

GUYANA

R E P O R T

of the

GUYANA WATER AUTHORITY

for the year

1975

THE GUYANA WATER AUTHORITY

TO: Comrade S.S. Narine, A.A.,
Minister of Works & Housing.

In compliance with Section 33 of the Public Corporations Ordinance No. 23 of 1962, we, the Members of the Board appointed under Section 3 of the Guyana Water Authority Act, 1972 as amended, submit our report on the operations of the Authority for the year 1975 together with the following related financial statements:-

- 1) Balance Sheet as at 31st December, 1975 with Report of Auditors dated August 10, 1976.
- 2) Operation Account, 1975.

PERSONNEL OF THE BOARD:
APPOINTMENTS, RESIGNATIONS ETC.

2. At the beginning of the year, the Board comprised the following personnel:-

- Saeram Prashad, M.P., M.C.I.T., A.M.Inst.T.A., A.M.B.I.M., Chairman.
- " Dr. U.P. Gibson, Ph.D., F.I.C.E. Deputy Chairman
- " S. Sukhu, M.P., M.S.,
- " Dr. D.P. Rawana, L.R.C.P., L.R.C.S., L.M.D.P.H., F.R.I.P.H.H.
- " S.C.H. D'Ornellas
- " G. Mentus
- " H.I.M. Liverpool, B.Sc., M.I.C.E.
- " S.A. Tross, A.C.C.A., A.C.I.S., D.P.A.

3. With effect from 1st April, 1975, Cde. H.I.M. Liverpool's membership ceased following his resignation as Chief Engineer of the Authority.

4. On May 12, 1975 Dr. L.E. Ramsahoye, M.P., Ph.D., was appointed Adviser to the Board.

5. The Board's term of office expired on 30th September, 1975, and a new Board was appointed with effect from 1st October, 1975 comprising the following Members:-

- Cde. Saeram Prashad, M.P., M.C.I.T., A.M.Inst., A.M.B.I.M., Chairman
- " Dr. U.P. Gibson, Ph.D., F.I.C.E., Deputy Chairman
- " S. Sukhu, M.P., M.S.
- " Dr. D.P. Rawana, L.R.C.P., L.R.C.S., L.M.D.P.H., F.R.I.P.H.H.
- " S.C.H. D'Ornellas
- " E.L. Meyers, M.S., J.P.
- " G. Mentus
- " C. Corbin

EMPLOYEES

The staff of the Authority comprised:-

General Manager

Chief Engineer and Assistant General Manager

- 1) Chief Engineer
- 2) Senior Engineers
- 12) Assistant Engineers
- 1) Chief Accountant
- 1) Senior Accountant
- 1) Secretary/Chief Administrative Officer
- 1) Internal Auditor

6. In addition there are 725 employees in various categories and classifications.

7. During the year the following fellowships sponsored by the World Health Organisation as part of the UNDP Technical Assistance and Management Consultant Service to the Authority were taken up by employees of the Authority:

NAME OF EMPLOYEE	DESIGNATION	TYPE OF FELLOWSHIP	DURATION	COURSE AREA
S.A. Tross	Chief Acct.	Attachment	3 months	Accounting procedures in Utility systems.
B. Roopnarins	Engineer	do.	4 weeks	Office Engineering Standard Practice and Records.
M. Israel	Engineer	do.	4 weeks	Meter repairing
B. Jaisiri	Engineer	do.	6 weeks	Water Utility Monitoring.
W.A. Jordan	Admin. Officer	Academic	6 months	Senior Executive Management.
T. Wharton	Plant Supt.	Attachment	6 weeks	Operations and Maintenance of Treatment Plants
A. Coppin	Assistant Commercial Supervisor	Attachment	4 weeks	Billing Procedures.
K. Humphrey	Assistant Storekeeper		2 months	Stores and Warehousing Procedures.
T. Jordan	Technical Assistant	do.	4 weeks	Office Engineering Standard Practices and Records.
E. Benjamin	Foreman	do.	4 weeks	Meter repairing.

ACCOMMODATION

8. The Authority's main offices together with offices for the UNDP Management Consultants continued to be housed in the top flat of the former D'Urban Park Pavilion, while the Authority's main workshop and stores continued to occupy the former Pure Water Supply building at Kingston.

9. The building east of the Authority's main offices that was being constructed to accommodate the Accounts Division and the Laboratory was almost completed. It is expected to be finished and occupied early in the new year.

10. Accommodation by the extension of the Ministry of Works Office at Fort Wellington was completed in the latter part of the year and a GUYWA Office under a Superintendent of Works was opened for the West Berbice District.

PUBLIC RELATIONS

11. During the year the first step towards the establishment of a Public Relations Section was taken by the appointment of Comrade H. Josiah as Public Relations Officer with effect from May, 1976. Shortly after, he had the benefit of the advice of the UNDP short-term Consultant whose report on a Public Relations Programme for GUYWA has formed the basis of his Public Relations Programme.

12. In his few months of activity the Public Relations Officer has undertaken his duties with verve and expertise. He has had more than fifty press releases on the function and development of GUYWA channelled to the media through the Ministry of Information.

13. A special newspaper supplement was published at the end of September to mark GUYWA'S third anniversary. Promotional advertising by GUYWA was also used to support newspaper supplements for Guyana Gajraj, Guyana Telecommunications Corporation, Co-op. Week, and the First Biennial Congress of the People's National Congress.

14. At the request of the Broadcasts to Schools Unit of the Ministry of Education, the Public Relations Officer prepared the first of a series of 12-minute radio talks on Pure Water Supplies; talks on water problems were also given on Radio Programmes "Development and You", "Nation on the Move" and "Party Line". Two news letters were issued during the year covering activities of GUYWA Personnel, and plans were in preparation for more frequent issues as the Public Relations Department expands. The Public Relations Officer attended monthly meetings of Regional Ministers' Administrative Committees and was continually in touch with Chairmen, Councillors and staff of Local Authorities affected by GUYWA'S activities.

FINANCE

15. The financial position of the Authority for the period under review is as set out in the accompanying audit statement.

16. The Commercial Division sent out 36,299 bills to customers for the supply of water during the year. Unfortunately, about 22,000 or 60% of these bills were unpaid at the end of the year. Arrangements were completed, however, for customers to pay their bills at relevant Post Offices and Postal Agencies and it is anticipated that this additional convenience would stimulate increased revenue collection.

17. Because of the urgent need to increase supplies of water throughout the country the Authority was granted an additional provision of \$4,492,071.00 to acquire new machinery and equipment.

CAPITAL WORKS (NEW AND DEVELOPMENTAL)

18. The usual programmes of development, rehabilitation and maintenance continued throughout the year.

Rehabilitation and maintenance works included -

- the location and repairs of leaks in the pipeline network and service connections;
- the flushing of dead-ends in the distribution systems;
- the cleaning of existing pipelines;
- cleaning and repainting of the various facilities at the pumping stations.

19. Pressure tests were carried out throughout the districts to determine the efficiency and adequacy of the various distribution systems.

20. The following major special projects were undertaken and/or completed during the years:-

- a) Installation of a booster pump at storage reservoir at Wismar Multilateral School.
- b) 10,000 feet 4 inch and 6 inch PVC pipelines were laid and a 20,000 gallon Braithwaite overhead tank erected for the National Service Centre at Papaya, North West District.
- c) A 24,000 gallons Braithwaite overhead tank dismantled from its site at Lusignan was transported and erected at Konawaruk, Mazaruni/Potaro District.
- d) The construction of a reservoir and a pump station, the erection of an overhead storage tank and the laying of pipelines were undertaken for the Ministry of Agriculture at its Kuru-Kururu/Newtown settlement on the Soesdyke/Linden Highway.
- e) Drilling of a Well at Festival City for the Georgetown City Council.

21. Major development works in the Interior were centred mainly around the Mosororo/Barabina area in the North West District. These two reservoirs to tap the springs at Wainina and Barabina, three pump stations, a storage tank and the laying of 19,000 ft. of pipelines were 90% completed by the end of the year. Elsewhere in the Interior, maintenance works continued and design plans were completed for major improvements to the water supply systems at Mahdia, Lethem, Bartica and Matthews Ridge. It is hoped that these works will be done in 1976.

22. The average daily amount of water supplied during the year by the Authority's facilities was 25.385 million gallons or a total of 9,265,535 thousand gallons for the year. With the exception of the surface water supply systems at Wismar, Bartica and Mosororo/Barabina, the Authority's water supply was produced by wells.

The areas and populations served, etc., may be seen in the following table:-

DISTRICT	ESTIMATED POPULATION	NUMBER OF PUMP STATIONS
East Berbice	88,000	30
West Berbice	45,500	13
East Demerara	146,000	25
West Demerara	43,500	10
Essequibo & Essequibo Islands	82,000	12
Linden	25,000	2
Bartica	8,000	1
North West District		1
Lethem		2

PRIORITY AREA A - SOESDYKE TO BUXTON

23. Construction work on the Caledonia Water Production facility site commenced in August, and the ground storage tank erected by the Chicago Bridge and Iron Co., was completed in December.

24. At the end of the year under review 30% of the Project was completed with the following breakdown of progress:

a) clear, grub and excavate site	100%	completed
b) Sandfill	80%	"
c) Drain, Layer and asphalt base to ground storage tank	100%	"
d) Access road	50%	"
e) Ringfooting to ground	100%	"
f) Erect ground storage tank	100%	"
g) Embankment	60%	"

25. The defects liability period under the original contract for the Project expired in December, 1974 and the retention sum was paid to the Contractors, Amelco Western, in February, 1975.

26. Work on the Georgetown Improvement Well at Festival City, Ruimveldt commenced in April, 1975, was completed in July, 1975. Materials for this well were financed by U.S.A.I.D. During the year, contracts were entered into in accordance with the Loan Agreement with the following U.S. Firms for the supplies indicated below of materials required for the Project.

FIRM	ITEM	CONTRACT PRICE US
Chicago Bridge & Iron Co.,	337,000 U.S. Gallons ground storage tank (including installation)	120,435
General Filter Co.	Two (2) Filter Units	109,299
Modern Welding Co.	20'0" O.D. x 23'0" high contract tank	23,400
Sporling	Flow metering equipment	5,466
Worthing Pump Corporation	Water pumping equipment four (4) booster pumps, one (1) deep-well turbine	33,770

FIRM	ITEM	CONTRACT PRICE US
La Prest Co.,	Two (2) Chemical feed pumps	3,904
Powell Electrical Manufacturing Co.,	Motor Control panel and lighting panel	32,116
Electro Motion Co.	Engine Generator set	18,027
Mixing Equipment Co.	Two (2) chemical mixers	1,914
Fischer Porter Co.	Chlorination equipment	9,917

PRIORITY AREA 1B LINDEN

27. Pre-design and design work on the Linden water supply project, which should have been completed in 1974, continued to suffer delay for various reasons. This project, a joint one by the Canadian International Development Agency and the Government of Guyana had as its design consultants, the Canadian firm of Duncan Hopper Associates, in association with a Guyanese firm of Aubrey Barker Associates.

PRIORITY AREAS 1A AND 2: BUXTON, EAST COAST DEMERARA -
JOHNS, CORENTYNE.

28. The field work on feasibility studies in these two priority areas continued into the first months of the year. The field staff of the consultants Gilbert Associates Inc., of the U.S.A. returned to the United States at the end of April to complete their study and commence compilation of their report.

29. The Consultants' project manager also paid several visits to the country during the year for further discussions with the GUYWA Management and with their local associate consultants, Aubrey Barker Associates.

30. The Report on the studies was finally submitted to Management in December 1975 and is being studied for implementation or otherwise.

OTHER DEVELOPMENT WORKS

31. In addition to GUYWA's normal capital works, the Corporation undertook the following projects in connection with the Government's Development Programme:

a) Well-Drilling

1 Well	Claybrick Factory No. 2 Cabal W.B.D.	502 ft.
1 Well	Good Hope, Essequibo	238 ft.
1 Well	Charity, Pomeroon	298 ft.
7 Wells-	(5 observation and 2 production Wismar, Linden Demerara River	916 ft.
2 Wells -	Kimbria (1 of 49 ft. and 1 of 190 ft.)	239 ft.
1 Well	Wismar-Rockstone road	175 ft.
1 Well	Festival City, North Ruimveldt	1,409 ft.
6 Wells-	Rupununi District	255 ft.
1 Well	Karasabai, Rupununi	58 ft.

b) WORK OTHER THAN WELL-DRILLING

i) DEVELOPMENT

LOCATION	WORKS COMPLETED
<u>East Berbice</u>	
Crabwood Creek	9,320 of 6" P.V.C. pipes installed.
Rose Hall	1,140' of 6" and 2,000' of 4" P.V.C. pipes installed.
Manchester	2500' of 4" P.V.C. pipes installed.
Liverpool	1,4000 ft. of 4" P.V.C. pipes installed
No. 2 and Seawell	2,430' of 6" and 2,230' of 4" P.V.C. pipes installed.
Islington	1,800' of 4" P.V.C. pipes installed.
Zambia	6,400' of P.V.C. pipes installed.
Nos. 35 and 36	900' of 6" and 120' of 4" P.V.C. pipes installed.
Kilmarnock to Phillip	120' of 6" and 120' of 2" P.V.C. pipes installed.
Sisters	1,780' of 4" P.V.C. pipes installed
Fyrish	540' of 6" pipes installed
Approximately 95% of the ditching and back-filling was done by self-help in the areas abovenamed.	
<u>Essequibo Coast and Islands:</u>	
Huis T'Dierien	1,400' of 6" P.V.C. pipes laid to connect Huis T'Dierien system with Onderneeming system.
Abramzuil to Zorg-en-Vlyght	Ditching, back-filling and laying of 3,140' of 4" P.V.C. pipes as extension works.
Anna Regina	i. New Flow-meter installed at Multilateral School's Treatment Plant. ii. Three buildings in Government Compound connected to Multilateral School's Treatment Plant. iii. 160' of 4" P.V.C. pipes used for diversion to Police Station.
Danielstown to Sparta	1,500' of 4" P.V.C. pipes laid to Sparta Government School as extension works.
Lime	2,080' of 4" P.V.C. pipe laid to Lime Housing Scheme as extension works.
Dartmouth	3,700' of 4" P.V.C. pipe laid as extension works.
Bounty Hall	7,920' of 6" and 500' of 4" P.V.C. pipe laid as extension works.

LOCATION	WORKS COMPLETED
<u>East Demerara:</u>	
Mahaica	2,832' of 4" Pipe laid (with self-help ditching).
Hand-on-Veldt	620' of 4" pipe laid (self-help ditching).
Cane Grove	6,000' of 4" pipe laid
Cove & John	620' of 4" pipe laid (self-help ditching).
Logwood	1,025' of 4" pipe laid.
Melanie Damishaha	10,870' of 6" and 125' of 4" pipe laid.
Lusignan	460' of 6" and 200' of 4" pipe laid (ditching by Local Authority, GUYWA and self-help).
Vigilance-Buxton	1,260' of 4" pipe laid (ditching by self-help).
<u>Two Friends:</u>	
Mon Repos (Lab. Compound)	164' of 4" pipe laid.
Mon Repos (School Farm)	383' of 2" pipe laid
Community High School Farm, Beterverwagting.	680' of 4" pipe laid (ditching supervised by GUYWA).
Triumph (Ogle Street)	1,200' of 4" pipe laid (ditching by self-help).
Vryheid's Lust	1,169' of 6" and 1,360' of 4" pipe laid.
Better Hope	1,620' of 4" pipe laid (ditching by self-help)
Shamrock Gardens	750' of 4" pipe laid (ditching done by self-help).
Khan's Park	500' of 4" pipe laid (ditching done by self-help).
Cummings Lodge	6,232' of 4" pipe laid (works by GUYWA for GUYHCC).
Rona's Canefield Drive, East Bank Demerara.	800' of 4" pipe laid (ditching by self-help)
Mocha	624' of 6" and 26' of 4" pipe laid (ditching by self-help).
Grove	5000' of 4" pipe laid.
Friendship (E.B.D.)	1,290' of 4" pipe laid (ditching done by self-help).
<u>LINDEN:</u>	
Half Mile	2,060' of 6" P.V.C. and 500' of 3" AC pipe laid.
Half Mile	Five (5) stand pipes installed
One Mile	4,345' of 6" and 1,700' of 4" P.V.C. pipe laid. Six (6) stand pipes installed.
Canvas City	3,750' of 6" and 1,850' of 4" P.V.C. pipe laid. Seven (7) stand pipes installed.
New Jersey Hill	1,850' of 4" P.V.C. pipe laid. Two (2) stand pipes installed.

LOCATION	WORKS COMPLETED
Blue Berry Hill	6,800' of 4" P.V.C. and 45' of 4" AC pipes laid. Ten stand pipes installed.
Second Alley	300' of 4" P.V.C. pipe laid.
<u>All ditching was done by self-help</u>	
Victory Valley	Three (3) pump beds cast.
Blue Berry Hill	Pressure Tank base cast. Wooden 10' x 8' housing for air compressor built.
Multilateral School	Booster Pump installed at storage pump reservoir.
<u>West Demerara:</u>	
Hubabu, Canal No. 2 W.B.D.	4,200 of 6" pipeline laid.
Canal No. 1	" " " 1,500' of 4" " "
Niames	" " " 3,000' of 4" " "
L'Oratoire	" Submersible pipe installed in well.
La Grange	" 1,260' of 4" pipeline laid.
Ruimzeight	W.C.D. 5,000' of 4" " "
Fellowship	" 1,600' of 4" " "
Matan-Meer-Zorg	" 3,000' of 6" and 1,000' of 4" pipeline laid.
Vergenoegen	" 16' x 16" concrete pump station constructed and deep well turbine pump with diesel engine installed at new well.

MAINTENANCE WORKS

Maintenance works on existing facilities were performed throughout 1975 as hereunder:-

East Berbice

Crabwood Creek	An old 3" Siegmund pump driver by old Lister engine was replaced by a new 4" Siegmund pump, driver by a new Lister Engine.
Springlande	Flourescent lights installed at pump Station.

LOCATION	WORKS COMPLETED
No. 73	Complete overhaul of 8" diameter 4" stage Deming pump."
No. 63	Flourescent lights installed at pump station.
Eversham (Palmyra, Rose Hall)	Surface pumps installed at reactivated wells to replace deep-well turbine pumps which were discharging muddy water.
Cromarty	Old 2½" Siegmund pump with PD 2 engine replaced by 3" Siegmund pump and new Lister engine.
Whim	A stable bed was constructed and a new Detroit diesel engine installed to drive a Deming turbine pump.
Gibraltar	A stable bed constructed and the PD3 Engine from No. 63 installed to replace unserviceable PJ4 engine.
Fyrish	A stable bed constructed and a new 4-cylinder Ford Engine installed to drive 8" diameter deep-well Siegmund pump.
Cumberland	A stable bed constructed and a new 6-cylinder Ford Engine installed to drive the 6-stage 8" deep well Siegmund pump.
Dverwinning	A stable bed constructed and a reconditioned 2-cylinder Lister engine installed to drive the 2" Siegmund pump.

At Rosehall installation of an 80 h.p. electric motor is in progress. Completion of this project will make 24 hour-per-day pumping possible.

Essequibo Coast & Islands

Aurora	Old galvanised suction pipes replaced with new ones.
Huis T'Dierien	Old galvanised suction pipes replaced with new ones.
Onderneeming	(i) Aerator troughs filtering chambers and laterals in rapid sand filter cleaned. (ii) New 25 h.p. electric motor and Siegmund pump installed.
Cullen	Old galvanised suction pipes replaced with new ones.
Queenstown	(i) Old galvanised suction pipes replaced with new ones. (ii) Elevated storage tank cleaned out and put back into operation.
Anna Regina	Old galvanised suction pipes replaced with new ones.
Danielstown	27 lengths 4" Everite pipe excavated from Public Road to assist in effecting repairs in tract.

Bounty Hall to Better Success	Old galvanised suction pipes replaced with new ones.
Enterprise, Leguan	Repairs carried out on turbine pump and engine.
Richmond Hill, Leguan	Old galvanised suction pipes replaced by new ones.
Ridge and Maria's Pleasure Wakennam	Old force and lift pumps replaced with new ones - one at Ridge and two at Maria's Pleasure.
Hogg Island	Force and lift pump replaced with new one. A new 4' x 4' x 6" sanitary base was constructed.
Liberty & Hackney, Pomeroun	Two new force and lift pumps installed to replace old ones.
Hackney, Liberty, Malborough and Martindale, Pomeroun	New 4' x 4' x 6" sanitary bases constructed.
Capoey Lake ..	Old force and lift pump replaced with new one
 <u>East Demerara:</u> =====	
Unity/Lancaster	Submersible Plenger pump installed. Result (a) increased pumping to 24 hours. (b) Better flow and pressure system.
Supply	Every source changed from diesel to electricity. Twenty-four-hour pumping increased flow and pressure in the system.
Anns Grove	Surface pump put into operation. Residents now able to get water at yard level in place of water tender supply.
Paradise	Pumping increased 24 hours per day.
Plaisance/Sparendam	10-8 reducer cast. 10" main at Plaisance connected to 8" main laid in 1974. Improved pressure at Shamrock Gardens/Cummings Lodge.
Agricola	Well-re-activated. Afforded increased pressure in formerly low-pressure area.
Timehri (Wells Nos. 2 and 3)	New D.W.T. pumps installed. Increased flow permits 24-hour supply as against previous arrangement for supply at flight time only.

UNITED NATIONS DEVELOPMENT PROGRAMME
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32. The UNDP Project entitled "Development of a Potable Water Supply, Sanitary Sewerage and Storm Drainage", concluded its work with GUYWA in December, 1975.

33. During the 36-month life of the project the agency undertook to assist in feasibility studies with the following objectives:

1. To stimulate and re-enforce planning on a long term basis for national programmes in community water supplies, waste water disposal and storm drainage facilities in urban and rural sectors in anticipation of foreseen domestic and industrial development.

2. Achievement of an adequate institutional organisation for the management of national programmes of water supply and waste disposal.
3. Improvement of the professional competence of the national staff in the fields of water supply, sewerage and sewerage treatment, utility management and administration.

34. The programme required the employment of a firm of consultants, Engineering Services International, who undertook studies into storm drainage, sewerage needs and waste-water disposal for Georgetown, Linden and New Amsterdam.

35. The project included, also, the provision of short-term consultants to assist in the areas of operation named hereunder:

Domestic water supply monitoring and establishment of Laboratory.

2. Billing, Consumer Accounting and Rate Collections.
3. Regulations for relations between a Water Utility and its customers.
4. Operations and Maintenance.
5. Personnel Administration.
6. Engineering Records and Engineering Standard Practices.
7. Accounting and Budgeting Systems.
8. Establishment of a Training Unit and Training Programme Development.
9. Laboratory Operations.
10. Supply and Purchasing Systems
11. Internal Auditing
12. Public Relations Programme

36. During the same period, several employees of various categories were sponsored for fellowships in connection with the work they do or are expected to perform in the near future.

37. Because of time and other constraints the Consultants (E.S.I.) did not complete the work on storm drainage but it is understood that their studies have been released for use by the agencies now dealing with the Georgetown storm drainage project.

38. The project (as agreed upon) came to a close in December 1975 and the reports are expected to be received early in 1976.

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CDE. SEERAM PRASHAD, M.P.,
Chairman

.....
CDE. RONALD RAJNARINE
Deputy Chairman

.....
CDE. (DR.) DONALD RAWANA,
Member

.....
CDE. LUCILLE COX-DAVID
Member

.....
CDE. GEORGE MENTUS
Member

.....
CDE. SYDNEY C.H. D'ORNELLAS, A.A.
Member

.....
CDE. CEPHAS GALSGOW
Member

.....
CDE. GARY CLARKE
Member

A D D E N D U M

The appointment of the following persons as members of the Board ended on 30th September, 1975:-

Comrade S. Sukhu, M.P., M.S.

Comrade C. Corbin

and in their places the following new members were appointed, with effect from 1st October, 1976:-

Comrade Lucille Cox-David

Comrade Cephas Glasgow

The appointment of Cde. E.L. Mayers as a Member ended on 30th September, 1977 and Cde. Gary Clarke was appointed in his place.

C
D
P
Y

THOMAS, STOLL, DIAS & CO.
Accountants

5 America Street,
Georgetown, Guyana.

The Chairman & Board of Directors,
Guyana Water Authority,
D'Urban Park,
Georgetown.

10th August, 1976.

Dear Sirs,

REPORT ON THE ACCOUNTS FOR THE PERIOD
ENDED 31st DECEMBER, 1975.

We have recently concluded our audit of the Authority's Accounts for the year ended 31st December, 1975 and have pleasure in submitting our report thereon.

In accordance with our normal practice, we set out below certain matters concerning internal control and accounting practices of the Corporation which came to our attention during our recent audit and our recommendations for improvement.

You will appreciate that our normal audit procedures are designed primarily to enable us to form an opinion on the accounts as a whole and therefore do not necessarily bring to light at each audit all the weaknesses in internal control or accounting practices which a special investigation might reveal.

Our report will deal with the following matters:-

1. Opening Balances
2. Cash and Bank Balances
3. Revenue
4. Payments
5. Payrolls
6. Stock and Stores
7. Purchases
8. Sundry Debtors and Creditors
9. Fixed Assets
10. General

OPENING BALANCES:

We checked the final balances from the previous balance sheet to the Opening entries in the Authority's books at 1st January, 1975 and found these to be correct.

2. CASH AND BANK BALANCES:

A cash count was carried out on the last working day of the financial period. The cash counted was found to be in agreement with the records.

All deposits were traced from the bank deposit book to the entries in the cash book and bank statement respectively and two reconciliations were prepared which agreed with the bank balances of the Authority.

Certificates confirming the balances held at the Guyana National Co-operative Bank were obtained.

PETTY CASH:
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Advance vouchers were compared with the Advance Register. We found, especially at the branches that advances given since March, 1975 to defray expenses for the Authority were not cleared, as late as November, 1975. We feel that this is a breakdown in the present system.

We recommend that checks be made regularly on all advances; and valid documents should be submitted as early as possible to support amounts expended so that the advances will be cleared.

3. REVENUE:
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We checked receipts for several months. Receipts were written for:-

- a) Water Rates
- b) Statements of receipts received by branches
- c) Connection and re-connection charges
- d) Repairs
- e) Deposits

These receipts were traced to the Receipt Cash Book. The Cash Book summaries were checked and posted to the accounts in the General Ledger. Receipts for water rates were compared with the entries in the personal accounts in the Water Rates Register.

These were all found to be correct.

4. PAYMENTS:
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Invoices and their supporting documents for the period tested were examined. These were compared with Accounts Payable Vouchers. Paid charges were tested for numerical sequence, signatures and details. These were traced to the Accounts Payable Ledger.

We observed in some instances that:-

- a) Several Accounts Payable Vouchers were missing;
- b) Accounts Payable Vouchers were not always properly authorised by two senior officers.
- c) Wages and salaries sheets to support Accounts Payable Vouchers were missing and were not produced for our examination.
- d) Accounts Payable Vouchers were not always entered in sequence in the Accounts Payable Ledger.
- e) We discovered an overpayment of twenty dollars (\$20.00) travelling expenses.

We recommend:-

- a) That Accounts Payable Vouchers should be kept at all times in their respective files, and that should the need arise to remove vouchers from the files, the vouchers should be returned to the voucher files immediately after the required information has been extracted;
- b) That Accounts Payable Vouchers at all times should be properly authorised by two senior officers;
- c) That wages and salaries sheets which are supporting documents for accounts for Accounts Payable Vouchers, should be firmly bound to the Accounts Payable Vouchers or that the above mentioned sheets should be filed in order of date with adequate reference to the Accounts Payable Vouchers which should be filed so that they could be easily and readily found.

- d) That every effort should be made to record in sequence the prenumbered Accounts Payable Vouchers in the Accounts Payable Ledger.
- e) That after the preparation of Accounts Payable Vouchers, an independent person should recheck it for accuracy before payment is made. This will avoid a weakness in the internal control.

5. PAYROLL:

Evidence of employment and other information in respect of rates of pay allowances etc., were obtained from the Personnel Department. These were compared with the payroll for the purpose of verifying that all employees listed were bona fide.

Employees' time sheets and overtime sheets were checked against the relevant earnings sheets. Deductions were calculated and the total net amounts were checked to the General Ledger. Allowances paid to employees were also checked and traced to the Accounts Payable Ledger.

An observation of the payout of wages to the workers in Georgetown and East Bank was carried out by us and we are satisfied as to the security and methods of paying employees.

In the course of our audit we observed:-

- a) That some wages and salaries sheets required by us for examination with numbered vouchers were missing, that is to say they were not produced to us for examination.
- b) That National Insurance stamps were not bought and affixed to N.I.S. Cards since August, 1975;
- c) Other short comings which were mentioned in our letter dated 26th March, 1976.

We recommend:-

- a) That every effort be made to improve the filing system
- b) That National Insurance stamps be bought and placed in named envelopes for the employees who do not have N.I.S. Cards
- c) That measures be taken to correct the shortcomings mentioned as soon as possible.

6. STOCK AND STORES:

Goods Receiving Notes and Internal Stores Requisitions were checked and traced to bin cards and the Maintenance Ledger respectively. We found that bin cards balances did not always correspond with the Maintenance Ledger balances.

We also discovered that stock of stores issued to the Sub-stores at Vreed-en-Hoop, Suddie and New Amsterdam were charged out directly against respective expense heads, but that the stores were not immediately consumed. As a result the expenses shown in the final accounts have been overstated for the relevant period.

We recommend that:-

- a) Either the practice of charging stores directly to expense accounts should be used only when stores are immediately put into use, or
- b) where this is not strictly adhered to a physical inventory be taken at the end of the financial year and the value of stock of stores charged out but not utilised, should be adjusted back against the relevant expense account so that the final accounts would be more nearly correct and accurate, comparing one period with another.

New Amsterdam - Stocks of Stores received from the Ministry of
Works & Housing at Conje, Barbice.

We checked Stores Return Vouchers to:-

- a) Stock of Stores received
- b) Bin cards, and
- c) Stores Ledger, respectively

Items were selected at random and a physical check was carried out.

We found that:-

- a) Stock of Stores received from the Ministry were not all sorted.
- b), the bin cards carried no indication as to location of the items and as a result items could not be found;
- c) these stocks were not valued;
- d) issues were made without the use of Internal Stores Requisitions;
- e) the costing out of these items was done in Georgetown using current values for similar items and past experience for others.

Stock Take at Georgetown

An observation was made by us of the physical inventory carried out on 31st December, 1975 at the stores at Kingston, Georgetown.

The procedure adopted was that several groups consisting of accounts clerks and stores attendants were engaged in the stock-take. Two persons were assigned to one group. Most groups were not familiar with the stores items. The store was divided into sections by which means different groups were able to carry out the inventory for different sections.

Items were counted by one person identifying the articles and indicating the amounts while the other recorded the information on a numbered foolscap sheet. The completed sheets were handed to an accounts clerk who then transcribed the information on to another numbered foolscap sheet. These were then submitted for I.B.M. completion of the final stock sheets. We feel that each group involved in stock taking should have a member or members who could locate and identify goods as easily as is possible. The completed sheets have not to date been made available to us for examination as the pricing of stock is incomplete.

We would recommend that the finalisation of the stock sheets be expedited to make them available for inspection earlier than at present.

Consequent on our not having and inspecting the final stock sheets, the General Ledger balance of stocks as at the end of the financial year was used in the Accounts.

7. Local Purchase Orders for several months were checked against Suppliers' Invoices to ensure that goods ordered were properly authorised. These were traced to the Accounts Payable Ledger. We found that purchases for a specified month were entered in the Accounts Payable Ledger in the month purchased and that when payment was made later the Local Purchase Orders and Suppliers' Invoices were attached to the Accounts Payable Vouchers, which were filed in the records in the month of payment. But the entry for payment in the Accounts Payable Ledger was made in the month in which the purchase was made. e.g. a payment in August in respect of purchase in May, while the Local Purchase Orders and Suppliers' Invoices were filed in August, was entered in the Accounts Payable Ledger in May.

8. Sundry Debtors and Creditors

a) Sundry Debtors

We checked balances on list against the balances in the memorandum book and the list total was also traced to the control account in the General Ledger.

We found that loans and salary advances to employees, advances to meet expenses etc are recorded in the memorandum book. Refunds and advance expenditure are later recorded against the respective entries in the memorandum book. At the end of the financial year a list was prepared of all outstanding amounts. The list did not provide sufficient information to reconcile each advance with the memorandum book. The result was that in order to verify the accuracy of the list, we had to go through all the entries in the memorandum book. We wasted a lot of time on this exercise before we were able to verify the listing.

We recommend subsidiary ledgers be introduced; in this ledger the accounts division would reconcile each debtor separately and be able to get information on the amount owed by each debtor quickly. A monthly reconciliation of the debtors subsidiary ledger balances with the control will enable the accounts division to check the accuracy of their postings.

b) Sundry Creditors

We checked balances on list to Local Purchase Orders and Suppliers' Invoices and the total list to the total of the General Ledger. We discovered that records kept could not readily give the balance of a specified creditor.

We recommend therefore that a Creditors' Ledger be introduced which would also greatly improve the present system.

9. Fixed Assets

We received a schedule of assets with details of acquisitions during the year. We checked all supporting documents for the validity of such acquisitions. We checked depreciation rates and calculations for their accuracy.

No Assets Register is kept by the Authority and we strongly recommend the preparation of one to keep an accurate account of all assets. Seeing that the Fixed Assets consist of more than three quarters of the Authority's Assets, we strongly recommend that periodically, usually yearly, an actual physical inventory provide a means for making certain that the assets recorded in the accounts actually exist and that existing assets are recorded. It also aids in verifying that the assets are in good repair, provides an opportunity for reviewing the estimated life for depreciation purposes and would help the Authority to anticipate new equipment purchases required and facilitate orderly planning for the disposal of surplus, out moded or fully depreciated equipment.

10. General

a) We found under the heading "Non-Operating Expenses" an amount of \$14,111.80 being cost of sales materials. This as explained by your Senior Accountant Mr. French, was sales made to Guyana Defence Force.

GUYANA WATER AUTHORITY

NOTES OF THE ACCOUNTS
FOR THE YEAR ENDED 31ST DECEMBER, 1975

NOTE 1

Organisational costs amortisable represent cost and installation of P.A.B.X. system and is being written off over five (5) years with effect prior 1st January, 1974.

NOTE 2

No provision for Property Tax has been raised in the accounts since we have been informed that the Corporation will be exempt from all Taxation.

NOTE 3

A U.S.A.I.D. loan of US\$5,000,000 has been made for the construction of water supplies on the outskirts of Georgetown in the East Coast and East Bank Demerara areas. The borrower is the Government of Guyana and such sums as are necessary for the purchase of Fixed Assets are advanced to GUYWA and when required. Since nothing is known at this stage of any possible repayment to the Government this amount is not considered as a long term liability of GUYWA at 31/12/75.

NOTE 4

An amount of \$1,320.00 deposited by the Ministry of Works on 26th November, 1973 as a deposit on twelve (12) cylinders at one hundred and ten dollars each (\$110.00) with the Demerara Oxygen Company Limited (DOCOL) has not been included in the accounts.

NOTE 5

The Authority has a contingent liability of \$19,500.00 representing loans guaranteed at various banks, these were obtained by staff of the Authority for the purchase of cards to assist such staff in the execution of their duties.

NOTE 6

Included in the total of accounts receivable other is a balance of \$2,612,886.46 on 'Foreign Purchasing Suspense' account.

This balance represents the value of foreign orders placed during 1975 which remained unfulfilled at 31/12/75.

GUYANA WATER AUTHORITY

BALANCE SHEET

AS AT 31ST DECEMBER, 1975

	<u>1976</u>	<u>1974</u>
Fixed Assets After Depreciation	17,431,861.91	16,393,735.55
<u>CONSTRUCTION WORK IN PROGRESS</u> For Authority's Benefit & Miscellaneous	1,426,586.70	40,969.05
Water Supply Improvement Project (Stores Supplied)	1,426,586.70	<u>20,125.76</u>
<u>RECEIVABLES</u>		
Contractors/Suppliers etc.	463,156.06	105,411.52
Deposits	17,093.99	6,735.00
Claims	5,357.95	3,494.36
Employses Account	21,203.08	2,244.29
Accounts Receivable (Water Rates)	932,889.78	
Suspense Account	2,612,886.46	
Miscellaneous	<u>14,847.73</u>	<u>1,585.19</u>
Stock	1,813,050.33	1,315,426.32
Organisational Costs Amortisable	2,463.50	3,285.00
<u>FUNDS</u>		
Imprest/Amount Advanced	5,257.39	1,895.23
Cash - G.N.C.B.	1,145,764.52	75,272.34
Special Deposits	1,500.00	
	<u>1,152,521.91</u>	<u>77,167.57</u>
	<u>25,893,919.40</u>	<u>18,050,179.61</u>
<u>FUNDED BY</u>		
Initial Capitalisation	19,746,320.77	19,692,320.77
Other Capital Grant by Government	8,528,741.86	1,385,998.13
Property Transferred from other Agencies	<u>1,745,065.94</u>	<u>1,540,736.54</u>
	30,020,128.57	22,619,055.44
Less Deficit	<u>4,937,577.47</u>	<u>5,072,120.61</u>
	25,082,551.10	17,546,934.83
Deposits	2,831.32	1,896.32
Payroll Deductions Payable	100,076.61	46,716.74
Creditors/Accrued Expenses	<u>708,460.37</u>	<u>454,631.72</u>
	25,893,919.40	<u>18,050,179.61</u>

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13th October, 1976

REPORT OF THE AUDITORS TO THE MEMBERS OF THE
GUYANA WATER AUTHORITY

We have examined the accounts of the Guyana Water Authority which are in agreement with the books of the Corporation.

We have been unable to verify the valuation of stock as appearing in the Balance Sheet because the stock sheets were not completed and were not made available to us.

With this specific reservation, we report that we have obtained all the information and explanations we have required.

In our opinion the Balance Sheet at 31st December, 1975 and the Operating Account for the year ended on that date give respectively a true and fair view of the state of the Corporation's affairs at 31st December, 1975 and of the surplus for the year then ended in accordance with generally accepted accounting principles applied on a consistent basis.

GUYANA WATER AUTHORITY
OPERATING ACCOUNT
FOR THE YEAR ENDED 31ST DECEMBER, 1975

Subsidy		3,730,000.00		2,500,000.00	
Revenue		<u>1,480,593.43</u>		<u>300,637.39</u>	
			5,210,593.43		2,800,637.39
<u>EXPENDITURE</u>					
Wells	827,846.09			869,816.75	
Transmission System				14,706.88	
Water Treatment	464,915.21			455,297.71	
Distribution System	2,009,952.33			1,635,373.88	
Timehri Sewerage System	<u>10,200.96</u>			<u>161.85</u>	
		3,312,914.59			2,775,357.07
<u>DEPARTMENTS</u>					
Customer install Repair Expenses	40,632.66			36,429.94	
Engineering	59,316.50			43,219.47	
Water Resources	16,243.29			2,824.58	
General/Administrative including Billing and Collecting	<u>761,974.39</u>			<u>538,049.40</u>	
		878,166.84		<u>538,049.40</u>	620,523.39
Loss on Sale of Fixed Assets				350.35	
Non Operating Expenses	28,824.66	28,824.66		1,183.07	1,533.42
Depreciation & Amortisation		<u>748,715.50</u>	<u>4,968,621.59</u>		<u>4,475,344.12</u>
Expenditure relating to prior year			<u>241,971.84</u>		<u>7,872,758.00</u>
			<u>107,428.70</u>		<u>(\$5,072,120.61)</u>
Balance being Surplus (Deficit) carried forward			134,543.14		(\$5,072,120.61)
Balance brought forward from previous year			<u>(5,072,120.61)</u>		
Balance carried forward			<u><u>34,937,577.47</u></u>		<u><u>(\$5,072,120.61)</u></u>