydraulic overloading and has experienced sewer main backups, and surcharging of manholes. Previous studies indicate that the primary sources of inflow/infiltration are located at sewer cleanouts and laterals in need of rehabilitation on the customer side of the connection with GWA.

Operator Training and Certification. As part of GWA's commitment to meet the objectives of the EPA Consent Order it will be necessary for GWA to institute a strong training and certification program for its wastewater treatment plant personnel. This program will consist of both traditional classroom training as well as on-the-job-training activities. It is anticipated that GWA will retain the services of a performance management contractor (PMC) during the next three years to assist in not only rehabilitating the treatment plants, but also training operating personnel. Finally, these activities will lead to the certification of plant operations personnel.

Monitoring Requirements. As part of GWA's commitment to meet the objectives of the EPA Consent Order it will be necessary for GWA to upgrade the capabilities of its laboratory services. Ideally these services would be accomplished by its own lab, which would obtain the necessary certification status to be acceptable to EPA. In the near-term it will be necessary for GWA to rely on private laboratories in Guam that possess the requisite certification status.

Facilities Master Plan. This activity is intended to update the previous master plan for GWA's wastewater system. The last master plan was prepared in December 1994, or seven years ago. While the 1994 plan was very comprehensive it was based upon a very optimistic growth forecast, which has failed to materialize. Ideally, the revised master plan should be completed prior to embarking on major new investments in GWA wastewater facilities. These would be system investments required to support future growth and would not be undertaken until GWA has complied with the requirements of the Consent Order for the purpose of meeting its various NDPES operating permit conditions.

ATTACHMENT II

LETTERS FROM GWA'S FINANCIAL ADVISORS -- GEDA AND FIRST UNION

ATTACHMENT III

LETTER FROM ADMINISTRATOR OF THE GUAM RUS OFFICE



Guam Area Office - Western Pacific Region
Room 303, FHB Building
400 Route 8
Hagatna, GU 96910

Telephone: (671) 472-7361
FAX: (671) 472-7366

DRAFT

November 16, 2001

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Dear

Thank you for allowing USDA Rural Development to provide comments relative to the Consent Order from U.S. Environmental Protection Agency (EPA) that addresses several projects that the Guam Waterworks Authority (GWA) is required to implement. We understand that a financing plan needs to be in place in order to address required project implementation.

Funds are available to public entities, such as municipalities, counties, special-purpose districts, and Indian tribes. In addition, funds may be made available to corporations operated on a not-for-profit basis. Priority will be given to public entities, in areas with less than 5,500 people, to restore a deteriorating water supply, or to improve, enlarge, or modify a water facility or an inadequate waste facility. Applicants must be unable to obtain funds from other sources at reasonable rates and terms. The maximum term for all loans is 40 years; however, no repayment period will exceed state statutes or the useful life of the facility.

As a public entity, GWA would be eligible for Rural Utilities Service (RUS) financing under the Water and Wastewater loan and grant program (<http://www.usda.gov/rus/water/index.htm>). RUS provides loans, grants and loan guarantees for drinking water, sanitary sewer, solid waste and storm drainage facilities in rural areas and cities and towns of 10,000 or less. Maximum grant per project is 75% of eligible project costs, depending on the eligible area's median household income as a percentage of Guam's overall median household income. The remaining 25% would be in the form of a low interest loan.

The administrative funding allocation for Guam and the Western Pacific has traditionally been approximately \$800,000 in loans and \$800,000 in grants for this program. However, additional funds above and beyond this figure may be available from the National Reserve in Washington, D.C. on a competitive basis. The National Reserve represents a pool of funds that is made available for all States that have utilized their initial administrative allocation. The National Office ordinarily "pools" funds at least twice a year from those states that have not used their initial administrative allocations to add to the National Reserve.

A potential resource where additional funds may be obtained is in the event that a Presidential or Secretary of Agriculture declares a disaster for Guam. The Governor of Guam on November 2001

DRAFT

had requested for a Presidential Disaster Declaration for Guam as a result of the 7.0 earthquake that struck Guam in October. Should disaster funds be made available for FY 2002, I see this as a potential resource to address more of GWA's project implementation needs.

Another potential resource would be in the form of a guaranteed loan, whereby RUS can guarantee up to 90% of a loan made by a lender. Guaranteed funds are more readily available when compared to our direct loan and grant funding. This could potentially address a majority of GWA's project implementation requirements. However, since it is a loan made by a lender and guaranteed by the Government, market rates would likely apply.

Understanding the formidable tasks of identifying a Financing Plan to address long and short term financing requirements, so long as a reliable repayment source is identified to service any RUS debt, we would have no difficulty with other traditional financing existing for GWA.

Our review of an application will be completed within 60 days of receipt of a completed application. The Agency conducts its own environmental assessment per project. This assessment would be completed prior to approval. Should a favorable determination be made on the application, then a formal approval will be issued to the applicant should funds be made available.

Our office is currently in receipt of 2 preapplications submitted by GWA. A \$2.8 million request was submitted for the Umatac/Merizo STP. Also, we recently received a second application for approximately \$9.2 million; the breakdown of the request includes approximately \$7.0 million to purchase equipment and \$2.2 million to refinance the IBM/JD Edwards loan.

As of this date, our Agency has not received RUS program funding for FY '02. In addition to determining the administrative allocations for all states to include the Western Pacific, information on the availability of disaster funding and emergency funding availability for FY '02 will be announced. Once published, then a more certain position on RUS funding availability can be provided.

Should you have any questions or comments on this matter, please contact me.

Sincerely,

JOSEPH M. DIEGO
Rural Development Manager

cc: State Director, Hilo, HI
RUS Program Director, Hilo, HI