

I/22/55

UTI/WAT/2#4

C.S.O.

(Formerly)

SUBJECT:

Vol I destroyed
in Secretariat file

STANLEY WATER SUPPLY

CONNECTED FILES.

NUMBER AND YEAR.

- 30/26 House Connections, Ordinance No. 1 of 1927.
- 31/26 Draft Rules relating to procedure to be followed in dealing with applications.
- 0191/A Stanley Water Supply, House Connections, Ordinance No. 1 of 1927.
- 0491/08. Caretaker of Stanley Water Filtration Plant.
- I/22/58 Filtration Plant (opened 18/3/58)

The Falkland Islands Company, Limited.

(INCORPORATED BY ROYAL CHARTER 1851.)

REGISTERED 1902.

AGENTS FOR LLOYDS.

TELEGRAMS "FLEETWING PORT STANLEY" VIA RADIO.

Stanley,

14th October 1955

The Honourable the Colonial Secretary,
STANLEY.

Sir,

Water supply - Your ref: 0491.

165 in
Vol. I.
We have for acknowledgment your letter dated 5th inst. regarding the present drought and consequent scarcity of water in the Stanley Reservoir.

X | You have been misinformed in the matter of drinking water for R.M.S. "FITZROY" which is invariably taken in Montevideo or Punta Arenas, never in Stanley.

Inability to supply peat-water for boilers and domestic use until the drought breaks gives rise to a situation which is more serious than possibly you imagine. "FITZROY" cannot, like a Warship for example, distil sea-water in large quantities and to allow sea-water into the boilers would soon ruin them.

There are only two ports in the Colony outside of Stanley where water can be taken, namely Port Howard and Port San Carlos, and in both cases the quantity available is likely to be influenced by the drought.

Shortage of water in Stanley is by no means entirely due to weather conditions. The major contributing factor is the shocking state of the main and subsidiary pipelines which should have been rectified years ago. Their renewal was at the top of the priority list in 1951 since when we have had Mr. Pape's survey but nothing forthcoming in the way of materials for the job until late 1955.

Y | In conclusion we must mention that the water escaping from a burst pipe in the Moody Brook line last week-end would have been more than sufficient for our average monthly needs.

I am, Sir,
Your obedient servant,

A.R. Darwin.
MANAGER.

Reply at 169.

168
S. P. W.

Re. report the information you have
about the supplying of drinking water for the
"Higony" - x refers.

was water lost as mentioned at Y?

S. 187x.

HES

I have seen the Town Clerk about this and he informs
me the Mr. Wilkinson of the FIC always asks for
drinking water.

I travelled the Pipe line in Y yesterday the 19th with
the water shut off and no leaks were found.

A. G. H.
20/10.

Can supply 10 tons - let S.P.W. know.

11
169
22nd October, 55.

Sir,

I am directed to refer to your letter of 14th October, 1955, on the subject of water for R.M.S. "Fitzroy" and to our recent conversation regarding this matter.

2. Although the drinking water supplied to the "Fitzroy" may not be used as such, I can assure you that Mr. Wilkinson of your Shipping Department always asks for drinking water and this is supplied on demand. Up to ten tons of water can be made available for the "Fitzroy's" next outward voyage and if this is required I am to request that your Shipping Department will make the necessary arrangements with the Superintendent of Works, Public Works Department.

3. I am to say that the laying of the new water main from Moony Brook to the Town Reservoir is now being undertaken as a matter of urgency and it is hoped to complete this work in ten to twelve weeks.

/4.

Manager,
Palkland Islands Company, Limited,
SEANLBY.

170

4. As regards the final paragraph of your letter under reference, a limited amount of water escaped from the Moor Brook line on Saturday, 8th October, but the leak was repaired within a short time. The quantity of water lost was negligible.

I am,

Sir,

Your obedient servant,

(Sgd) S. G. Trees

ACTING COLONIAL SECRETARY.

Copy to Supt. of Works, Public Works Department.

PA

Communications to be addressed to
THE CROWN AGENTS
IN REPLY TO THE CROWN AGENTS
IN REPLY TO THE CROWN AGENTS
following reference and the date
of this letter being quoted.



171
4, MILLBANK,

LONDON, S.W.1.

EC3/Falkland Islands 6921

4th October, 1955.

TELEGRAMS { INLAND: "CROWN, SOWEST, LONDON."
OVERSEA: "CROWN, LONDON,"

TELEPHONE: ABBEY 7730.

Sir,

Port Stanley Water Supply.

148
Vol I
I am directed to refer to your letter No. 0491/11 dated 29th April, 1955 requesting quotations for the supply of roofing to the existing Dairy Paddock Reservoir.

2. It is confirmed that the following telegram was despatched on the 29th September:-

"Reference your letter 29th April Dairy Paddock Reservoir Roof. Lowest quotations for steel roofing and asbestos sheeting total £2976 f.o.b. with delivery 24 weeks. Letter with drawing follows."

At back cover
3. A copy of drawing No. Z13654 is enclosed showing the general arrangement and typical details of the proposed roofing and on which tenders were invited. Separate quotations were received for the steel work and the asbestos sheeting. The two lowest quotations for the supply of the steelwork are as follows:-

<u>Firm</u>	<u>Price</u>	<u>Delivery</u>
Wm. Bain & Co.	£2321.16.1d. f.o.b. Glasgow	24 weeks
Walker Bros.	£2374. 0.8d. f.o.b. Liverpool	26 weeks

These prices include for all steel work to be painted one coat redoxide before despatch and sufficient shipment paint for the application of a further coat of the same paint and two coats of middle buff finishing paint at the site. An access door to each gable end, and perspex roof sheets are also included in the above quotations. With regard to delivery, the times quoted cannot be regarded as very firm in view of the difficult supply position which obtains at the present time.

4. With reference to the roof and gable end covering, Messrs. Turner quote £653.6.9d f.o.b. Liverpool or London, with a delivery of 4 to 5 weeks. This price includes for the corrugated sheets, ridging and barge boards, together with all fastenings.

5. It is hoped that the above information is sufficient for your present requirements. If an Indent is issued in due course, it would be appreciated if you would make reference therein to this correspondence.

I am, Sir,
Your obedient servant,

The Colonial Secretary,
FALKLAND ISLANDS.

EHG

Communications to be addressed to
THE CROWN AGENTS
FOR OVERSEA GOVERNMENTS AND ADMINISTRATIONS
the following reference and the date
of this letter being quoted.



4, MILLBANK,

LONDON, S.W.1.

115/103/FALKLAND ISLANDS 6921

TELEGRAMS { INLAND: "CROWN, SOWEST, LONDON."
OVERSEA: "CROWN, LONDON."

TELEPHONE: ABBEY 7730.

16th September, 1955.

23 OCT 1955

Sir,

Port Stanley Water Supply.

148 in Vol. I
161 in Vol. I
With reference to your letter No: 0491/II of the
29th April, 1955, and to the letter from this Office dated the
8th July, I am directed to inform you that tenders have been
duly invited, and it is hoped to cable the most favourable
quotation about the end of September.

I am, Sir,

Your obedient Servant,

The Colonial Secretary,
Stanley,
Falkland Islands.

GFD.

RGD

First Copy filed in 0040/III

Copies filed in 0040/II Educational Staff
0452/II Stanley Roads.

STANLEY,

22nd December, 1955.

FALKLAND ISLANDS.

No. 186. COLONY.

Sir,

261 in 0040/III
I have the honour to refer to your Circular Despatch No. 411/55 of the 26th April, 1955, on the subject of the Colonial Development and Welfare Act, 1955, and to forward for your consideration the enclosed applications for Colonial Development and Welfare assistance towards the cost of a number of schemes and projects in the Falkland Islands.

2. I appreciate the very generous scale of assistance which has been given in the past to this Colony from Colonial Development and Welfare Funds, and have done all I can to impress on Executive and Legislative Councils and on the public in general the generous treatment they have received from the United Kingdom Government. I fully agree with the principles set out in your despatch that Colonies should, so far as their means allow, contribute to their own development and should in the long run bear all residual costs. It was with this in mind that the 1955/56 Estimates were prepared which provided for extraordinary expenditure of £127,000 nearly all of which was expenditure on capital development. This resulted in a deficit of £104,000 which was met from the General Reserve. The amount remaining in the General Reserve is still substantial but in considering how much more of it should be spent on capital development I must take into account the following considerations:-

- (1) The economy of this Colony depends entirely on wool and there is virtually no other source of wealth. The price of wool has recently been good but in view of the increasing manufacture of artificial wools it is by no means certain that the long-term prospects are bright. During the past few months there has been a decline in the price of wool and although the market has recently steadied there is no reason to suppose there will be any substantial recovery. The decline was reflected in a fall of £9,000 in revenue (which was anticipated in the Estimates) consequent upon a reduction in the rate of duty on wool. If the price deteriorates further it will become necessary to offer relief from taxation in other ways, and there will be substantial reductions in revenue from such sources as Income Tax and Customs Duties. In fact the Colony will become very hard-up indeed.

/(11).

THE RIGHT HONOURABLE
ALAN JENNOX-BOYD, P.C., M.P.,
SECRETARY OF STATE FOR THE COLONIES.

ORA/L.H.

See 183

Reply at 303 in 0040/II

- (ii) It is almost certain that the Colony's necessary expenditure will rise in consequence of a general rise in wages and cost of living. Everything is being done at present to prevent this happening and in general, scales of wages and salaries are still lower here than in the United Kingdom. This is offset locally by the lower cost of living but the consequence is that it is becoming more and more difficult to recruit staff on the salaries we are offering even though these salaries may in fact be adequate locally. Other importers of labour and senior staff are experiencing the same difficulties and I have little doubt that in spite of everything that is being done to prevent this taking place there will be a slow increase in wages and cost of living. In consequence, so far from seeing any prospect of economising in Government recurrent expenditure it seems almost inevitable that it will slowly increase.
- (iii) I must also take into account commitments of Government which cannot be ignored but which cannot properly be met from Colonial Development and Welfare Funds. In paragraph 3 of my despatch No. 46 of the 24th February, 1955, I informed you that there were serious arrears of maintenance of public works, which would have to be met by spending from the General Reserve. These arrears have now partly been wiped off but there still remains a very great deal to be done. In addition there is much minor Government building necessary the main items of which are (a) an extension to the Post Office, which is at present in very cramped and inefficient accommodation, (b) provision of housing for Government employees, (c) the construction of a Schoolmaster's house on West Falkland capable of accommodating a few boarders and of expansion to accommodate more if required, and (d) the construction of new offices.

In these circumstances I cannot dip into the General Reserve in a way which would be possible if the Colony had many sources of wealth instead of one only, and that a precarious one.

3. As regards the possibility of increasing revenue, the principal sources of revenue are Income and Companies' Tax, Import Duties and the export tax on wool and the by-products of the sheep industry. None of these is susceptible of any marked increase. A comparative analysis of the United Kingdom rates of Income Tax and those in the Falkland Islands shows that the basic rates in the United Kingdom are higher than those in the Falkland Islands, but allowances are less generous, and in some cases, particularly in respect of families in the lower income groups and families with several children in the medium income groups, a higher rate of income tax is payable in the Falkland Islands than is paid in the United Kingdom. (The question is being considered of increasing the personal and children's allowances here but even if this is done equivalent increases

in the basic rate would have to be made). The question of the Companies' Tax is closely related to the wool price and to the export duty on wool, and in view of the present prospects for the wool market I do not believe that it would be in the best interests of the Colony to impose higher taxation on the industry. The time may well be approaching when it will require capital reserves, and most farms are still suffering from the consequences of the lean years. There is room for an increase in certain customs duties but even a 25% increase on goods at present taxed would only result in an additional £5,000 per annum. Any substantial extension in the range of goods subject to import duty might in the present circumstances of wages and cost of living here upset the existing precarious balance and precipitate a landslide in wages and salaries which would result in increases in expenditure far beyond the increase in revenue which would be obtained.

4. After consideration I conclude that

- (i) the present General Reserve is fully committed in meeting items of capital expenditure for which I cannot properly ask for assistance from Colonial Development and Welfare funds and in maintaining a reserve sufficient to cushion the consequence of a fall in the price of wool.
- (ii) that substantial increases of revenue are impossible and that any minor increases are likely to be absorbed by a slow inevitable rise in the cost of essential services.

I therefore believe myself justified in asking for further assistance from Colonial Development and Welfare Funds.

5. Detailed applications, which are summarised below, accompany this despatch and involve new or additional provision as follows:-

Scheme	<u>1955/56</u>	<u>1956/57</u>	<u>1957/58</u>	<u>1958/59</u>	<u>1959/60</u>	<u>Total</u>
	£	£	£	£	£	£
I. Camp Education (D970)	-	789	2650	2720	1350	7549
II. Stanley Water Supply (D2320)	4910	21,325	5365	-	-	31,600
III. Stanley Roads	7190	17,795	16,015	-	-	<u>41,000</u>
						<u>£80,149</u>

6. So far as the individual applications are concerned, I comment first on existing schemes and the progress made since they started. Under Camp Education, Scheme No. D970 an initial grant of £12,000 was approved (your telegram No. 227 of the 24th July, 1956 refers) and this was increased by

14/10 0040/13

100 w 004019

a supplementary grant of \$3,250 (your Savingsgram No. 22 of the 5th February, 1954 refers). The original conception of this scheme was set out in the enclosure to my predecessor's despatch No. 2 of 1948. The idea then was to engage additional staff from overseas in order to facilitate a training programme for locally appointed teachers. In his despatch No. 128 of 16th July, Sir Miles Clifford pointed out that the scheme had not gone as smoothly as was expected and in fact the principle of the scheme has, through force of circumstances, undergone a change. There are two main reasons for this. Firstly the Colony has been very short of teachers and in the past, although the situation has now materially improved, the "teaching beats" of the travelling teachers have been far too extensive. Consequently, as the only alternative to leaving a substantial number of children without education, it has been necessary to utilise the services of every teacher available and it has not been possible to release them for teacher training courses. The second factor is the reluctance of locally appointed teachers to accept postings away from their home areas and such postings have in the past precipitated resignations. As a result the necessary flexibility has been lacking. In other respects, however, the scheme has shown very definite and important results. The Colony has recently been fortunate in the calibre of teachers recruited and in my view the enthusiasm they have shown towards their somewhat unusual type of work and the manner in which they have fitted in with "Camp" life and conditions have contributed substantially to a marked improvement in the general attitude towards education in the Camp and to the improved results that are now being obtained. Until enough boarding schools are established, and for some time afterwards, however, Camp education must continue and without teachers recruited from overseas there would be insufficient staff to cover the Colony.

7. There is enough money available in the grant to meet expenditure during the twelve months ending 31st March, 1956. Estimated expenditure during the following twelve months will exceed the allocation by \$789 and application is now made for a supplementary grant of this sum to enable the scheme to continue up to the 31st March, 1957, together with a further amount of \$6,750 to continue the scheme until the 31st March, 1960

239 w 0040/III
244 w 0040/II

8. Application was made on the 9th June, 1954, (my Savingsgram No. 101 refers) for assistance from Colonial Development and Welfare funds in respect of the Stanley Water Supply, Scheme No. 32325, which was estimated to cost \$50,000. A grant of \$40,000 was made (your Savingsgram No. 126 of the 22nd September, 1954 refers) but as the balance remaining in this Colony's allocation amounted at that time to \$37,400, this latter amount was authorised and the question of making available the balance of \$2,600 was deferred pending the extension of the existing Colonial Development and Welfare Acts. The Civil Engineer appointed to carry out this project has now estimated that it will cost \$75,000 of which \$6,000 has been found this year from Colony funds. Application is now made for a supplementary grant during the year

/ending

ending 31st March, 1956, of £4,910 which includes the balance of £2,600 from the initial grant of £40,000 together with a further supplementary grant during the year ending 31st March, 1957, of £21,325 and £5,365 in the financial year ending 31st March, 1958. The water supply to Stanley is becoming increasingly precarious and has recently given cause for some anxiety. The completion of this project is of considerable importance from both social and general health aspects. It is expected that the major part of the project will be completed by September, 1958.

9. Work on the jetties (Scheme No. B1772) and the new Power Station (Scheme B1430) have now been satisfactorily completed. The new Power Station in particular is a credit to the Colony and has made a substantial difference to the standard of electricity services in Stanley.

10. A start has been made with the reconstruction of the Stanley roads which, as you are aware, are in a terrible condition of disrepair. Labour difficulties, which for so long prevented any progress, have now been overcome. The project is estimated to cost a total of £82,000 of which the Colony has provided the sum of £40,000 from reserves in order to enable work to proceed. It is now estimated that during the current financial year expenditure will amount to £7,490 in excess of the funds provided, to be followed by expenditure in the year ending 31st March, 1957 of £47,795 with £17,015 being required during the year ending 31st March, 1958. Application is made for a grant from Colonial Development and Welfare funds of £41,000 to meet estimated expenditure to the 31st March, 1958, by which time it is expected that the programme will be completed.

11. The existing Senior School in Stanley, a wooden structure about 50 years old, is in such a bad state of repair that further work and maintenance on the fabric will, in the long term, have very little effect. The school is far too small to accommodate the number of pupils now attending it, and there are no facilities for the staff. A new building, to conform if possible with the standard set by the new Infant's School, is essential. The Public Works Department is fully committed with other urgent work at the present time and it is unlikely that the labour required to erect a new school will be available until some time in 1956 or 1957. The approximate cost of a new school has been estimated at £20,000 but I am seeking further advice as to a more exact estimate and with regard to the design and plans of a new building before submitting for your consideration an application for some Colonial Development and Welfare assistance towards the cost of the proposed new school.

12. As regards contribution from the Colony's funds towards development it is proposed to provide in all £6,000 towards the Stanley Water scheme and £41,000 towards the Stanley Roads scheme. £35,000 has been provided for a scheme for improving land communications (by despatch No. 106 of the 17th June, 1954 refers) for which no assistance is being asked from Colonial Development and Welfare funds and it is also proposed to

/start

start a boarding school in the West Falklands without assistance. It will also be necessary to make substantial Government contribution to the Darwin boarding school. By spending the Colony's money on providing houses for Government workmen it is hoped to escape the necessity of asking for Colonial Development and Welfare funds to deal with the housing shortage in Stanley. On these projects Colony money will be spent which may be expressed in a round sum of \$115,000. This amount is as much as the finances of the Colony can safely stand.

13. With particular regard to the applications made for financial assistance during the period of the current United Kingdom financial year, I fully appreciate that it may not be possible, assuming the applications receive your approval, to ensure the provision of the necessary funds before the end of March, 1957 on account of the late date at which they have been forwarded. The delay in submitting these applications has been occasioned by the fact that the Civil Engineer employed for the two projects principally concerned, the Stanley Water and Roads Schemes, has only recently found it possible to prepare detailed and final estimates of costs. If therefore the applications are approved but it is not found possible, within the limited time available, to provide the funds within the current financial period, I should be grateful if they may be made available in the following financial period and if possible before the expiry in June, 1956, of the current Falkland Islands financial year.

I have the honour to be,
Sir,
Your most obedient
humble servant,

(Sgd) O.R. Arthur

GOVERNOR.

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MAINLAND ISLANDS.

COLONIAL DEVELOPMENT AND WELFARE SCHEME D.2325.

STANLEY WATER SUPPLY.

APPLICATION FOR A SUPPLEMENTARY GRANT OF \$31,600 TO
COMPLETE THE SCHEME.

Because of increased costs and the need for erecting a transmission line from the Power Station to the site of the new Filtration Plant, the estimated total cost of providing Stanley with an adequate supply of water has been increased from the original estimate of \$50,000 to \$75,000.

A free grant of \$37,400 was made from Colonial Development and Welfare Funds and the question of making available an additional sum of \$2,600 to meet four fifths of the total cost of \$50,000 was held in abeyance pending the extension of the Colonial Development and Welfare Act.

Estimated expenditure is as follows:-

Period ending 31st March, 1956.	-	\$48,310
" " " " 1957.	-	\$21,325
" " " " 1958.	-	<u>\$5,365</u>
Total		\$75,000

Of this total, the sum of \$37,400 has been provided from Colonial Development and Welfare sources and \$6,000 from Colony funds. Application is accordingly made for an additional grant of \$31,600 of which \$4,910 would be required in the United Kingdom financial period 1955/56, \$21,325 in 1956/57 and \$5,365 in 1957/58.

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Expenditure will be in accordance with the Revised Estimate attached as a schedule to this Memorandum. It will be noted that certain items of expenditure are referred to as 25% of total expenditure. This is on account of the fact that the Civil Engineer has been appointed to take charge of both the Stanley Water Supply Project and the Stanley Roads Project and the German Labour force is employed on both projects. Consequently certain personal emolument charges in connection with passages and expenditure on theissen Hut Camp have been charged 75% to the roads project (which will take longer to complete) and 25% to the water project.

FINANCIAL SUMMARY.

1. Administering Authority Government of the Falkland Islands.
2. Allocation Falkland Islands.
3. Classification Public Works.
4. Description of Scheme Stanley Water Supply.
5. Total Cost £75,000.
6. Colonial Development & Welfare Assistance required £69,000. (1)
7. Basis of Administration for accounting purposes
 - Capital £50,500
 - Personal Emoluments £9,480
 - Other Charges £15,020
 - Total £75,000
8. Basis of calculation of claims where the grant or loan does not provide for one hundred per cent of cost.
 - Colonial Development & Welfare £69,000
 - Colony Funds £6,000
 - £75,000
9. Not Applicable.

Note (1). Of this total a free grant of £37,400 from Colonial Development and Welfare Funds has already been approved. Consequently £31,600 new money is required.

	Estimated Total Cost	1956/56	1956/57	1957/58
I. CAPITAL EXPENDITURE (£90,500)				
i. Filtration Plant Building (Materials only)	£8,000	£2,000	£6,000	-
ii. Filtration & Purification Plant	16,450	£14,350	£2,100	-
iii. Pumping Main (Woody Brook - Turvey Heights)	7,200	£5,000	£2,000	-
iv. Covering of Reservoir & Forebay alterations	3,500	-	£3,500	-
v. Transmission Line (Power Station to Filtration Plant)	85,000	£5,000	-	-
vi. Auxiliary Supply to Meteorological Station	3,300	-	£1,000	£1,300
vii. Constructional Plant & Equipment	1,500	£1,200	£300	-
viii. Mission Bus Fare (25% of total expenditure)	2,000	£2,000	-	-
ix. Contingencies (10%)	£1,750	£3,200	£1,600	£150
TOTAL CAPITAL EXPENDITURE	£110,500	£32,550	£16,500	£1,450
II. PERSONAL EXPENDITURE (£9,480)				
i. Civil Engineer (25% total expenditure)	£1,650	£550	£550	£550
ii. Clerical Assistance (25% of total expenditure)	£250	£20	£25	£25
iii. Pages	£6,720	£2,500	£2,500	£1,720
iv. Contingencies (10%)	£660	£310	£310	£310
TOTAL PERSONAL EXPENDITURE	£9,480	£3,440	£3,445	£2,595
III. OTHER CHARGES (£15,020)				
i. Passages (25% of total expenditure)	£2,500	£1,200	£100	£1,200
ii. Freight	£11,170	£10,000	£1,170	-
iii. Contingencies (10%)	£1,350	£1,100	£110	£120
TOTAL OTHER CHARGES	£15,020	£12,300	£1,380	£1,320
TOTAL	£125,000	£48,290	£21,325	£5,365

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PUBLIC NOTICE.

A serious shortage of water exists in Stanley and consumers are requested to exercise the strictest possible economy in the use of water until such time as the supply is back to normal.

The supply position at present is worse than it was in October but it is hoped that, with the full co-operation of the public, it will not be necessary to cut off supplies.

Colonial Secretary's Office,
Stanley, Falkland Islands.

18th February, 1956.

Simon has read P.A.

*d
2/3*

Original filed in 604011 Rev. 10x

DECODE.

3 01

TELEGRAM SENT.

From SECRETARY OF STATE to GOVERNOR

Despatched: 15.3.56. Time: 17.30 Received: 16.3.56. Time: 09.00

No. 38. Following from Denton-Thompson begins:-
Colonial Development and Welfare.

I have had a series of discussions with Geographical and Finance Departments and latter advise me that decision may be expected this week or next. I am very hopeful of generous allocation but not of full amount. Ends.

SECRETARY OF STATE.

20/5/56
Rec 3/4/56

fa.
M...
R...
4/1/56

C.T.C. IS
Typed: VM

see 174

DECODE.

Original in 00401/III
Copies in 40/S = 0452/II
TELEGRAM SENT.

184

From GOVERNOR to SECRETARY OF STATE.

Despatched: 14/5/56

Time: 2500

Received: : : :

Time: : : :

303 m
00401/III
No. 91. Your Despatch No. 36 of 17th April. Colonial Development and Welfare allocation.

I am grateful for the very generous allocation of £50,000 for 1955/60 period.

I propose for your consideration that application should be amended as follows:-

- (1) Stanley Water Supply. £15,000 from Colonial Development and Welfare and £5,000 from Colony funds in 1956/57. £5,000 from Colonial Development and Welfare and £3,000 from Colony funds in 1957/58. On this basis and by completion of scheme Colony will have met £17,600 and Colonial Development and Welfare £57,400 of total estimated cost of £75,000.
- (2) Stanley Roads. £15,000 from Colonial Development and Welfare and £3,000 from Colony funds 1956/57. £10,000 from Colonial Development and Welfare and £5,000 from Colony funds 1957/58. By completion of scheme Colony will have met £57,600 and Colonial Development and Welfare £25,000 of total estimated cost of £82,600.
- (3) I propose that the remaining £5,000 of the £50,000 allocation of new money should be held in reserve as a Colonial Development and Welfare contribution amounting to one fifth for the proposed new Senior School in Stanley which it is estimated would cost approximately £25,000. Plans for this have yet to be considered.

I note that you consider that there are no longer grounds for considering Camp Education scheme as capital scheme and expenditure will be met from Colony budget when existing grant has been drawn in full.

Reply at 185
I should be grateful for telegraphic approval as Colony will be considered by Legislative Council in early July
L:AWP/IR

Original in 0040/II
Copies in 0040/II - 0452/II

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DECODE.

TELEGRAM SENT.

From SECRETARY OF STATE to GOVERNOR

Despatched: 3.6.56 Time: 1035 Received: 4.6.56 Time: 1200

No:84. Your tel. No: 91. Colonial Development and Welfare Allocation.

I approve of development programme generally.

2. Reference to your (1) Stanley Water Supply. I assume that Colonial Development and Welfare Grant of £37,4000 under Scheme D2325 was fully expended by 31st March, 1956, but if necessary, since this is the capital of the grant, the Scheme may remain open until 31st May in order that full amount of grant may be utilized. I would suggest that further Colonial Development and Welfare assistance of the order of £20,000 should be provided under a new and separate Scheme and that this should take effect from 1st June, 1956. Expenditure from that date may therefore incur from local funds and will deem eligible reimbursement from Colonial Development and Welfare Fund in whatever proportion is agreed if and when a formal scheme is approved. Grateful for revised detailed estimates for new grant on this basis giving estimated cost of work by item and year from 1st June to completion of project.

3. Your (2) Stanley Roads. I am prepared to agree that Scheme should take effect from 1st June, 1956, and that expenditure from that date may be deemed eligible for reimbursement from Colonial Development and Welfare Funds in whatever proportion is agreed if and when a formal scheme is approved. Grateful for revised detailed estimates on this basis.

4. I note that you will be letting me have your proposals for the new Senior School in due course.

GTC:PT

HCS
Para 3 being done by Mr. New?
DBM
3/7/56

HCS / I am working on the new Development

F.6
HCS
3/7

SEN. 26/7/56

10th July, 1956.

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309 in 0040 | II Your telegram No: 34 of 3rd June. Colonial Development and Welfare Allocation.

1913 195
2. I enclose the following revised applications for assistance from the Colonial Development and Welfare Fund for the financial period 1955/60: -

(1) Stanley Water Supply. Application for Colonial Development and Welfare grant of £20,000 to complete the project.

(2) Stanley Roads Project. Application for Colonial Development and Welfare grant of £25,000 to complete the project.

3. Financial provision amounting to £43,400 (£37,400 from Colonial Development and Welfare Funds and £6,000 from Colony funds) was approved in respect of the 1955/56 financial year for the Stanley Water Supply Scheme. It was at one time during the course of the year hoped that in fact there would be considerably greater progress than was originally expected and that consequently additional financial provision would be required to meet the increased rate of progress. Unfortunately, owing to unforeseen delays in the delivery of plant and equipment in the United Kingdom, for which the manufacturers have accepted responsibility, progress has in fact been slower and consequently expenditure within the 1955/56 period has been much less than was originally estimated. In the event it is calculated that expenditure and outstanding commitments against the 1955/56 financial period amount to £36,650 of which £36,400 will be met from the Colonial Development and Welfare grant which remained open until the 31st May 1956. A further consequence of reduced expenditure in 1955/56 has been that the estimates of expenditure under this scheme contained in the approved Estimates of Revenue and Expenditure for the financial year 1956/57

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have already been upset. When the Colony estimates were prepared it was calculated that with expenditure to the order of £43,000 in 1955/56, £20,000 only would be required for the 1956/57 period. According to the latest information, however, it is likely that the estimated expenditure of £20,000 will be exceeded during 1956/57 without, however, affecting the total cost of the completed scheme unless unforeseen difficulties arise. Past experience however has shown that delays in delivery, fluctuations in price, and delays in getting advice from the Crown Agents consequent upon very bad communications, make it virtually impossible to forecast accurately the amount which will be required within any given period.

4. A memorandum and revised estimates and programme of expenditure are enclosed with this savingram and there is no need for me to expand further on the explanation contained in the memorandum except to say that as compared to the roads scheme, the water project has made disappointingly slow progress.

5. The Stanley Roads Scheme, on the other hand, has made much better progress, in spite of one of the worst summers on record, and results so far are encouraging. It has proved possible to speed up the work on the roads, to some extent as a result of slower progress on the water project, and expenditure has been correspondingly greater and has amounted to approximately £45,000 (actual expenditure and estimated commitments against the 1955/56 financial year). A memorandum and revised estimates and programme of expenditure are enclosed with this savingram.

6. Finally, I note that you have asked for detailed estimates of the two projects as from the 1st June 1956. The Colony's new financial year runs from the 1st July until 30th June. Taking into account the different United Kingdom financial year, the introduction of a third period for estimation purposes would involve much complication which might result in confusion here where accounting resources are limited. I very much hope, therefore, that you will find it possible to accept the estimates and programmes of expenditure in the form in which they have been submitted.

BARKLAND ISLANDS.

CC1
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STANLEY WATER SUPPLY PROJECT

Application for a Colonial Development and Welfare Grant of £20,000 to complete the Stanley Water Supply Project.

Because of increased costs and the need for erecting a power transmission line from the Power Station to the site of the Filtration Plant, the estimated total cost of providing Stanley with an adequate and pure supply of water has been increased from the original estimate of £50,000 to £75,000.

A fixed grant of £57,400 was made from the Colonial Development and Welfare Funds (Scheme B2325) and the question of making available an additional sum of £2,600 to meet four-fifths of what was then the estimated total was held in abeyance pending enactment of the Colonial Development and Welfare Act.

Financial provision amounting to £45,400 (£57,400 from Colonial Development and Welfare and £8,000 from Colony funds) was made in 1955/56. Total commitments on the project to the end of June, 1956, were estimated at £45,000 but owing to serious and unexpected manufacturing delays it is now estimated that only £36,650 will actually have been expended and of this £36,400 (expended by 31st May) will have been met from Colonial Development and Welfare Funds and the balance from Colony funds.

Estimated future expenditure on the project is calculated as follows:-

<u>Colony Financial Year</u> (1st July - 31st June)	<u>U.K. Financial Year</u> (1st April - 31st March)
Period ending 30.6.57. £29,575	Period ending 31.3.57 £20,000 (beginning 1.7.56.)
Period ending 31.6.57. £ 8,775	Period ending 31.3.58 £ 9,000
	Period ending 31.3.59 £ 1,350
	£20,350
Amount spent by 30.6.56. <u>36,650</u>	Amount spent by 30.6.56. <u>36,650</u>
<u>TOTAL</u> <u>£ 75,000</u>	<u>TOTAL</u> <u>£ 75,000</u>

It is proposed that further Colony contributions of £14,575 (which includes £5,750 rebate from 1955/56) and £8,775 should be made in the financial years (Colony) 1956/57 and 1958/59, thus bringing the total Colony contribution to £18,600.

Application is now made for an additional grant of £20,000
 Colonial Development and Welfare Funds, of which £
 £15,000 will be required in the U.K. financial year
 ending 31.3.57.

£5,000 will be required in the U.K. financial year
 ending 31.3.58.

It is expected that the project will be completed by June, 1958.

[C] Expenditure will be in accordance with the revised estimate
 attached as a schedule to this Memorandum. It will be noted that
 certain items are referred to as 25% of the total expenditure.
 This is on account of the fact that the Civil Engineer has been
 appointed to take charge of both the Stanley Water Supply Project
 and the Stanley Roads Project and the German labour force is
 employed on both projects. Consequently personal emoluments,
 charges in connexion with passages and expenditure on the Hissen
 Hut Camp have been charged 75% to the Roads and 25% to the water
 supply project which, in comparison to the roads scheme, involves
 a much higher proportion of capital expenditure and a lower
 proportion of man hours.

ADMINISTRATIVE SUMMARY

1. Administering Authority Government of the Falkland Islands.
2. Allocation Falkland Islands
3. Classification Public Works
4. Description of Scheme Stanley Water Supply
5. Total Cost £75,000
6. Colonial Development and Welfare assistance required. £56,400 X
7. Basis of Administration for Accounting purposes

Capital	£55,000
Personal Expenditure	9,970
Other Charges	<u>10,030</u>
<u>Total</u>	<u>£75,000</u>
8. Basis of Calculation of Claims

Colonial Development & Welfare	£56,400
Colony Funds	<u>18,600</u>
<u>Total</u>	<u>£75,000</u>
9. Not applicable.

Note X Of this total a free grant of £17,400 from Colonial Development and Welfare Funds has already been made (Scheme B2325) but it was only possible to expend £36,400 before the grant lapsed. Consequently £20,000 new money is required.

GENERAL BUDGETARY AND FINANCIAL STATEMENT (No. 2,235) - FISCAL YEAR 1938

Application for a Grant of \$20,000 to complete the Bureau.

I.	CAPITAL EXPENDITURE (\$50,000)	Potential Total Cost	Salary Periods		
			1936/37	1937/38	1937/38
i.	Filtration Plant Building (Materials only)	\$ 9,000	-	\$ 6,000	\$ 1,000
ii.	Filtration and clarification plant	\$ 17,500	\$ 11,775	4,750	1,000
iii.	Supply Basin (Body Work - Heavy Weight)	\$ 8,000	6,300	1,500	-
iv.	Covering of reservoir & forebay alteration	\$ 3,000	-	3,000	500
v.	Transmission Line (over station to filtration plant)	\$ 1,000	3,000	2,000	-
vi.	Auxiliary Supply to Meteorological Station Area	\$ 2,500	-	-	3,500
vii.	Structural Work and equipment	\$ 2,500	1,000	500	-
viii.	Diesel Fuel Exp (25% of total on contract)	\$ 2,500	2,500	-	-
ix.	Contingencies	\$ 5,000	3,400	2,100	500
	<u>TOTAL CAPITAL EXPENDITURE</u>	<u>\$ 50,000</u>	<u>\$ 30,000</u>	<u>\$22,000</u>	<u>\$ 5,500</u>
II.	PERSONNEL (\$9,975)				
i.	Civil Engineer (25% of total on contract)	\$ 1,000	550	550	550
ii.	Clerical Assistants (25% of total on contract)	800	80	80	80
iii.	Wages	7,500	2,100	5,500	500
iv.	Contingencies	500	100	600	100
	<u>TOTAL PERSONNEL EXPENDITURE</u>	<u>\$ 9,975</u>	<u>\$ 2,800</u>	<u>\$ 6,750</u>	<u>\$ 1,250</u>
III.	OTHER EXPENSE (\$20,000)				
i.	Passages (25% of total on contract)	\$ 1,500	\$ 1,250	-	\$ 1,250
ii.	Light & fuel for exp (25% of total on contract)	80	150	150	150
iii.	Freight	6,200	4,700	1,500	500
iv.	Contingencies	500	100	100	500
	<u>TOTAL OTHER EXPENSE</u>	<u>\$20,000</u>	<u>\$ 6,600</u>	<u>\$ 1,300</u>	<u>\$ 3,300</u>
	<u>TOTAL</u>	<u>\$70,000</u>	<u>\$ 46,600</u>	<u>\$30,070</u>	<u>\$ 9,770</u>

See 186 a K9

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FALKLAND ISLANDS

STANLEY ROADS PROJECT.

Application for Colonial Development and Welfare Grant of
£25,000 to complete the Stanley Road Project

The seven and a half miles of road in and around Stanley have progressively deteriorated during the last six or seven years. Before the war they were in good condition. They were, however, seriously damaged by the heavy military vehicles used by the garrison and a shortage of labour has since precluded any serious attempt to restore them.

The shortage of labour has been overcome by the engagement, on contract terms, of a group of workers from abroad who are employed on the same basis and rates as local Falkland Island hourly paid labourers. A Civil Engineer from the United Kingdom supervises the two main projects now in hand - The Stanley Roads Scheme and the Stanley Water Filtration and Pumping Scheme.

A great deal of preliminary work, including the construction of a complete camp for the German labour force, a road into the stone quarries and extensive foundation work and gantries for the cranes, was necessary before work on the roads began. Work on the roads is now, however, well in hand and 3,480 feet of concrete along the principal road in the town, together with 1,400 feet of 5 ft. wide side-walk have now been laid. It is the intention that once this road has been completed in concrete (for a distance of 4,050 feet, with a width of 20 ft. between kerbs), the remaining roads, approximately 35,320 feet in length and varying from 15 ft. to 18 ft. in width will be made up and tar-sprayed. It is estimated that the whole project (bearing in mind that the labour force is also engaged on the Stanley Water Filtration and Pumping Scheme) will take approximately three years to complete, preliminary work having begun in July, 1955.

The estimated total cost of the scheme is £22,000. Expenditure up to 30th June, 1956, is estimated at £25,000 (which included the purchase of a considerable quantity of capital equipment) and this

has been met from Colony Funds. Estimated future expenditure on the project is calculated as follows:

<u>Colony Financial Year</u>		<u>United Kingdom Financial Year.</u>	
(1st July - 30th June)		(1st April - 31st March)	
Period ending 30.6.57.	£13,000	Period ending 31.3.57. (beginning 1.7.56.)	£17,000
Period ending 30.6.58.	18,920	Period ending 31.3.58.	14,000
		Period ending 31.3.59.	5,920
	<hr/>		<hr/>
Total	£36,920	Total	£36,920
Amount spent by 30.6.56.	45,080	Amount spent by 30.6.56.	45,080
	<hr/>		<hr/>
<u>TOTAL</u>	<u>£82,000</u>	<u>TOTAL</u>	<u>£82,000</u>

It is proposed that further Colony contributions of £3,000 and £8,920 should be made during the financial years (Colony) 1956/57 and 1957/58 thus bringing the total Colony contribution towards the cost of the completed project to £57,000.

Application is now made for a grant from the Colonial Development and Welfare Funds of £25,000 of which:-

£15,000 would be required in the United Kingdom financial year ending 31. 3. 57.

£10,000 would be required in the United Kingdom financial year ending 31. 3. 58.

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Detailed estimates based on expenditure during the Colony financial years are attached to this Memorandum. It will be noted that certain items of expenditure are referred to as 75% of total expenditure. This is on account of the fact that the Civil Engineer in charge of the project was appointed to take charge of both the roads scheme and the water supply project and the German labour force is employed on both projects. Consequently certain personal emoluments, charges in connexion with passages and expenditure on the Nissan Hut Camp have been charged 75% to the road project and 25% to the water supply project, which in comparison to the roads scheme involves a much higher proportion of capital expenditure and a lower proportion of man hours.

FINANCIAL SUMMARY

- 1. Administering Authority Government of the Falkland Islands
- 2. Allocation Falkland Islands
- 3. Classification Public Works
- 4. Description of Scheme Stanley Roads Project
- 5. Total Cost £82,000
- 6. Colonial Development and Welfare Assistance required £25,000
- 7. Basis of Administration for Accounting purposes

Capital	£23,100
Personal Expenditure	31,670
Other charges	<u>27,230</u>
Total	£82,000
- 8. Basis of calculation of Claims

Colonial Development & Welfare	£25,000
Colony Funds	57,000
- 9. Not applicable.

GENERAL INVESTING AND REVENUE BILLS, REVISED MESSAGE - JUNE 1936

Application for a grant of \$25,000 to complete the school

I.	Detailed Expenditure (\$25,000)	Original Total Cost	Colony Fiscal Year		
			1935/36	1936/37	1937/38
	i. Constructional Plant & Equipment	\$ 15,000	\$ 12,000	\$ 2,000	\$ 1,000
	ii. Blacken Put Corp (75% of total expenditure)	6,000	6,000		
	iii. Contingencies	4,000	1,000	300	100
		\$ 25,000	\$ 19,000	\$ 2,300	\$ 1,100
II.	General Expenditure (\$31,670)				
	i. Civil Engineer (75% of total expenditure)	4,000	1,000	1,000	1,000
	ii. Clerical Assistance (75% of total expenditure)	750	200	250	250
	iii. Wages	25,000	7,000	8,100	7,400
	iv. Contingencies	2,920	300	750	1,350
		\$ 31,670	\$ 10,300	\$ 10,100	\$ 10,000
III.	Other Expenditure (\$27,200)				
	i. Passages (75% of total expenditure)	7,000	3,750		3,750
	ii. Freight	6,750	4,750	1,300	700
	iii. Cement	2,250	2,250		
	iv. Car & Station	3,500	600	2,000	650
	v. Quarry Development	300	300		
	vi. Fuel & Lubricants	2,400	300	300	300
	vii. Profiles Separation Joints, connecting pipes	250	100	30	30
	viii. Light & Fuel for Car (75% of total expenditure)	1,500	450	450	450
	ix. Reprovision	600	600		
	x. Contingencies	2,200	1,300	300	600
		\$ 27,200	\$ 14,950	\$ 3,050	\$ 7,200
		\$ 52,000	\$ 45,000	\$ 10,000	\$ 10,500

See 186 & 193

Original filed in 0040/11

Saving

From the Secretary of State for the Colonies.

To the Officer Administering the Government of FALKLAND ISLANDS

Date 17 September, 1956

No. 93 Saving



315w Your savingram No.106 of 10th July.

0040/111

Stanley Water Supply

I approve Colonial Development and Welfare grant of £20,000 under Scheme D.2958. Four copies of memorandum C.D.W.(D) 3926 are enclosed.

2. As you will see from the memorandum a reduction of \$1,000 has been made in the C.D. & W. grant under Scheme D.2325. This saving will revert to the Falkland Islands Colonial Development and Welfare allocation.

SECEP



WAF. 252/690/01.

C.D.& W. (D) 3926.

FALKLAND ISLANDS.

Development of Water Supplies in Stanley.

Further Grant of £20,000.

A grant of £37,400 under Scheme D.2325 was made in September, 1954 for the development of water supplies in Stanley. The original estimate of the total cost of the project was £50,000 but because of increased costs and the need for erecting a power transmission line from the Power Station to the site of the Filtration Plant the total cost is now estimated at £75,000.

2. Of the grant of £37,400 under scheme D.2325 only £36,400 was expended before the scheme ended on 31.5.56. The difference of £1,000 is now being found from local funds, and the savings will revert to the Falkland Islands Colonial Development and Welfare allocation.

3. Total expenditure on the project is estimated as follows:-

	<u>C.D.W. Funds.</u>	<u>Colony Funds.</u>
Amount already expended	£36,400	£ 570
Period 1956/57	15,000	14,575
Period 1957/58	5,000	3,775
	<hr/>	<hr/>
	£56,400.	£18,600.
	<hr/>	<hr/>
Total	£75,000	
	<hr/> <hr/>	

Detailed estimates of expenditure from 1956/57 onwards are given on the Appendix to this memorandum.

4. Approval has already been given for expenditure to be incurred from local funds as from the 1st June, 1956 subject to reimbursement from Colonial Development and Welfare funds. Mr. Dodd's letter of the 25th May 1956 to Mr. Rawlinson (Treasury reference IF36/25/03) refers. The money will be provided under a new and separate scheme. The position regarding recurrent revenue and expenditure is described in paragraph 3 of memorandum 3071 relating to Scheme D.2325. It is accordingly proposed to make from the Falkland Islands allocation of Colonial Development and Welfare funds a grant of £20,000 for the period commencing 1st June, 1956. It is hoped to finish the programme in 1957/58 but the scheme will remain in force until 30.6.59 to allow for any delays in completion. A Financial Summary is attached.

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COLONIAL OFFICE,
SANCTUARY BUILDINGS,
GREAT SMITH STREET,
LONDON, S.W.1.

4th September, 1956.

FINANCIAL SUMMARY.

1. Administering Authority: Falkland Islands.
2. Allocation: Falkland Islands.
3. Classification: Social Water Supplies.
4. Description of Scheme: Improvement of Water Supplies in Stanley.
5. Total Cost: £38,350
6. Colonial Development and Welfare Assistant required: Grant of £20,000 (further to grant of £37,400 under Scheme D. 2325).
7. Basis of Administration for Accounting purposes. Single head £38,350.
8. Basis of Calculation of claims:

53% from Colonial Development and Welfare funds up to £20,000.

DETAILED ESTIMATES.

	<u>Estimated Total Cost.</u>
	£
i. Filtration Plant Building (Materials only)	9,000
ii. Filtration and Purification Plant	5,730
iii. Pumping Main (Moody Brook - Murray Heights)	1,120
iv. Covering of Reservoirs & Forebay alteration	3,500
v. Transmission Line (Power Station to Filtration Plant)	5,000
vi. Auxiliary Supply to Meteorological Station Area.	2,500
vii. Constructional Plant and equipment	550
viii. Civil Engineer (25% of total expenditure) £	1,100
ix. Clerical Assistance (25% of total expenditure) £	170
x. Wages.	6,000
xi. Passages (25% of total expenditure) £	1,250
xii. Light & fuel for camp (25% of total expenditure) £	300
xiii. Freight	1,450
xiv. Contingencies	3,680

TOTAL	38,350

£ The remaining 75% of total expenditure is charged to the roads scheme, which in comparison to the water supply project involves a much higher proportion of man-hours and a lower proportion of capital expenditure.

Public Notice

A serious leak in the water supply pipe line has been found. It is hoped that it will be repaired very shortly, but, in the meantime, we have approximately 12 hours' supply of water in hand. It is, therefore, essential that the strictest economy in the use of water is exercised by everybody.

Colonial Secretary's Office,
SINGAPORE.

22nd November, 1956.

What action is reqd. re file pt? 15/11/57

Re: Treasury + CE have
held for a period. No
action required. DR-23/1/57 [Signature]

175.

There is a manuscript of S. J. S. on the
history of his scheme - a copy of which
should go on this file.

W. H. S.

9. 1. 57

1st April, 1957

To: COLONY.

C. D. & W. Scheme D.2325 - Stanley Water Supply.

212 0040/S My telegram No:39 of the 23rd March, your savingram No:126 244 0040/17 of the 22nd September, 1954, and your savingram No:93 of the 17th 3 30 0040/17 September, 1956, refer.

Two matters in connection with the financing of this scheme have arisen which will require clarification and as regards which I should be grateful for your ruling.

The original estimates forwarded under cover of the Governor's savingram No:101 of the 9th June, 1954, put the cost of the Water Scheme, originally devised by Major Pope, at £50,000. This Government asked for assistance from Colonial Development and Welfare Funds in the form of a free grant of £40,000 which, on the basis of the original estimate, amounted to four fifths of the estimated total cost. The four fifths/one fifth financial basis was incorporated in the memorandum enclosed with your savingram No:126 of the 22nd September, 1954, but in view of the fact that the total sum remaining in the Falkland Islands allocation amounted to £57,400, a grant of that amount only was sought and it was intimated that further consideration would be given to granting the balance of £2,600 from funds made available under the extension of the Colonial Development and Welfare Acts subject to the enactment of new legislation. In your telegram No:84 of the 3rd June, 1956, you intimated that the scheme might remain open until the 31st May, 1956, in order that the full amount of the grant might be utilised.

Up to the 31st May, 1956, the sum of £36,249. 9. 2d. was spent on the water project, the greater proportion of which was capital expenditure. A further £9,382. 16. 7d. was spent from Colony funds in the month of June, 1956. A total of £36,249. 9. 2d. is being claimed as being eligible for re-imbursment under Scheme D.2325. Now, however:-

- (1) The Auditor has queried whether in fact the full amount of £36,249. 9. 2d. can be claimed on the grounds that it does not represent four fifths of the total estimated expenditure on the scheme.
- (2) The Auditor has also queried two items:-
 - (a) £1,201. 4. 10d. representing a proportion of the passages for the German labour gang that, in the event, had to be recruited for both the Stanley Water Scheme and the Stanley Roads Scheme;

/ (b)

Reply at 36
in 0040/S.

- (b) 22,000, 6. 50. representing a proportion of the capital costs involved in the purchase and erection of the nissen hut camp for the labour gang.

These two items have been queried on the grounds that they were not included in the original estimates forwarded under cover of the Governor's savingram No:101 of the 9th June, 1954, and incorporated in Appendix 'B' to the memorandum enclosed with your savingram No:126 of the 22nd September, 1954.

With regard to the first principal item, the claim does not represent four fifths of the total expenditure on the scheme within the lifetime of that particular grant and it would seem that on those particular grounds the validity of the claim is certainly open to question. Moreover, it is perfectly correct that the two items questioned by the Auditor were not incorporated in the original detailed estimates. On the other hand:-

- (1) I notice that paragraph 5 of the memorandum enclosed under cover of your savingram No:93 of the 17th September states that the amount already expended on the scheme amounted to £36,400 from U.S. & W. sources and only £250 from Colony sources, which appears to indicate that either it was no longer the intention to stipulate that one fifth of the total expenditure under Scheme D.2325 should be met from Colony funds or, alternatively, that the original stipulation had been overlooked.
- (2) The original estimate of 250,000 was optimistic and, in the event, and in the light of the recommendations of the Civil Engineer appointed to carry out the project, it had to be revised and amended to £75,000.
- (3) You will appreciate that having regard to communications, labour problems and inevitable delays in accounts and in the delivery of plant and equipment from the United Kingdom which, in some cases, have been quite substantial, it is extremely difficult to "programme" actual expenditure within stipulated financial periods for a scheme that will take two or three years to complete. In such circumstances it would not seem unreasonable to regard the overall costs of the project as a whole although it is in fact financed under two separate schemes. If that were permissible it will be observed that of the total estimated expenditure involved (£75,000), the Colony would meet £18,600 or just under 25% as against 30% of the total cost as proposed in the original scheme.
- (4) The original estimates, which had to be substantially revised, did not include provision for the expenditure involved in the recruitment of a labour gang from overseas, which in the event, proved to be unavoidable if the Scheme were to be undertaken at all, and it does not seem unreasonable to regard a proportion of the costs of the purchase and erection of the nissen huts and of the passages as a charge against the Scheme. In this respect, however, I am a little uncertain as to the extent that the original detailed items of expenditure on a scheme such as this, and having regard to local conditions, must remain "across-the-board".

(5) If the Colony is only permitted to claim four fifths of actual expenditure in the case of Scheme D.8325 and if expenditure in respect of passages and the labour camp is to be disallowed, then it will reduce the C.D. & W. contribution towards the total revised cost of the Scheme from just over 75% to 62% and whereas it was the original intention that between the two schemes C.D. & W. should contribute a total of £36,400, this contribution will be reduced to £46,370.

In the circumstances I should be most grateful if consideration might be given to permitting the Colony, if possible, to claim reimbursement of the full £36,249 and to allowing the expenditure incurred in meeting a proportion of the costs of passages and providing quarters for the labour gang.

OFFICER ADMINISTERING THE GOVERNMENT.

Reply in 0040/5 By 10/6
 30/6
 3/8 (misc)
 1/9

AGDE/PT

A.E.S.

No mail

36249.00
 3-83-103
 36249.00

12/11/50
 20/11/50

1st August

57

Superintendent, Public Works Dept.

Civil Engineer

The Honourable the Colonial
Secretary.

Replacement of Water Mains and
Connections to Property Boundaries

We discussed the question of water connections
from mains to ^{SEP-COCKS} property boundaries that have to be replaced
in advance of the start of the road project.

Shp-cocks! It is agreed that any connection between mains
and boundaries that will have to be replaced when
eventually the roads are re-constructed should be replaced
at public expense and the cost charged to Head XVII, item
25, Renewal of Water Pipes.

A. G. Stuart Chapman
COLONIAL SECRETARY.

BW 35
Nov

No. _____

MEMORANDUM.

It is requested that, in any reference to this memorandum the above number and date should be quoted.

12th. November 19 57

To:- The Hon. _____
The Colonial Secretary
Stanley _____

From:- Civil Engineer

Stanley, Falkland Islands.

SUBJECT :-

STANLEY WATER SUPPLY

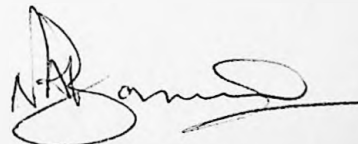
Please despatch the following letter to C/Agents:-

" STANLEY WATER SUPPLY

In this scheme designed by Paterson Engineering Co, water is pumped a distance of 2-3 miles to two reservoirs which are approximately 8 feet deep. It is desired to have a depth gauge showing the amount of water in each reservoir, situated in the pumping station for the information of the operator.

There are existing disused telephone lines free for the electrical connection between the reservoir and the pumping station.

Would you please obtain details and prices of such equipment."



Civil Engineer

*Office
re - in B/SA form - better
also quote a reference. 15/3.*

21st November,

57

Gentlemen,

Stanley Water Supply Scheme.

I am directed to inform you that in this scheme, designed by Paterson Engineering Co., water is pumped a distance of 2 - 3 miles into two reservoirs approximately 8 feet deep and as it is desired that the operator in the pumping station should know the amount of water in each reservoir, I am to request you to obtain and forward details and prices of suitable depth gauges for this purpose. There are disused telephone lines available for the electrical connection between the reservoir and the pumping station.

I am,
Gentlemen,
Your obedient servant,

See 208

*Replies at 215
221
for*

(Sgd.) D. R. Morrison.

COLONIAL SECRETARY.

The Crown Agents for Overseas Governments and Administrations,
4, MILLBANK,
LONDON, S.W.1.

Copy to: Civil Engineer.

*BU 22/1/58
SW*



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Communications to be addressed to
THE CROWN AGENTS
FOR OVERSEA GOVERNMENTS AND ADMINISTRATIONS
the following reference and the date
of this letter being quoted.



4. MILLBANK,
LONDON, S.W.1.

W5/EC2/Falkland Islands 7744

30th December, 1957.

TELEGRAMS | INLAND: "CROWN, SOWEST, LONDON."
 | OVERSEAS: "CROWN, LONDON."
TELEPHONE: ABBEY 7730

Sir,

Stanley Water Supply Scheme.

207

I am directed to refer to your letter
reference 0491/II dated 21st November 1957, regarding
a quotation and delivery estimate for the supply of
suitable remote indicating equipment for the reservoirs
of the above scheme, and to inform you that the
necessary enquiries were duly issued on the 10th December 1957.

The required details will be forwarded to you at the
earliest possible date.

I am, Sir,
Your obedient servant,

R. M. Heatley

207
9/8 to see

13/1/58

The Colonial Secretary
The Colonial Secretary's Office,
Stanley,
Falkland Island.

RGD/BS

No. _____

MEMORANDUM.

It is requested that, in any reference to this memorandum the above number and date should be quoted.

22nd. January 19 58

To:- The Hon.
The Colonial Secretary
Stanley

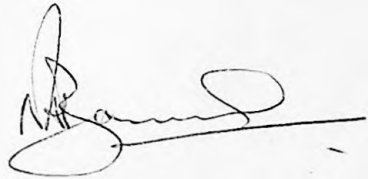
From:- Civil Engineer
Stanley, Falkland Islands.

SUBJECT :- STANLEY WATER SUPPLY


May the following letter be sent to C/Agents.

Enclosed for your information is a copy of a letter which was sent to the Director of the Water Pollution Research Laboratory. D.S.I.R. 103 Langley Road Watford accompanying a sample of water sent for examination.

Will you please reimburse the D.S.I.R. any expenses or fees in connection with this test and charge to Government General Vote.



Civil Engineer

Enclosure to follow later today 

Enclosure from [unclear] 2/2/58

0491

213

27th January,

58

Gentlemen,

Stanley Water Supply.

214

I am directed to enclose a copy of a letter sent by the Civil Engineer to the Director of Water Pollution Research Laboratory, Department of Scientific and Industrial Research, regarding a sample of water for analysis and to request that any expenses in this connection may be met by you and charged to the Colony's General Account.

I am,
Gentlemen,
Your obedient servant,

W.C.
(Sgd.) J. Bound.
for COLONIAL SECRETARY.

The Crown Agents for Overseas Government and Administrations,
4, Millbank,
LONDON, S.W. 1.

DRM/MF

*Bu. 208 (main)
or 15/2
29.*

The Director of Water
Pollution Research Laboratory
Department of Scientific and
Industrial Research,
103 Langley Road,
Watford, Herts.

Dear Sirs,

Stanley Water Filtration Plant.

A sample of treated water has been despatched to you for testing by air to London from Stanley.

It would be much appreciated if you would carry out a chemical analysis and report by telegram as soon as possible stating if you consider the sample to be safe to be used in the new domestic water supply for the town of Port Stanley.

The water has been prepared in the new water filtration plant designed and supplied by the Paterson Engineering Co. Ltd. in cooperation with Major G. Rawlings Pape who sent you samples of the original peat stained water in 1954 and on which you reported in your letter to Major Pape dated 25th March, 1954.

In order to remove the colloidal peat stain it was found by numerous tests that this water needed a dose of chemicals as follows: 12 p.p.m. Sodium Carbonate, 10 p.p.m. Sodium Aluminate, 60 p.p.m. Sulphate of Alumina.

A further dose of 12 p.p.m. of Sodium Carbonate was needed to raise the P.H. value of the treated water from to 7.1.

The water was then chlorinated with a dose of 1.5 p.p.m. Sodium Hypochlorite giving a chlorine residual of 0.2. after 2½ hours contact. P.H. value of this Raw sample was 6.7 and that of the final Chlorinated sample 7.1 on leaving Stanley on 22nd January, 1958. The raw water was approximately 100 units of colour Hazen No. 1.

Further experiments are being made to reduce the quantity of chemicals but this does not seem possible at present.

Please contact Crown Agents for recovery of any fees or expenses connected with this report.

Yours faithfully,

(Sgd.) N. A. Barr

CIVIL ENGINEER.

A. M. I. C. E.

Reply at 230

But 15/2/58

EC2 Falkland Islands 7744

All communications to be addressed to the Crown Agents, the above reference and the date of this letter being quoted.

THE CROWN AGENTS

FOR OVERSEA GOVERNMENTS AND ADMINISTRATIONS,

4 MILLBANK,

LONDON, S.W.1.

215

Letter

No. 0491/11

Date 21.11.57.

8 JAN 1958

19.....

Indent

No.

Date

Department:— Col. Sec.

Sir,

I am directed to append a report in connection with the indent or other communication referred to hereon.

I am, Sir,

Your obedient servant,

The Colonial Secretary,
Falkland Islands.

ITEM No.	SUBJECT	REMARKS
Stanley Water Supply.	Level Recorders.	The attached quotations which have been received from the Lea Recorder Co. Ltd. and Evershed & Vignoles Ltd. are forwarded for your information.
		Will you please note that the equipment offered by the Lea Recorder Co. Ltd. requires that the loop resistance of the transmitting lines should not exceed 800 ohms. (in this case the resistance of the telephone lines) and you are requested to check this point.
		It is hoped that the attached information is of assistance and your further instructions are now awaited.

2112-220

h/e

11/2/58

Reply at 236

IW/AJ

215

CROWN AGENTS

William 23/11

ON ADMIRALTY, AIR MINISTRY AND WAR OFFICE LISTS

Line:
PARK 2813
(3 Lines)

Telegrams:
RECORDING, MANCHESTER 18
Code: BENTLEY'S

RECORDERS
For Measuring
Boiler Feed, Condensates,
Water Supplies, Sewage,
Rivers, Streams,
Borehole Discharge,
Trade Effluents, Etc.
**FLOW CONTROL
APPARATUS**

THE LEA RECORDER CO. LTD.

Managing Director: John W. Horner, B.Sc., A.M.I.E.E.

HEAD OFFICE AND WORKS

CORNBROOK PARK ROAD

MANCHESTER, 15

COAL METERS
For Mechanical Stokers

"CUBI-METERS"
For Measuring
Coal and other Materials
in Bulk

LONDON OFFICE:
PARLIAMENT MANSIONS
ABBEY ORCHARD ST., S.W.1
Telephone: ABBEY 4079

YOUR REF.

EC2/Falkland Is. 7744

IN REPLY PLEASE QUOTE

DDS/BE. E.19047.

QUOTATION

20th December, 1957.
CROWN AGENTS
23 DEC 1957
MILLER

The Crown Agents for Oversea Governments
and Administrations,
4, Millbank,
LONDON S.W.1.

Dear Sirs,

PORT STANLEY WATER SUPPLY SCHEME.

We thank you for your enquiry of the 10th instant requesting our quotation for the supply of two sets of Remote Indicating Equipment for installation on the above Scheme.

We have noted that disused telephone lines would be available from each Reservoir to the Pumping Station, and on the assumption that an electricity supply is not available at the Reservoirs but is available at the Pumping Station, we would offer an Electronically operated Transmitting System. Each set of equipment would consist of a small transmitting unit built into a weatherproof case, and would be provided with a small circular dial to give an indication of the level in the Reservoir at the site.

The transmitter would be float operated and should be mounted directly over a float tube particularly if there is any turbulence which might cause the float to have some slight lateral motion. The Transmitter should be connected to the existing telephone lines and at the receiving end the power unit necessary for the operation of the equipment should be installed, and into which a single-phase A.C. supply would be fed.

The Indicator for mounting in the Pumping Station would have a dial approximately 8" in diameter and could be built into cases for either wall or flush mounting, whichever is preferred.

We trust that these proposals will meet with your approval and now have pleasure in submitting our formal quotation for the

equipment required as follows :-

FOR TWO SETS OF WATER LEVEL INDICATING EQUIPMENT
OF ELECTRONICALLY OPERATED TYPE,

each set consisting of

Transmitter built into a small cast metal case complete with circular dial to show the depth in the Reservoir;

complete with float, float connection, balance weight, and arranged to operate

Water Level Indicator built into a case for flush mounting, or alternatively, wall mounting, the Indicator having a circular dial approximately 8" in diameter, calibrated for a range of 8 ft.;

each set of equipment complete with power unit to operate the equipment over two transmitting lines from each transmitter from a single-phase A.C. supply,

THE SUM OF £205. 0. 0. each set.

DELIVERED F.O.B. suitably packed for shipment.

TIME REQ'D FOR DELIVERY Approximately 5 months from receipt of full instructions and approval of plans.

TERMS OF PAYMENT Nett Cash Monthly Account.

SHIPPING SPECIFICATION Each Set - Space Approx. 10 cu.ft.
" " Weight Approx. 170 lbs.

We would mention that in order that satisfactory remote indications can be obtained, the loop resistance of the transmitting lines should not exceed roughly 800 ohms.

We trust that our offer will be accepted and that we shall be favoured with your further instructions in due course.

Meanwhile, assuring you of our best attention at all times,

We remain,
Yours faithfully,
for THE LEA RECORDER CO. LTD.,

L.O.



Sales Dept.

218

EVERSHED AND VIGNOLES LIMITED

INTERNATIONAL INSTRUMENTATION AND CONTROLS DIVISION
ACTON LANE WORKS · CHISWICK · LONDON · W4

YOUR REF EC2/Falkland Is. OUR REF ARG/JC/DI/267658
7744

Trade Mark

TELEPHONE: CHISWICK 3670
TELEGRAMS: MEGGER, CHISK, LONDON
CABLES: MEGGER, LONDON

23rd December, 1957.

The Crown Agents for Oversea Governments and
Administrations,
4, Millbank,
LONDON, S.W.1.

For the attention of Mr. I. Williams.

Dear Sirs,

Port Stanley Water Supply Scheme

We thank you for your valued enquiry of the 10th December regarding remote level indicating equipment for two reservoirs located two to three miles from a pumping station. The equipment which we wish to offer for this application is our Teleresistance System as illustrated and described in the enclosed Publication No. 533.

This consists basically of a robust float operated transmitter of the variable resistance type which, together with a resolver unit situated at the indicating point, produces a D.C. mA signal directly proportional to water level. This signal can be used to operate the remote indicator which has a simple milliammeter movement. The dial of the indicator would be scaled in terms of water level. A two-wire light duty telephone type line is required between each transmitter and the pumping station. The loop resistance of each of these lines must not exceed 1,000 ohms.

In detail our quotation is as follows:-

Two Sets each comprising:

- 1 - Teleresistance Water Level Transmitter, symbol T015, complete with local indicator, 10" diameter galvanised iron float, driving sprocket, jockey pulley, length of chain and counterweight; suitable for a level range of 0-8'.
- 1 - Teleresistance Resolver Unit, symbol TR1, suitable for operation from a single phase 50 cycle supply.
- 1 - Teleresistance Water Level Indicator, symbol RA/A3, with a 9" diameter 18" long circular scale; housed in a wall mounting case fitted with a side terminal box.

Price: £176. 14s. 6d. nett per set.

We estimate that delivery of the above equipment could be effected in approximately six months from the date of receipt of a firm order with full instructions to proceed.

The price quoted does not include the cost of packing and delivery f.o.b. London, which would be charged for extra at £6. 6s. 0d. nett per set. In all other respects our offer

cont'd....

The Crown Agents for Oversea Governments and Administrations.

is governed by the enclosed Terms and Conditions for Export, and our prices are strictly nett for cash in London against shipping documents.

We estimate that the foregoing equipment would be packed according to the following approximate shipping specification:-

2 - Packing Cases, each having outside dimensions
45" x 31" x 25"

Nett weight: 120 lbs. approx. each.
Gross " 230 lbs. approx. each.

We trust that this quotation will be of interest and assistance to you and look forward to hearing from you again in the future. Should you require any further information, please do not hesitate to contact us again.

Yours faithfully,
EVERSHED & VIGNOLES LIMITED.

Al George.

for W. T. Marchment,
Instrumentation & Controls Manager.

ENC: Pub. 533.
T&C(E)

HFG

DECODE.

TELEGRAM.

From Water Pollution Research, England.

To Colonial Secretary, Stahley.

Despatched . 14th Feb. 19 58 Time : 1600

Received : 15th Feb. 19 58 Time : 1030

Water samples Port Stanley chemical quality safe bacterial quality not examined clarity not good report follows by airmail.

WATER POLLUTION RESEARCH

P/L:MF

231

H.C.S. informed

Phoned to C/E's office - send him a copy please.

(Intld) J.B.

15/2/58

232.
b.e.f.
15/2

NB Water Filtration Plant
opened by HE 18th March 1958
232

b/c
215 returned for observations, pl

8/3/58.

AtqCS. 233

These installations are far more complicated and expensive than I expected and are not warranted in our case.

234  9/5/58

S/C
re. these C/MA - say it has now been decided
not to proceed - or was that what ACS²³⁵ meant
8/12/58
Staff. etc. 21/3/58

REC

13th May,

58

215

Gentlemen,

I am directed to refer to your letter EC2 Falkland Islands 7744 of the 8th January, 1958, regarding quotations for water level recorders and to inform you that as these installations are more complicated and expensive than was at first envisaged it has been decided not to proceed with this project.

2. I am to thank you for your assistance in obtaining quotations and information.

I am,
Gentlemen,
Your obedient servant,

(Sgd.) D. R. Morrison.

for ACTING COLONIAL SECRETARY.

The Crown Agents for Overseas Governments and Administrations,
4, Millbank,
LONDON, S.W.1.

DRM/MF

Copy to Civil Engineer. 237

238 ACB-230 Did this report come direct to CA?
I don't know - ask him 3 & 4/5/58
20/1/58

239

C.A.

Have you received the Report
promised in 230?

Dr. P. H. C. S.
14/7/58

CIC

Aty. CC

240

See 241 Your report came direct to me.

[Signature]

C.E.

19/5/58

[Signature]
LANK

REC

REC

DEPARTMENT OF SCIENTIFIC



AND INDUSTRIAL RESEARCH

I/122/58
167
241

Telephone: Stevenage 820

Replies should be addressed to:—
THE DIRECTOR

Our ref.:— WPRS.45/39/1

Your ref.:—

WATER POLLUTION RESEARCH LABORATORY,

ELDER WAY,

STEVENAGE, HERTS.

11th March 1958.

BY AIR MAIL

Dear Sir,

Stanley Water Filtration Plant

~~167~~ 242
230

As promised I am sending you herewith our full report on the chemical examination of the sample of water you sent recently from the Stanley Water Filtration Plant; two copies are enclosed. I must mention that although we carry out investigational work such as the original examination in 1952 of the sample of Falkland Islands water, to find whether it could be treated by coagulation, we do not normally do routine analyses. The laboratory to which samples should be sent for routine examination is The Government Laboratory, Water Division, Dudley House, Endell Street, W.C.2. The Government Laboratory has a regular organization for providing this service to Government Departments and I feel sure that the Crown Agents for the Colonies must be included among the Departments served.

Yours faithfully,

(A. E. J. Pettet)

Assistant Director, Water Pollution Research

N. A. Barnes, Esq., A.M.I.C.E.,
Civil Engineering Department,
Port Stanley,
Falkland Islands.

168
242

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH
WATER POLLUTION RESEARCH LABORATORY

Chemical Examination of a Sample of Treated Water Received
from the Falkland Islands in February 1958

A Winchester quart sample of water from the filtration plant at Port Stanley, Falkland Islands, was received for examination at the Water Pollution Research Laboratory on 7th February 1958. The sample had been despatched from the Falkland Islands on 22nd January 1958. The water was stated to have been treated at the filtration plant with 12 p.p.m. sodium carbonate, 10 p.p.m. sodium aluminate, and 60 p.p.m. aluminium sulphate, followed by a further dose of 12 p.p.m. sodium carbonate to raise the pH of the treated water to 7.1. The water was stated then to have been chlorinated with a dose of 1.5 p.p.m. sodium hypochlorite giving a chlorine residual of 0.2 p.p.m. after 2½ hours contact. The pH of the chlorinated sample, on leaving Port Stanley, was stated to be 7.1.

The sample, on arrival at W.P.R.L., contained a slight sediment and on shaking the sample this was dispersed giving a slightly yellow turbid water. On filtration through a No. 1 filter paper the filtrate obtained was perfectly clear and almost colourless. Taste and odour were satisfactory. Results of chemical analyses of the sample were as follows:-

Results of chemical analysis of sample of water received
from Falkland Islands on 7th February 1958

Colour (Hazen scale)	Unfiltered	40
	Filtered	5
pH value		6.4
<u>Parts per million</u>		
Permanganate value (4 hrs., 27°C., $\frac{N}{80}$)		3.0
Total hardness (as CaCO ₃)		12
Total solids	Unfiltered	15
	Filtered	14
Nitrogen (as N)		
Organic		0.14
Ammonia		0.06
Nitrate plus nitrite		0.06
Nitrite		0.008
Copper (as Cu)		0.01
Zinc (as Zn)		0.16
Lead		not detectable

159
243

From these results it appears that the metals and contaminants for which analyses were made were not present in sufficient concentration to be harmful in a public water supply. The details given of the chemical treatment applied and the appearance of the sample of water suggest that better coagulation could be obtained if the dose of aluminium sulphate was reduced and the dose of sodium aluminate increased so as to produce a pH of about 6.5 without the use of sodium carbonate at the flocculation stage. If necessary, sodium carbonate could be added after filtration to adjust the pH to approximate neutrality.

To judge whether a water is safe to use for domestic supply, chemical analysis alone is not sufficient and it is necessary to have, in addition, the results of bacteriological examination. For bacteriological examination special precautions must be taken in sampling and according to the Ministry of Health the sample must be examined on the day of collection (The Bacteriological Control of Drinking Water, Monthly Bulletin of the Ministry of Health, 1951, 10, 18-22). As far as the Falkland Islands are concerned it is very likely that this would mean that any bacteriological examination would have to be done on the spot; it is possible that improvised arrangements to do this might be made under the instruction (given by post) of a competent Bacteriologist.

Water Pollution Research Laboratory,
Elder Way,
Stevenage, Herts.

March 1958

(WPRS 45/39/1)

244

Curti by name.

Any further actions required on 241-243?

11-13/58


Atty. C.S.

245

In the last paragraph of 243 the necessity of bacteriological tests of public water supplies is stressed.

I would suggest that the only place such tests could be carried out here would be at the Hospital.

As there is at present, no equipment available in the Hospital I would suggest that Dr Slessor be asked to make enquiries in U.K. to ascertain the nature and cost of such equipment.

 C.E.

27/8/58

D.O. on return of S.M.O.

11-28/9/58

BU 30/9/58

2491/11
247

STANLEY TOWN COUNCIL.
FALKLAND ISLANDS.

Stanley, 14th. August, 58



TC/37

Sir,

At a general meeting of the Stanley Town Council held on the 13th. inst; concern was expressed by members at the Officer in Charge of Public Works Department's advice that in future his Department, would be unable to supply the r.m.s. "Darwin" with water for boiler use. Water will of course be supplied as usual, for domestic purposes.

2. Unfortunately, members seem to feel that they have been under a missapprehension in this respect, and it appears, mistakenly believed, that on the completion of the Water Filtration Plant, the supply of water for local consumption and ships would be ample.

3. Vessels such as the R.R.S. "John Biscoe" "Shackleton" and r.m.s. "Darwin" may require at certain periods approximately 150/60 tons of water. These requirements cannot apparently be met.

4. I have been instructed to write to Colonial Government in this respect, and to seek assurances that measures can be taken to augment the actual water supply if necessary to cover these commitments, and also to respectfully ask that Government may confirm that there will be sufficient water to meet the demand, when approximately 90 dwelling houses in Stanley will have completed the installation of flush lavatories.

5. Council would be most grateful to Government for all possible information concerning the recently installed Water Filtration Plant and the supply of water to the Town, including its maximum working capacity, the average daily consumption, any other source of water supply etc.

I am,
Sir,
Your obedient servant,

D.K. Sindy.
Town Clerk.

The Honourable,
The Acting Colonial Secretary,
Colonial Secretary's Office,
Stanley.

248
on file of (1.15)8

Reply at 29.256

249

C.E.

Re. submit a full report on the points raised at 1 so that a satisfactory reply can be sent to the Town Council.

R. 18/1/58

It is requested that, in any reference to this memorandum the above number and date should be quoted.

23rd August, 19 58.

The Hon.,

The Civil Engineer,


The Ag. Colonial Secretary,

Stanley, Falkland Islands.

Stanley.

SUBJECT :- REPORT ON CAPACITY OF FILTRATION PLANT.

- (1) In considering the capacity of the plant it should be borne in mind that it is quite normal to operate for 24 hours per day if necessary, similar to the operation of the Power Station.
- (2) When the plant was designed the average daily consumption was estimated at 29,000 gallons per day.
- (3) A possible future increase in consumption up to 60,000 gallons per day was allowed for.
- (4) Present average consumption over 136 days was 40,000 gallons per day including ships etc.
- (5) 40,000 gallons per day was produced by running the plant for 58 hours per week giving an average hourly output of 4,840 gallons per hour.
- (6) The capacity of the pumps is 6,000 gallons per hour but 1160 gallons per hour is used in cleaning filters and de-sludging sedimentation tanks. These operations take an average time of 2 hours per day when the stream water is very coloured. There would be a seasonable increase in summer output.
- (7) There is storage in the reservoir, which should be kept full, for approximately 300,000 gallons. In the past this has not been done but I have made the suggestion to P.W.D., that they see that this is done. One ship taking 150 tons would only take 30,000 gallons so that the present arrangements whereby the operators do shift work on two evenings per week amounting to 9 additional hours per week would only have to be increased to meet any additional demand. There is of course no Saturday afternoon or Sunday working at present. The operator travels in P.W.D. Rover Pick-up to and from the plant, resulting in at least $\frac{1}{2}$ an hour being lost each day. It might be considered an advantage to pay a small allowance to run his own motor cycle.
- (8) From the above it will be seen that it would be possible to increase the output sufficiently to cover any foreseeable increase in demand. The Moody Brook is always expected to supply sufficient water to maintain the maximum that the plant can produce per hour even in the driest weather. The question of supply of ships is really a matter of keeping the reservoir full and also of cost.


Civil Engineer.

7E

1. Pages 1 to 7 of the report are correct.
2. I think it was at the last meeting of ExCo when Mr. Belmont raised the question of some contribution being made by the P.C. towards the cost of supplying Stanley with water.
3. In replying to the P.C., it would seem an appropriate opportunity to mention that the Government has this in mind and I have included pages 8 to 10 for this purpose.

252

P. 27/8/58

WAGS

- I agree. I think it quite probable that the cost of operating the plant will be raised when next year's estimates are considered.
2. I believe the operator owns a motorcycle, & as Mr. Davies suggests it might be more economical to pay him an allowance than have him taken out by P.W.D. and Ross. Was the question of his travelling to & from Stanley considered when he was first taken on?

PA. 27.8.58

0491/11

B

253

The Falkland Islands Company, Limited.

(INCORPORATED BY ROYAL CHARTER 1851.)

REGISTERED 1902.

AGENTS FOR LLOYDS.

Stanley,

TELEGRAMS "FLEETWING PORTSTANLEY" VIA RADIO.



27th. August 1958.

The Town Clerk,
Stanley Town Council,
Stanley.

Dear Sir,

We have for acknowledgement your letter of 10th. ult. which advised us that R.M.S. "Darwin" would not be supplied with Boiler Water in future.

No reasons were given for this decision, nor were we warned in advance, but fortunately our private reservoir was able to provide the thirty tons required on the following day, and any that has been needed on subsequent occasions.

In the past, before the Moody Brook plant came into operation, we were constantly being refused water for domestic use as well as boilers, or rationed to such an extent that our vessels had sometimes to deviate from their itinerary to take in water at a Camp Station, but we accepted this as a necessary, if inconvenient, precaution to safeguard the Town supply.

Now it would appear that the Moody Brook Filtration Plant cannot cope even with normal demands. What then will the situation be when the hundred or so houses in Stanley that still lack conveniences are modernised, not to mention the requirements of the much publicised Swimming Bath ?.

R.M.S. "Darwin" carries 40 tons water in two boilers and approximately the same quantity in Feed Tanks.

A round voyage to Montevideo and back consumes 30-35 tons therefore allowing for Boiler Cleaning every three months and Coastwise Voyages, the ship needs 70 tons a month.

Our main reservoir contains 90 tons, Jetty Tank 14 tons, in all 104 tons which clearly are insufficient in a spell of dry weather.

At the Camber there is a rainwater reservoir holding allegedly 300 tons. It is Admiralty property, the underground pipe-line is corroded, and several hundred yards of hose and a portable pump are necessary to put water to the mooring berth. The time taken for the whole operation is considerable.

R.M.S. "Darwin" fills domestic water tanks in Montevideo every voyage, but preferably not boiler feed tanks because water at Montevideo is so hard.

/To...

File

To sum up, your letter came as an unpleasant surprise,
and we visualise an occasion possibly during this coming summer
when R.M.S. "Darwin" is unable to carry out her Overseas Itinerary.
Please let us hear your views.

Yours faithfully,



Manager.

c.c. The Honourable the Colonial Secretary.

255
8

STANLEY TOWN COUNCIL,
FALKLAND ISLANDS.

TC/37



Stanley, August, 27th, 19.....

The Manager,
Falkland Islands Company Limited,
Stanley.

Dear Sir,

253

B

Further to my letter of the 10th. July, and in reply to your favour of to-day's date, I must in the first place offer you my apologies for not stating reasons at time of writing why r.m.s. "Darwin" could not be supplied with water for boiler use.

2.- I have requested from Colonial Government on behalf of Council, that the supply of water be augmented if possible whenever necessary, to enable us to fulfill our commitments towards r.m.s. "Darwin" and other vessels, etc.

3.- Mr S.G. Trees, the Honourable the Acting Colonial Secretary has this morning given the Town Clerk accurate verbal information in this respect and his assurance that Government will accede to our request as stated in above paragraph.

4.- I will communicate with you again, immediately upon receipt of letter from Colonial Government.

Yours faithfully,

J. G. Sney
Town Clerk.

copy:
The Honourable
The Acting Colonial Secretary,
Colonial Secretary's Office,
Stanley.

J. G. Sney

28th August,

58

Sir,

247 I am directed to refer to your letter of the 14th August, expressing concern that the Public Works Department would, in future, be unable to supply water for use in the R.M.S. "Darwin's" boilers and asking for full information about the maximum capacity of the recently erected filtration plant, particularly in view of the fact that, in due course, approximately 30 more dwelling houses in Stanley will instal flush lavatories.

2. I am to say at the outset that the filtration plant is more than capable of meeting any foreseeable demand for water in Stanley. When the plant was designed the average daily consumption of water in Stanley was 29,000 gallons while present consumption, averaged over 136 days and including the requirements of ships, is 40,000 gallons.

3. Forty thousand gallons per day have been produced by running the plant for 58 hours weekly, an average hourly output of 4,840 gallons. The capacity of the pumps is 6,000 gallons per hour but 1,160 gallons per hour are used in cleaning the filters and de-sludging the sedimentation tanks. These operations take, on an average, two hours daily when the stream is very coloured.

4. It must be borne in mind, of course, that the plant is capable of operating 24 hours daily, should this be necessary, but additional staff would have to be engaged.

5. The reservoir has a storage capacity of approximately 300,000 gallons. The reservoir has not been kept full in the past but steps are now being taken to ensure that the maximum quantity of water is held there. A ship taking say 150 tons of water would reduce the quantity held in the reservoir by 30,000 gallons.

6. As you are aware, Moody Brook is the source from which water is obtained and it is expected to supply sufficient water to maintain the maximum output of the filtration plant, even in the driest weather.

7. The boiler water requirements of R.M.S. "Darwin" will, in future, be met.

8. This raises the question of expenditure incurred by Government in operating the filtration plant. Firm figures of the annual cost are not yet available as the plant has been operating only for about six months. The cost, however, is likely to be high. In addition to the wages of the operators, the cost of the chemicals used in purifying the water and electricity consumed in running and heating the plant are major items of expenditure.

9. The overtime costs and other incidental charges incurred in, for example, pumping an additional 30,000 gallons of water for R.M.S. "Darwin" are considerable. These costs are at present met by Government yet the revenue received for the sale of the water accrues to the Town Council.

The Town Clerk,
Stanley Town Council,
STANLEY.

SCT/MF

/10. It is understood....

10. It is understood that the Town Council imposes a water rate in Stanley and I am to request that you will inform me of the annual revenue derived from this rate. Will you please also advise the charges imposed, per ton (or however it may be assessed of supplying water to ships.

I am,
Sir,
Your obedient servant,

(Sgd.) S. G. Trees.

ACTING COLONIAL SECRETARY.

Copy to: Officer-in-Charge, Public Works Department.

21V 246.

21V 5 para 2.

BU. 6/9/58

TC/37

Stanley, 2nd. September 19 58



Sir,

256 I have before me your welcome letter of the 28th. ult, in reply to Council's request for full information with regard to the output of the newly erected Water Filtration Plant.

2.- Your letter was read to Council at a general meeting held yesterday, and I am directed to thank you for the very valuable and detailed information contained therein.

257 3.- With reference to your request in paragraph 10, I beg to inform you that the average water rate revenue for the past five years, was 466.- and although not requested by you, may I take the liberty of giving the expenditure figure for this same item, in respect of repairs, connexions etc. which shows a yearly average of £91.- for the same period. Due to an increase in the water rate the revenue for the present financial year ending December 31st. 1958, will be approximately 25% higher than the average quoted.

4.- A charge of 3/- per ton is imposed for sales of water to ships.

5.- I should like to repeat my thanks for your letter which makes it patently clear that the reservoir in itself when maintained at its full capacity as intended by Government is more than a sufficient guarantee to insure that the local requirements of water can be easily met, and that fortunately the concern felt by Councillors, is now unwarranted.

I am,

Sir,

Your obedient servant,

D. J. O'Malley
Town Clerk.

The Honourable,
The Acting Colonial Secretary,
Colonial Secretary's Office,
Stanley.

258

259.

STANLEY TOWN COUNCIL,

FALKLAND ISLANDS.

Stanley, 2nd. September 589

TC/37

The Manager,
Falkland Islands Company Limited,
Stanley.

Dear Sir,

Water Filtration Plant

253

In reply to your favour of the 27th. ult, I give hereunder extracts of letter received from Colonial Government dated August 28th. 1958, supplying full information requested by Council in respect of the output of the above plant, and the average daily consumption of water in Stanley etc.

"the filtration plant is more than capable of meeting any foreseeable demand for water in Stanley. When the plant was designed the average daily consumption of water in Stanley was 29,000 gallons while present consumption, averaged over 136 days and including the requirements of ships, is 40,000 gallons. Forty thousand gallons per day have been produced by running the plant for 58 hours weekly, an hourly average output of 4,840 gallons. The capacity of the pump is 6,000 gallons per hour but 1,160 gallons per hour are used in cleaning the filters and de-sludging the sedimentation tanks. These operations take on an average, two hours daily when the stream is very coloured. The reservoir has a storage capacity of approximately 300,000 gallons. The reservoir has not been kept full in the past but steps are now being taken to insure that the maximum quantity of water is held there. A ship taking say 150 tons of water would reduce the quantity held in the reservoir by 30,000 gallons. The boiler water requirements of R.M.S. "Darwin" will, in future, be met."

2.- Obviously there has been a regrettable misunderstanding in this respect, and the Town Clerk is in part responsible for this, because although he did request verbally an explanation to give you at the time, the above extracts show, that he should have pursued this matter further before taking any action.

3.- I am indeed sorry, and members of the Stanley Town Council have also expressed their regret, for the unnecessary inconvenience caused, to all concerned.

Yours faithfully,

[Signature]
Town Clerk.

Copy:
The Honourable,
The Acting Colonial Secretary,
Colonial Secretary's Office.
Stanley.

Bu 6/9/58 (257)

4E.

Para 2 of § 252. Although we have offered the operator an allowance, he does not wish to use his motor cycle with the road in its present state. It is likely, however, that he will do so once it is repaired. In the meantime there is no alternative but to continue taking him out in the pick-up.

2. When first engaged it was understood that the operator would use his motor cycle.

3. P.C. see 258 re. Low Linnar Avenue
from notes

6/9/58

261.

HACS.

I suppose the understanding was not sufficiently definite for us to make him use his m-c. The trouble is he has bought an expensive BMW. He cd. very well use it but it wd. get dirty! The road was repaired only a few months ago & has deteriorated rapidly. I am afraid the heavy traffic on a dirt surface makes this inevitable.

RA 8.9.58

CA.

262

No. _____

MEMORANDUM

It is requested that, in any reference to this memorandum the above number and date should be quoted.



1st November, 1958.

The Honourable, _____

The Colonial Secretary, _____

Stanley. _____

The Civil Engineer, _____

Stanley, Falkland Islands.

SUBJECT :-

263

I enclose herewith a report on the Meteorological Station water supply. My department could carry out the construction of the concrete underground storage sump without appreciably interfering with our programme of work. Secretary FIDS has stated that he is willing to authorize payment for the work on the basis suggested.

Shall I go ahead?

A handwritten signature in black ink, appearing to be "N. R. ...", written over a horizontal line.

Civil Engineer.

262 A

On file
E. J. J.
3/1/58

WATER SUPPLY TO METEOROLOGICAL STATION.

When the new Stanley Water Supply Scheme was put into operation, the High Level Tank at Sapper's Hill was cut off. This meant that no piped water could reach the Meteorological Station unless it was pumped direct from the Filtration Plant. There has been a rain water tank supply only available since March, 1958 and this has failed several times. It has been possible to pump directly through to the Meteorological Station on several occasions but this has proved to be most detrimental to the efficient running of the Filtration Plant.

As a result, I suggest that a small centrifugal pump powered by an electric motor single phase 230 volt A.C. supply 50 cycles be installed to deliver approximately 100 gallons per hour through 80 yards of 2 1/4" diameter pipe against a total maximum head of 25 feet. The suction of this pump would be taken into a concrete tank of 400 gallons capacity constructed in the ground below the level of the Stores Nissen Hut by the East side of the gate to the Meteorological Station.

It has been found by experiment that water would reach this sump and could be controlled by a ball valve on the existing service pipe. The pump should be electric automatically float controlled from the storage tank on the Meteorological Station roof. The total cost of this equipment would be less than £100.

There is a dwelling house approximately 50 yards from the Meteorological Station owned by Mrs. Butcher which has no piped water supply. This could easily be supplied from a branch line off the Meteorological Station pumping main controlled by a ball valve in the storage tank of the house.

I suggest that Government pay 20% of the cost of the installation to secure the right to supply this house with piped water from this source. If this is not done now, then a similar installation would have to be provided for this house independent of the Meteorological Station.

Whilst waiting for the supply of the electric pump, a small petrol engined pump could be temporarily installed on loan from this Department.



Civil Engineer.

C.T.

J. 263.

You will remember that the sub-project of piping a water supply to the Met. Station was cut out of the estimate. They are, I understand, in a pretty precarious position up there and must have a supply. This the Civil Engineer is proceeding against payment by F.I.D.S. - who should not in equity be called upon to pay - though there is no alternative.

My own feeling is that in all the circumstances an arrangement as summarized in J. 263 (to which erection and labour costs must presumably be added) is reasonable and suggest an approach by consultation to S.F.C. Would you think the same view. There may be some other way of legitimately meeting the unbalanced oblong obligation.

24/11/58
7/11/58

265

note Messrs Hardy Clement (S.F.C.) agree to expenditure of £40 on the project proposed in 262-263 (£40 = 20% of revised maximum estimate of £200, 80% to be borne by F.I.D.S.)

D. 7/11/58

266

C.E.

262-263. Your proposals for supplying water to the Met. Station & the Butcher's have been agreed by S.F.C. The work may be put in hand forthwith. Payments in the proportion of 20% Govt, 80% F.I.D.S.

A.C.S.

267.

Noted.

for C.O.
D. 7/11/58

6/11/58

277
Thank you. This is
interesting

DA 12.12.57

Y.E.

276
Water Supply.

S/S. reports that the
daily consumption of water
has gone up from 48,000
galls. to 75,00 galls. over
the past 12 months. This
has resulted in minor
increase in the filtration
plant operators (2) wages
in view of extra overtime
involved in pumping. The
Stream is however living up
to expectations & S/S anticipates
no shortage.

The increased consumption
is no doubt due to the many new
house sewerage connections. A further
increase can be expected.

12/12/57

URGENT

No. _____

It is requested that, in any reference to this memorandum the above number and date should be quoted.



MEMORANDUM.

5th January, 19 60

To: The Honourable,
The Colonial Secretary,
Stanley.

From: Superintendent of Works.

Stanley, Falkland Islands.

SUBJECT:- Shipment of water for Analysis.

I have the honour to inform you that we are forwarding to the Crown Agents for Analysis per this trip of the "A.E.S." 3 bottles of water from Fox Bay and 1 bottle of water from the Stanley Supply. I will be grateful if the Crown Agents can be informed of this.

CSO 0491/III

[Handwritten Signature]

Supt. of Works.

*Office - for my action pt.
5/1/60*

ACS

277

Draft etc

[Handwritten initials]

11.1.60

279

OK. can sign

[Handwritten initials]

12th January,

60

Gentlemen,

I am directed to inform you that 1 case containing 3 bottles of water from Fox Bay and 1 bottle of water from Stanley is being forwarded direct to you in 1 case bearing the reference "C.S.O. Q491/II" by m.v. "A.E.S." due to arrive at London 31st January/1st February, 1960.

2. I am to request you to arrange collection of the case and to have the water analysed. Charges in this connection may be charged to the Colony's General Account.

I am,
Gentlemen,
Your obedient servant,

D. R. Morrison.
(Sgd.) ~~XXXXXXXXXX~~

for COLONIAL SECRETARY

Crown Agents for Oversea Governments and Administrations,
4, Millbank,
LONDON. S.W.1.

Rec 350

DRM/MF

copy sent to Dept. Public Works.
Colonial resources.

281.

Communications to be addressed to
THE CROWN AGENTS
OVERSEA GOVERNMENTS AND ADMINISTRATIONS
the following reference and the date
of this letter being quoted.



4, MILLBANK,
LONDON, S.W.1K 1965
FALKLAND ISLANDS

0/Prod. 1989

TELEGRAMS { INLAND : " CROWN, SOWEST, LONDON." }
 { OVERSEA : " CROWN LONDON." }
TELEPHONE : ABBEY 7730.
TELEX No. 24209.

2nd March, 1960.

Sir,

280. I am directed to refer to your letter of the 12th
January and to inform you that the consignment of water which
you require to be analysed has now been safely received in this
office.

Arrangements are in hand to carry out your instructions and
a copy of the analyst's report will be forwarded to you as soon
as possible. It is noted that any charges incurred in respect
of this service may be charged to the account of the Falkland
Islands Government with this office.

I am, Sir,
Your obedient servant,

Reply at 292.

The Colonial Secretary,
Stanley,
Falkland Islands.

282.

50
Above for info
282
31 3 60

283.

Noted that you

31/3/60

EAG/JKA.

282 13 6.60.

No mail
28. 16/5/60

282 30/4/60 (mail)

No mail
28. 16/5/60

Sept. P.W.

M^{rs} Lurston tells me that it seems that the chemicals in the water are doing her pipes and boiler a good deal of harm. She understands that a lot of pipes are having to be renewed - including her and Handings (all of which are fairly new).

What is the position please?

D.G.H.

30.5.60.

285.

H.C.S.

I am having quite a lot of trouble with these pipes they all seem to be blocking up. It is my confirmed opinion that the chemicals being used are removing the sediment from the old water inside the pipes and it always goes to the lowest point.

A.G.H.

31/5/60.

Water Samples were sent to the Crown Agents in March but to date there is no report

A.G.H.

31/5/60

On file of.

2/1/7

1st June 1960

I have looked into the question that you raised the other day with regard to the renewal of water pipes.

Livermore confirms that he is having a lot of trouble with pipes which seem to be blocking up. It is his view that the chemicals being used in the Filtration Plant are scouring the sediment which was deposited on the inside of the pipes in great quantities, and this sediment is now being carried through the various terminal points of the pipe line system of Stanley, particularly to the lower points.

Water samples were sent to the Crown Agents in March, but we have not yet had an analysis. I hope this may give us some indication of what is happening. Livermore's opinion does, however, seem to be a fairly logical one, particularly when you consider the massive and progressive build-up of peat deposits on the inside of the whole of our pipe system, for which the unfiltered water was responsible.

I do not think there is anything further we can do at the moment, pending a reply from the Crown Agents. - But we will keep it in view.

*Yours sincerely
Aubrey.*

~~Signed A. G. Denton-Thompson~~

Mrs. C. Luxton, J.P.,
STANLEY.

AGDT/MW

Reply at 287.

287

1.6.60

Please B/U 15th June to see if there is any reply from Crown Agents. We should keep this question in view.

C. J. P.
1.6.60

0491/11

289.

Box 165

MALVINA HOUSE

PORT STANLEY

FALKLAND ISLANDS

SOUTH ATLANTIC

3rd June 1960.

Dear Aubrey,

Thank you for your letter. I hope they can do something about the water, but it will be some time before you hear anything from the Crown agents. They & the F.I.C. head office are on a par with delaying replies. Maurice Evans has just had to renew my hot water

pipe in four places! so I am
hoping the Pot water system
will hold out.

As you say we must await
an answer from the Crown
agents.

Yours Sincerely
Commins,

Sept. 27. 60.

289

Can you list -

how much work has been done - and what work - on Government grants as the result of this agreement sitting up;

how much work Evans and Peck should have done privately on the same problem.

Could you also give me a brief description of what precisely is happening - because I want to refer the matter to the known agents for enquiry from the consultants.

I want full details please - this may well become a matter of some importance and controversy

P.G.J.
11.6.60.

290

Recalled for filing folio 291.

JH 25/1/60.

291

No. _____

It is requested that, in any reference to this memorandum, the above number and date should be quoted.



MEMORANDUM.

23rd August, 19 60

To: The Honourable, _____

The Colonial Secretary, _____

Stanley. _____

From: The Superintendent of Works, P.W.D. _____

Stanley, Falkland Islands.

SUBJECT:- Analysis of Water.

With reference to the case of water shipped per "A.E.S." in January of this year to the Crown Agents for Analysis I have to report that no Analysis has been received to date although a payment of £10. 10s. was made by the Crown Agents in April for analysing this water. Can a telegram be sent to them asking for a copy to be sent as it would appear that the original has gone astray.

Supt. of Works.

see 250-251

292

GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS AND DEPENDENCIES.

SENT

(W. & S. Ltd.—250 Pd/7/59).

Number	Office of Origin	Words	Handed in at	Date
	PSY			26.8.60
To				
	CROWN LONDON			(HOA/c)

281 No. 279. Your letter 0/Prod. 1989 of 2nd March 1960 stop Analysts report not received please airmail copy

Secretary

Time DRM/LH

Reply at 294.

[Handwritten signature]

294

DECODE.

TELEGRAM.

From Crown Agents for Oversea Governments and Administrations.

To Colonial Secretary, Stanley.

Despatched : 29th August, 19 60. Time : 1250.

Received : 29th August, 19 60. Time : 1500.

292 Your telegram No. 279.

Water samples original report sent airmail
30th March. Will airmail copies today.

Crown.

(Intld.)
DM

295

See To note above and for action on 289 pl.

HCB Noted and action taken, (Samples supplied) 30.8.60

ASK 2/9/60

P/L : IM

o.
It is requested that, in any reference to this memorandum the above number and date should be quoted.

MEMORANDUM.

2nd. September, 19 60.

To: The Honourable,
The Colonial Secretary,
STANLEY.

From: The Superintendent of Works

Stanley, Falkland Islands.

SUBJECT :- Stanley Water Supply.

I have the honour to submit the following information for the Crown Agents:-

Chemicals used.

1. Alumino Ferric.
2. Soda Ash or Sodium Carbonate.
3. Sodium Aluminate.
4. Unstoved Vacuum Salt.

These chemicals are used as perscribed by the Paterson Engineering Co. Ltd.

Effects on Systems.


Return pipes to stoves get blocked up with substance as samples supplied in as short a time as 6 to 8 months.

On inspection it has been found out that the water has removed the Galvanize from the inside of the Hot Water Cylinder after a period of approxmately 8 months.

Very little trouble has been found in the cold water pipes.

Water.

Water is fed to the Reservoir by a new 6" main from the Filtration Plant but from the Reservoir the distrabution system consists of 4" pipes which are approxmately 30 years old.


Supt. of Works.

*Today
received 4 samples Sept*

3rd September,

60.

Gentlemen,

I am directed to inform you that Government has been concerned for some time about the ever increasing trouble experienced in water pipes particularly in hot water systems. The trouble is caused by the return pipes to stoves becoming blocked as will be evident on examination of the two samples enclosed. Both of these are return pipes. This can happen in as short a time as six to eight months. Inspection has also revealed that the water has removed the galvanize from the inside of the hot water cylinder after a period of approximately eight months. Very little trouble has been experienced in cold water pipes.

2. The town has been supplied with water since March 1958 through the recently constructed water filtration plant and water is fed to the reservoir by a new 6" main from the filtration plant but from the reservoir the distribution system consists of 4" pipes which are approximately 30 years old. The chemicals used in the filtration plant are as prescribed by the Paterson Engineering Co. Ltd. and are as follows:-

Alumino Ferric
Soda Ash or Sodium Carbonate
Sodium Aluminate
Unstoved Vacuum Salt

3. A suggestion has been made that the chemicals which have been in the water since 1958 may have been scouring the pipes and that the resultant impurities have been settling at the lowest point and forming a sediment which when it gets into the return pipes causes the blockages. Water samples have been analysed recently but I have not yet had any reports. This has been the subject of my letter 0491/II of 12th January, 1960, and your telegram of the 29th August, 1960.

4. This Government would appreciate it if you would investigate this question of blockage of pipes and would welcome any suggestions that you may be able to make to overcome this problem.

I am,
Gentlemen,
Your obedient servant,

for COLONIAL SECRETARY.

See 305

Crown Agents for Oversea Governments and Administrations,
4, Millbank,
LONDON, S.W.1.

DRM/LH

17 9 60
(1960)

THE FOLLOWING REFERENCE AND THE
DATE OF THIS LETTER SHOULD BE
QUOTED IN COMMUNICATIONS.

300
299

CROWN AGENTS

FOR OVERSEA GOVERNMENTS AND ADMINISTRATIONS

0/Prod. 1989

4, MILLBANK,

LONDON, S.W.1.

TELEGRAMS { INLAND: "CROWN, SOWEST, LONDON."
OVERSEA: "CROWN, LONDON."

TELEPHONE: Abbey 7730

TELEX NO. 24209



29th August, 1960.

292.

Sir,

280.

I am directed to refer to your telegram No. 279 of the 27th August and to Crown Agents' reply of the 29th August, concerning the Analyst's Report on the water samples sent to this office under cover of your letter 0491/II of the 12th January, 1960, and to enclose two further copies of the Report.

The original Report was sent to you, by airmail, on the 30th March but fortunately a photostat copy had been retained in this office and the two copies now enclosed are further photostats which, of course, have not reproduced as satisfactorily as copies from the original would have done.

I am, Sir,
Your obedient servant,

The Colonial Secretary,
STANLEY,
Falkland Islands.

EAG:MJP.



Department of Scientific and Industrial Research
LABORATORY OF THE GOVERNMENT CHEMIST
Dudley House, Endell Street, LONDON W.C.2

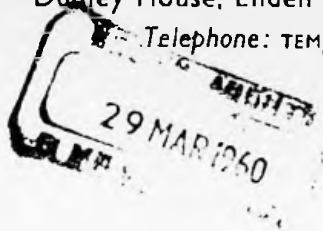
Telephone: TEMple Bar 1823/4

28th March, 1960.

Lab. Nos. 448/49/50/51.

Please address any reply to
THE CHEMIST IN CHARGE
and quote: 3(1)W/1401/34.

Your reference: O/PROD. 1989



Case: Falkland Islands.

Collected:

Received: 16.3.60.

- Sampling Position
- 1. Stanley.
 - 2. Fox Bay - Spring.
 - 3. " " - Mill.
 - 4. " " - Tap in House.

Treatment:- -

Source: -

<u>Physical Examination</u>	1	2	3	4
pH	6.8	6.8	6.6	6.8
Conductivity at 20°C. micromhos/cm. ...	240	310	325	340
Appearance:	1. } Very slightly opalescent, odourless. 2. } 3. } Opalescent, odourless. 4. } Very slightly opalescent, slightly earthy.			} colourless.

- Sediment:
- 1. Moderate, no living organisms.
 - 2. Moderate, a few protozoa.
 - 3. Heavy, no living organisms.
 - 4. Slight, no living organisms.

<u>Chemical Examination</u>	<u>Milligrammes per litre</u>			
Ammoniacal nitrogen	0.02	absent	0.02	0.01
Albuminoid nitrogen	0.02	0.04	0.04	0.02
Nitrite nitrogen	absent	absent	0.004	absent
Nitrate nitrogen	"	"	absent	"
Oxygen absorbed in 4 hours at 26.7°C. from N/80 Permanganate	1.2	0.5	0.1	0.1
Chloride, as Cl	45	85	85	90
Total alkalinity, as CaCO ₃	20	20	30	30
Total hardness, as CaCO ₃	30	45	45	45
Lead	absent	absent	absent	absent
Iron	"	"	1.4	trace
Zinc	"	"	6	6
Copper	"	"	absent	absent
Fluoride, as F	trace	trace	trace	trace
Residual chlorine, on receipt	-	-	-	-
Silicate as SiO ₂	8	16	12	16
Calcium as CaCO ₃	14	25	30	25
Magnesium <i>ca. Mg.</i>	3	5	5	5
Sulphate as SO ₄	30	8	8	8
Total Dissolved Solids	150	190	200	210

The Crown Agents,
4, Millbank, S.W.1.

/The chemical

*299 wrongly
filed. Sent 300
to SW.*

302

The chemical character of the four samples of water is satisfactory for drink purposes. The samples were unsuitable for bacteriological examination and no report can be given on their bacterial condition and hence on their general suitability for drinking purposes without treatment by chlorination.

All the four samples of water are soft and their reaction is slightly acidic. A such waters are likely to be aggressive to metals, it is recommended that service pipes should be of asbestos-cement, polythene or copper. The interior of galvanised iron tanks should be painted with a suitable bitumen paint such as "Bituros".

PIPES

Mail from 299

W. F. Waters

W. F. Waters.
for Government Chemist.

9/15.

To see from f 299 and withdraw copy at b.c. pl.

0
for c.s.
27. 9. 60.
—

HCS

304

Noted and I don't like the look of it
but we must wait until we get a reply
to 298

AKH

29/9/60

Await reply to 298

5
1/10/60

be accordingly
but left to be
completed on 298 first

By 29. 9. 60

THE FOLLOWING REFERENCE AND THE DATE OF THIS LETTER SHOULD BE QUOTED IN COMMUNICATIONS.

305

CROWN AGENTS

FOR OVERSEA GOVERNMENTS AND ADMINISTRATIONS

EC2/Falkland Is. 8728.

4. MILLBANK.

LONDON, S.W.1.

TELEGRAMS: (INLAND: "CROWN, S.WEST, LONDON."
(OVERSEA: "CROWN, LONDON.")

TELEPHONE: ABBEY 7730

TELEX NO. 24209



14th October, 1960.

Sir,

298 I am directed to refer to your letter reference 0491/II and to inform you that the copy of the analysis of the water referred to your letter has been obtained from records in this office.

In the first instance the matter has been referred to the Paterson Engineering Co. Ltd. for their observations on the causes of the formation of the sediment in relation to the plant and chemicals which they have advised for the water treatment.

A full report of their findings will be submitted to you as soon as possible.

I am, Sir,
Your obedient servant,

Handwritten signature

366

Handwritten initials

The Colonial Secretary,
Colonial Secretary's Office,
Stanley,
FALKLAND ISLANDS.

note p. 4. 11. 60

367

*HCS
I can thank you*

DFB

JF

*WGH
4/11/60
71260
(unread)*

THE FOLLOWING REFERENCE AND THE
DATE OF THIS LETTER SHOULD BE
QUOTED IN COMMUNICATIONS.

368

EC2/Falkland Is. 8728

CROWN AGENTS
FOR OVERSEA GOVERNMENTS AND ADMINISTRATIONS

TELEGRAMS { INLAND: "CROWN, SOWEST, LONDON."
OVERSEA: "CROWN, LONDON."
TELEPHONE: ABBEY 7730
TELEX NO. 24209

4. MILLBANK,
LONDON, S.W.1.



8th November, 1960.

Sir,

Further to this office letter dated 14th October 1960 and with reference to your letter ref. 0491/11 dated 3rd September 1960, I am directed to forward for your information the attached copy of the laboratory report of The Patterson Eng. Co. Ltd.

You will note that the deposit in the hot water pipe samples returned with your letter consists almost entirely of Iron Oxide and that the corrosion and deposition is the result of the pH value of the water in use being too low.

This low pH will be noted on the copy of the water analysis Lab. Nos. 448/49/50/51 dated 28th March, 1960 and a copy is attached for your information.

The corrosion experienced is more pronounced in the hot water system than in the cold though in time the cold water pipes would be attacked.

The only means of reducing the causticity of the water is to raise the pH value sufficiently to ensure that the soft water in use will be non corrosive and this can be achieved by increasing the soda dose after filtration to raise the pH to approx. 8.3.

It is hoped that the information provided proves of assistance and the raising of the pH of the treated water cures the corrosion troubles which have been experienced.

I am, Sir,

Your obedient servant,

F.C. [Signature]

369

*On file early pcc
then to S/W based.*

[Signature] 11/2/60

The Colonial Secretary,
Colonial Secretary's Office,
Stanley,
Falkland Islands.

JF/JP

neu

THE
PATERSON ENGINEERING COMPANY
 LIMITED
 129 KINGSWAY
 LONDON WC2

27 OCT 1960

Chemical Laboratory

Date 14th October, 1960

Report on Sample No. 24987 of Deposit Received 12.10.60 Taken

Received from Crown Agents, Millbank.

Source Falkland Islands. Deposit in pipe from hot water system.

Ref. LAB.	KK 1138
File No.	4061
Lab. File No.	

Loss on Ignition	4.2%	by weight
Insoluble in Acid	1.3%	" "
Fe ₂ O ₃	91.0%	" "
	<u>96.5%</u>	" "

No carbonate was present. There was a small amount of manganese.

The deposit received indicated that the major portion of it consisted of iron oxide due to corrosion, most probably from an acid water. From our examination of this deposit it would appear that the galvanising has been attacked and that not only has electrolytic corrosion occurred as between the zinc coating and the iron of the pipe but also that the water passing through them has been of an acid character. This is confirmed by the analysis sent to us where a sample taken from the mill had a pH value of only 6.6 and a sample taken from a tap in the house had a pH value of only 6.8. Such action would be more pronounced in the hot water supply than in the cold although in time in the latter the coating might become perforated when enhanced corrosion would occur.

In view of the fact that the supply being dealt with is a very soft one it is essential to increase the soda dose after filtration to give a final pH value of 8.3.



Department of Scientific and Industrial Research
LABORATORY OF THE GOVERNMENT CHEMIST
Dudley House, Endell Street, LONDON W.C.2

29 MAR 1960
RECEIVED

Please address any reply to
THE CHEMIST IN CHARGE
and quote: 3(1)W/1401/34.
Your reference: O/PROD. 1989

Telephone: TEMPLE BAR 1823/4
28th March, 1960.
Lab. Nos. 448/49/50/51.

Case: Falkland Islands.

Collected:

Received: 16.3.60.

- | | |
|-----------------|------------------------|
| <u>Sampling</u> | 1. Stanley. |
| <u>Position</u> | 2. Fox Bay - Spring. |
| | 3. " " - Mill. |
| | 4. " " - Tap in House. |

Treatment:- -

Source: -

<u>Physical Examination</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
pH	6.8	6.8	6.6	6.8
Conductivity at 20°C. micromhos/cm. ...	240	310	325	340
Appearance: 1.)	Very slightly opalescent, odourless.			} colourless.
2.)	Opalescent, odourless.			
3.)	Very slightly opalescent, slightly earthy.			
4.)				

- Sediment:
- Moderate, no living organisms.
 - Moderate, a few protozoa.
 - Heavy, no living organisms.
 - Slight, no living organisms.

<u>Chemical Examination</u>	<u>Milligrammes per litre</u>			
Ammoniacal nitrogen	0.02	absent	0.02	0.01
Albuminoid nitrogen	0.02	0.04	0.04	0.02
Nitrite nitrogen	absent	absent	0.004	absent
Nitrate nitrogen	"	"	absent	"
Oxygen absorbed in 4 hours at 26.7°C. from N/80 Permanganate	1.2	0.5	0.1	0.1
Chloride, as Cl	45	85	85	90
Total alkalinity, as CaCO ₃	20	20	30	30
Total hardness, as CaCO ₃	30	45	45	45
Lead	absent	absent	absent	absent
Iron	"	"	1.4	trace
Zinc	"	"	6	6
Copper	"	"	absent	absent
Fluoride, as F	trace	trace	trace	trace
Residual chlorine, on receipt	-	-	-	-
Silicate as SiO ₂	8	16	12	16
Calcium as CaCO ₃	14	25	30	25
Magnesium as Mg	3	5	5	5
Sulphate as SO ₄	30	8	8	8
Total Dissolved Solids	150	190	200	210

The Crown Agents,
4, Millbank, S.W.1.

/The chemical

The chemical character of the four samples of water is satisfactory for drinking purposes. The samples were unsuitable for bacteriological examination and no report can be given on their bacterial condition and hence on their general suitability for drinking purposes without treatment by chlorination.

All the four samples of water are soft and their reaction is slightly acidic. As such waters are likely to be aggressive to metals, it is recommended that service pipes should be of asbestos-cement, polythene or copper. The interior of galvanised iron tanks should be painted with a suitable bitumen paint such as "Bituros".

W. F. Waters

W. F. Waters.
for Government Chemist.

373

S/W

To note 368-372 please

See for c.s.

1.12.60.

374

HES

I have read with interest and will explain to the
water operators on return to Stanley about 21/12/60

A. L. L. L.

Supt. Works

14/12/60

No. _____

MEMORANDUM

It is requested that, in any reference to this memorandum the above number and date should be quoted.

12th October 19 61

To: The Honourable,
The Colonial Secretary,
Stanley.

From: Superintendent of Works, P.W.D.

Stanley, Falkland Islands.

SUBJECT:- Telegram to Montevideo.

I have the honour to request that the following telegram be sent to Macstaple, Montevideo:-

"CAN YOU OBTAIN AND SHIP PER THIS DARWIN ONE TON CRUSHED ALUMINO FERRIC OR SULPHATE OF ALUMINA GRATEFUL FOR EARLY REPLY."

No. 19

Phoned 10.42 am

Reg Lawrence
Supt. of Works.

12/10/61

Lawrence

See 384

DECODE.

TELEGRAM.

From London and Stockholm, Sweden.

To Colonial Headquarters, London.

Despatched : 18th October, 1941. Time : 1055

Received : 18th October, 1941. Time : 1350

Chemicals going this trip.

Monteagle

P/T : 131
Copy to: P/T

RAM
19. 10. 61

387

H. C. S.

Notes taken on corrosion - investigating

L. Pickett.
S.P.N.
29-1-62.

OL

~~PA~~

BW 31.3.62

Returning L. Pickett S.P.N.
16/3/62.

or

P.A.

EXTRACT FROM THE MINUTES OF MEETING OF EXECUTIVE COUNCIL

HELD ON 31st JULY, 1962.

3. Stanley Water Supply

In answer to a question regarding the condition of the Stanley Water Supply resulting from cleaning and painting the interior of the tank, the Superintendent of Works informed the meeting that the water was now free of pollution at the Filtration Plant and he hoped it would soon reflect this condition in the piped supply.


Clerk of Executive Council

389

J.H.


Conditions have certainly improved.

BU in a week to CIV?

FH

Yes

4/9

 4.8.62

BU 13.8.62

390.

We can now, I think, budget.

82.

13/2/62.

Fa

391A

BROADCAST ANNOUNCEMENT

Government and the Town Council greatly regret that the water at present has a somewhat unpleasant flavour.

They assure the Public that the water is quite wholesome and the flavour entirely harmless. They further assure the Public that the question of eliminating the flavour is receiving the very careful attention of the Medical Department and the Public Works Department.

It is hoped that it will be possible to make a full statement during the course of the week after the investigations have been completed.

RHDM/II.

To be broadcast three times please - to Stanley listeners only

STANLEY TOWN COUNCIL,
FALKLAND ISLANDS,

.....17th August 1962.....

TC/16.

Dear Sir,

An extra-ordinary general meeting was called on Thursday 16th August, 1962, in connection with complaints received from various members of the public concerning the taste of the Stanley Water Supply.

Members of the Town Council would be most grateful if the Acting Senior Medical Officer could broadcast to the Public, his views and the benefit that the public will receive by the water.

Enclosed are two letter both from firms who manufacture mineral waters.

392-393.

I am,
Sir,

Your obedient servant.

R. Rose
Clerk to Council.

The Honourable,
the Officer Administering the
Government,
Secretariat,
STANLEY.



TELEGRAMS:
"KELPERSTOR STANLEY"

Mrs. LES. HARDY & SON

GENERAL MERCHANTS
KELPER STORE

STANLEY,
FALKLAND ISLANDS,

15th. August 19 62.

Town Council Office,
Stanley.

Dear Sir,

On July 15th. the P.W.D. broadcast an announcement to the effect that they regretted the foul taste the water had, but assured people that it would clear in two to three day's, this must have been wishful thinking on their part; for in actual fact it cost me twelve day's on which it was impossible to manufacture mineral waters, this was quite a loss.

Once again our water supply is contaminated, however not to the extent of the first mishap. Apart from the taste which in no way would help to promote sale of mineral waters, do you think it is going to harm people ?

I trust you will consider a rebate in our water rates to compensate for the loss to our trade,

Looking forward to an early reply,

Yours faithfully,

SPECIAL
MALENGERIAN

Essex Factory
Davis St.
St. Stanley
14th Aug. 1902

St. Stanley Town Council
St. Stanley.

Sir,

I have been informed that any complaints regarding the Towns water supply should be made to your department.

Now since the water supply was switched from one source to another I made no minerals as I did not like the taste of it.

In the meantime my customers have been shouting for minerals, (which I cannot supply) having used up all my stock on hand. I'll yesterday, thinking that the water should be all right now, after waiting about 3 weeks, I made 18 doz bottles of minerals, and on trying them I found they were all spoiled and useless for sale, so I had to dump them.

Last night I emptied my supply tanks of about 800 Gals. water ~~then~~ I caught a little rain water which I used today, giving every satisfaction.

Now I should like to know if the Water Works Dept, cannot reimburse me for my loss of minerals and my loss to business. Trusting this will receive your favourable consideration.

I am, Sir,
Yours respectfully,
J. W. Smith

It may be necessary for ASO to SPW BL FC et al
to meet when ~~any~~ investigation is completed
we could consider 392 & 393 then. As regards 391
it was after work agreement of the T.C that I
had over the announcement. BV 27/8/62

or 20/8/62.

394 A

The present position is that it is considered that the
unpleasant flavour was the result of the gases from
the paint acting on chlorine. When the
water has been in contact with the painted tanks
without being chlorinated there has been no
taste. Also when the water has not been
in contact with the tanks but has been chlorinated
there has been no taste. The tanks are now
being scraped and we shall have to get
advice as to whether there is any fast-drying
paint which we can use. Meanwhile the
water is not being chlorinated. By the end of
next week we hope the scraping will be completed
and chlorination can start again and we hope
there will be no further problems. But at some stage
they will somehow have to be painted; otherwise
they will corrode. (Have explained the
position to the Ghana T.C. SPW, we all agree
that no further announcement is needed at present.

Action now - when the letter comes from Mr Smith
it will be considered.

X It is 395 to RSC for advice

See.

3/c AS as x/abull/jc 29/7/62
30.8.62

23/8/62

Mr Hardy writes.

I am now doing about £4 - £5 a day
though not being able to make mineral
waters. I have not found anything with
the hot water so have not lost in that way.

I suppose I had about 500 dozen minerals
at the beginning. I have still stocks of large
mineral waters which will last about another

3 weeks to a month (ie quite better)

mine is in tonic water, 4 minerals or 5 or 6 all.

I stopped manufacturing for 15/7 - 27/7

(then made they will be soon some
will be taken yet had again. I have a note of
the day stopped.

I suppose I ran out about 4 or 5 days ago.

I have also ~~but~~ not been able to

make ice cream. I generally make
about 2c a week. (we still supply ice cream
in cream. I suppose we sell about 8-10
lbs worth a week.

(would like to be allowed having no restriction
made in the water rates to make up for the loss.

gr.

30 marks 27.8.62

gr.

KIV 394.

396

"Vigour" Mineral Works
Davis St.
Pt. Stanley.
25th July 1962.

The Honorable
The Colonial Secretary
The Secretariat
Pt Stanley.

Sir,

I have been advised by the
Chairman of the Town Council to submit to
you the value of my loss owing to the
water trouble.

Away from loss of time, I had orders
to the value of £22:10/- which I could
not supply, and you must understand
that if this lot had been sold I
would have had further orders.

I mentioned in my previous letter
that I had to destroy 15 doz bottles of mineral
value £4.

I am, Sir,

Yours respectfully
J. W. Smith

Reply at 408.

Adkd

Att. 30/8/62.

R.S.C.

For your advice on p. 395-6 pt. (see 394A).

B
for C.S.

30. 8. 62.

398

Hon. Col. Sec.,

This presents quite a problem to which I am unable to give a complete answer at the moment.

There is no statutory obligation as to the quality of the water supplied although I feel this is implied, particularly when supplied for human consumption.

I understand we have been assured by the authorities concerned that in spite of the fact that the water contains some ingredient which is unpalatable to some it is quite wholesome.

The same water is supplied to all mineral ^{water} manufacturers, therefore one is not placed in a more privileged position than the others. In any case they would have to prove actual injury.

However, one would need to hear both sides before passing a firm opinion, therefore I would suggest that the authorities concerned deny liability. The manufacturers could then, if they still feel aggrieved bring a test action into court.

H.B.

3. ix. 62.

Revised 6 - memo

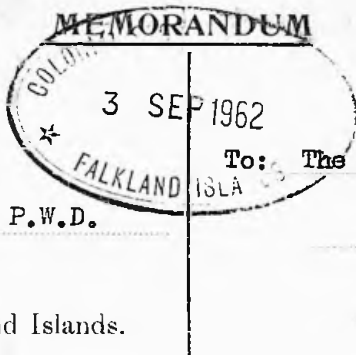
with form papers were revised

H.B.
4/9/62.

399

No. _____

It is requested that, in any reference to this memorandum the above number and date should be quoted.



1st September 1962

To: The Honourable,

The Colonial Secretary,

Stanley.

From: Superintendent of Works, P.W.D.

Stanley, Falkland Islands.

SUBJECT :- Telegram to Montevideo.

With reference to our verbal conversation on Thursday 30th August regarding the ordering of turpentine from Montevideo I have the honour to submit a copy of the telegram which was sent off to Macstaple Montevideo.

399A *R. Puton*
Supt. of Works.

I approve.
we could not wait to order from Crown.
This is the result of the fact that we have not
agreed to make a quantity to
R

GOVERNMENT TELEGRAPH SERVICE

FALKLAND ISLANDS

SENT

Number	Office of Origin	Words	Handed in at	Date
--------	------------------	-------	--------------	------

Psy

30.8.62

To

MACSTAPLE

MONTESVIDEO

PLEASE UNDEAVOUR OBTAIN AND SHIP THIS DARWIN VERY URGENTLY REQUIRED FIFTEEN
GALLONS TURPENTINE. STOP PLEASE CONFIRM THIS CAN BE DONE.

COLONIAL SECRETARY.

KIV 398

Time

2.5.

3. September, 1962.

Dear Dr. Sparke,

I should like to thank you on behalf of Government for the excellent work you did in helping us to find the solution of our trouble with the nasty tasting water. We were indeed lucky to have you here and I know how much time and trouble you gave to it.

Yours sincerely,

R.H.D. Manders. 

Dr. B. Sparke, M.B., B.S., M.R.C.S., L.R.C.P.,
SEALEY.

RHD/MFH

Copy to: P/950

K10-378.

No. _____
It is requested that, in any reference to this memorandum, the above number and date should be quoted.

COLONIAL SECRETARY'S MEMORANDUM
4 SEP 1962

1st September 19 62

From: Ag. Senior Medical Officer and
Ag. Chairman Board of Health,
Stanley, Falkland Islands.

To: His Honour, the Officer
Administering the Government,
STANLEY.

SUBJECT :-
Stanley Water Supply.

Following extensive tests in our Laboratory in the K.E.M.H. on the Bacterial Content of the Stanley Water, I am now satisfied that, for the present, the filtered water being pumped from the Filtration Plant is suitable and safe for use without Chlorination.

The main harmful Bacteria - B. Coli - which were present prior to filtration are not present in a harmful manner after filtration.

I strongly recommend, however, that Chlorination of the filtered water be resumed when it is possible to do this without the taste or smell of Chlorine being noticed.

My thanks are due to Dr. Sparke for spending so many hours working on the culture media and experiments.

I should like a copy of this Memorandum sent to the Supt. P.W.D. and to the Town Clerk, Stanley Town Council.

sent for

James H. Ashman
Acting Senior Medical Officer and
Acting Chairman Board of Health.

*Copies to T.C.
S.P.W.*

KIV 398.

403

SPW. 395 396 & 398

*for information.
1. the Davis Street works was getting a
taste-free water 2.*

5/9/62

404

*H.C.S.
Mr Hardy states he is losing 4 to £5 per day.
(395) Have we this in writing, if not I think
we should get it. S.P.W.
6/9/62.*

SHIPPING J.A.H. MARK

44
TELEGRAMS:
"KELPERSTOR STANLEY"

MRS. LES. HARDY & SON

GENERAL MERCHANTS
KELPER STORE

STANLEY,
FALKLAND ISLANDS.

3rd. September 19 62.

Stanley Town Council,
Falkland Islands.

Dear Sirs,

392 Further to my letter of the 15th. August, it seems likely that the water supply is now returning to normal and I beg to submit the following.

During the first mishap our Mineral Water Plant was put out of action for twelve day's , an even greater loss was felt on the second occasion when it was impossible to manufacture minerals, ice cream or 'Sunfresh'.

The demand was great owing to the taste of the water, consequently our supplies of small mineral waters soon ran out, thus affecting our trade and turning down approximately £47 worth in all,

I trust council will reimburse me for this loss,

Yours faithfully,



Reply at 409

SPW tells me that the water is now prepared ~~408~~ 406
flavour and sent to Davis Street
establishment has been manufacturing
for some time.

We might write now to them and say that it
is much regretted that the water had a somewhat
unpleasant flavour for a little time; the situation
has since been dealt with & this is not likely
to occur. It is not known whether in view of the
prevalence to blame the matter. It may do a
wonder be necessary to put forward a case supported
with figures ~~for~~ ^{clearly stated}

SPW tells me that he will have to put up
a supplementary estimate for the cost of cleaning &
repairs - I think the figure is £364
He thought a special warrant would be needed
but that now it will not but he will write
X | here to SFC

R 8/9/62.

SFC. 409.
Pl. reply to (396) + (405) as above, referring
in Hanay's case to his letter addressed to the Standing
Home Council.

File should then go to J.C.T. for note for SFC via
X | above.

10.5.62

10L September, 62.

Sir,

396

I am directed to refer to your letter of the 25th August, 1962, and to say that it is much regretted that the water had a somewhat unpleasant flavour for a little time. The situation has now been dealt with and it is not likely to occur again.

2. It is not known whether in view of this fact you wish to pursue the matter of compensation. If you do, it would be necessary to state a clearer case and support it with figures.

I am,

Sir,

Your obedient servant,

(Sgd,) H.L. Bound

for Officer Administering the GovernmentMr. J.W. Smith,
STANLEY.

Reply at 415

10th September, 62.

Sir,

405 I am directed to refer to your ⁰¹⁴ letter of the 3rd September, 1962, addressed to the Stanley Town Council, and to say that it is much regretted that the water had a somewhat unpleasant flavour for a little time. The situation has now been dealt with and it is not likely to occur again.

2. It is not known whether in view of this fact you wish to pursue the matter of compensation. If you do, it would be necessary to state a clearer case and support it with figures.

I am,

Sir,

Your obedient servant,


Officer Administering the Government

J.A. Hardy, Esq.,
STANLEY.

Reply at 414



K.E.M. Hospital,
STANLEY.
August, 1962.

Report on an attempt to detect the presence, nature, and extent of bacterial contamination in the Stanley Water Supply - with especial reference to Bact. Coli. (if latter are present then it may be presumed that organisms pathogenic to man are likely).

METHOD.

At the waterworks 650 ml. samples were taken in sterile bottles of :-

- (i) Incoming Water.
- (ii) Water Antechlorination Post Filtration.
- (iii) Water Post Chlorination.

Each bottle having previously 0.35 ml. of a 3% solution of Sodium Thiosulphate added (to counteract any free Chloride ions which would inhibit bacterial growth). Within an hour 5 plates were made up from each sample. Each plate composed of a mixture of 15 ml. of double strength, warmed, liquid, and sterile Nutrient Agar with 10 ml. of sample water.

These were then incubated at 37° centigrade, ($\pm 3^\circ$ centigrade), for 48 hours together with 3 control plates each composed of a mixture of 15 ml. of identical Agar and 10 ml. of distilled sterile water with the equivalent addition of Sodium Thiosulphate.

The plates were then examined for growth, and Gram stained slides, and stab cultures on sterile neutral Lactose Litmus Agar slopes were made up from suspect areas. The latter again incubated at 37° centigrade, ($\pm 3^\circ$ centigrade), for 48 hours after which they were examined for signs of acidity and gas formation, followed by the making up of Gram stained slides from these sub-cultures.

RESULTS.

The first two experiments were bedevilled by the persistent presence of a spore-bearing Gram negative bacillus probably Bact. Subtilis but after autoclaving the equipment at 18 lbs. per square inch. for 30 mins, three times with a 36 hour interval between, this was controlled.

	Nutrient Agar.	Slide.	Lactose Litmus Agar.	Slide.
Sample 1.	Heavy growth on 2 plates, Light growth on remainder.	Gram negative. Sterile bacilli.	Acid and gas.	Gram negative bacilli. Gram cocci positive.
Sample 2.	Very slight growth 2 plates.	Gram negative sporing bacilli.	Acid after 72 hours.	Gram negative sporing bacilli.
Control.	No growth.	Negative.	Negative.	Negative.

DISCUSSION.

It would appear that the water supply at the time of the experiment was free from harmful contamination by Bact. Coli. after filtration. It will be noted that no examination was made for Anaerobic Pathogens. Only frequent and repeated examinations could confirm this view and owing to the nature of the supply from surface draining bog water, open to danger from bird and terrestrial animal droppings, it would seem advisable to continue chlorination to ensure against sudden massive contamination.

James A. Ashmore
Ag. S.M.O.

*The Honorable,
 The Colonial Secretary,
 Stanley.*

*Dr. Sparkis report. Copies sent to Supt/P.W. and
 Town Clerk.*

TELEGRAMS:
"KELPERSTOR STANLEY"

SHIPPING  MARK

Mrs. LES. HARDY & SON

GENERAL MERCHANTS
KELPER STORE

STANLEY,
FALKLAND ISLANDS.

Colonial Secretary's Office,
Stanley, Falkland Islands.

14th. September 1962.

Dear Sir,

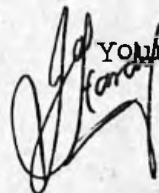
409 With reference to your letter No.0491/11 of the 10th. September requesting further details, I beg to submit the following.

The water supply first became contaminated on the 15th. July until the 27th. July. The next occurrence being from the 7th. August to the 27th. August, once again becoming impossible to use the water for our trade, making a total of 32 day's when we could not produce Mineral Waters, Ice Cream or 'Sunfresh'.

In addition to our regular customers I had to turn down approximately 80 dozen Mineral Waters @ 6/6 per. Doz. At the time I did not realise it would be an advantage to keep a list of Minerals not supplied, the same applies to our Ice Cream trade, we produce and sell on the average 200 a week and as the flavour did not lend itself for the making of Ice Cream we lost the sale of approximately 820 Ice Creams @ 6d. each.

Hoping this information will help,

Yours faithfully,



SPECIAL

MADE IN BRITAIN

"Vigour" Mineral Factory, 415
 Davis St.,
 Pt. Stanley,
 14th Sept. 1962.

The Honourable,
 Officer Administering the Government,
 Colonial Secretary's Office,
 Pt. Stanley,

Dear Sir,

I am in receipt of yours of 18th inst.
 No 1759/11, referring to mine of 25th Augt;

I do wish to pursue for compensation
 for which I have enclosed a statement of
 my loss for which I am claiming,

I make no claim for loss of time
 which means I had no income, thus leaving
 me with no way of paying my accounts, one
 being a Court Order for £6 Stg. per month which
 is now in arrears.

I trust this is what you desire.

I am, Sir,

Yours respectfully,
 J. W. Smith,

Statement of Claim,

18 Doz splits @ 4/- (which had to destroy) Gr. S. D.
3:12:-
Usual monthly standing orders

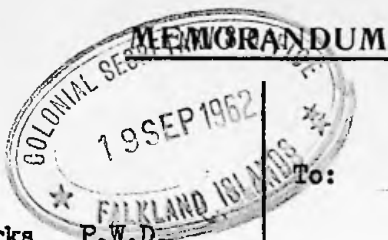
Mrs H. Cartmell	2	lots of 10 Doz @ 6/4,	£ 3:3:4 =	6:6:8
" F. Coleman	2	" " 1 doz " 6/4,	£ 4:8:8 =	8:17:4
" C. Laxton	2	" " 2 " " 11/4	£ 1:2:8 =	2:5:4
" J. Binnie	2	" " 2 " " 6/4	} £ 1:4:- =	2:8:-
"	2	" " 1 " " 11/4		
" J. Watts	2	doz @ 4/-	= 8 =	-:8:-
" M. Allan	7	" " 6/4	£ 2:4:4 =	2:4:4
				£ 26:1:8

P.S.

This is a full and correct statement.

No. _____

It is requested that in any reference to this memorandum the above number and date should be quoted.



15th September, 19 62

To: His Honour,

The Officer Administering
The Government,

Stanley.

From: Superintendent of Works, P.W.D.

Stanley, Falkland Islands.

SUBJECT :- Water Supply.

I have the honour to request that a Special Warrant be made out to cover the expense of eliminating the objectionable taste of the Stanley water, pumped from the Filtration Plant after painting the tanks.

As this job was an urgent matter, I proceeded with the work, carrying out tests and then made the decision to scrape the tanks of all traces of paint. The reason for this being that with the introduction of chlorine an objectionable taste was found in the water, where as when there was no chlorine added there was no taste.

It appears that, with tests made, some action was taking place in the water from painted tanks on the introduction of chlorine which is the media for controlling bacterial contamination. With the permission of the S.M.O. chlorination ceased temporarily, in doing so the objectionable taste cleared and with the scraping of the tanks chlorination can be resumed we hope without taste.

The estimated cost is £364.

P. Picton.
Supt. of Works.

418
Alan C.T.

Way you pl w/d

Rise at bc.

KIV

414 & 415

19.9.62

419
H.C.S.

to them, Thank you.

L.C.

Yat

420

19.9.62

412 onward submitted for

19.9.62

S.P.W.

● O.A.G. enquires if the water leakage at Gort. Jetty has been located + the leak stopped please.

422

21.9.62

H.C.S.

Water pipes at Gort Jetty are being renewed. Breakdown is due to corrosion of exposed pipes to salt water.

P. P. W.

22/9/62.

NOE

423

FR before new main

15 ft

50.

424

note file for Friday

422

was renewed.

FR info

number

NFA on main

26/9/62.

BU Friday 28.9.62
PTW

KIV 420

414 & 415

425

HCT for Commins Ware

or 23/9/62

H.C.S.,

426

Perhaps R.A.C. could advise whether there is a case for compensation. If not I suggest a flat refusal to pay anything.

We need to take care in this. Compensation because of the taste caused lead to compensation because the chemical ruined the 'pig'. ~~_____~~
~~_____~~

H.C.S.

29.9.62

427

R.G.C.

for Commins Ware

or 23/9/62

Hon. Col. Sec.,

I still think the authorities concerned should deny liability and leave it open to the manufacturers to bring a test action into court if they feel they have a right of action for the injury they claim to have suffered.

H. B.
12.x.62.

Y.E.,

There has been a somewhat unfortunate happening about the water tank at the Filtration Plant. S.P.W., no doubt rightly decided that it was high time the tanks were painted as they would have wasted away otherwise. He had the whole thing cleaned up and had the tanks painted with Bitumastic paint. Unfortunately this brought out the taste of chlorine in the water. It had an unpleasant taste for some time and various ribald remarks were passed by the Members of Ex. Co. In the end the S.P.W. decided that the only possible thing to do was to scrape off all the paint. He is now preparing a report to the Crown Agents to get advice as to what we should do to preserve the tanks. It is unfortunate that the water was given an unpleasant taste for a bit and still more unfortunate that the sum of over £300 had to be spent on scraping the paint off. Looking back on it now it would obviously have been better if the S.P.W. had asked for the advice of the Crown Agents before he started work. On the other hand if the S.P.W. had not come at all and we still had Mr. Livenmore probably nothing would have been done, which would have been worse still. I shall have to explain the position to the S.E.C., as we have to get the money voted for scraping the paint off.

I do not think there is anything more to be said or done about all this, but there is one question which will have to be decided, namely the claim by two makers of aerated waters for compensation - please see 414 and 416 advice of H.C.T. and R.S.C. at 426 and 428. I am not myself very much in favour of the idea of allowing them to take a case, if we think that they are at all likely to win the case, though of course if we merely refuse to pay anything it will still be up to them to take the case if they wish. I think that we could well resist a claim on the grounds that we do not guarantee to produce water with or without any particular flavour, we only undertake to produce wholesome water, and I don't think it has ever been disputed that the water we produced was wholesome. I myself would be inclined to favour denying any liability but making some payment purely as a matter of grace. The amount involved would not be very great. According to Mr. Hardy his claim at 414 we might reckon that he has lost 6d. profit per dozen on 80 dozen mineral waters i.e. £2. -. 1d. profit on 820 ice creams i.e. between £3 and £3. 10. 0. I should think we could settle with him for £5. As regards Mr. Smith's claim given at 415 and 416 he claims that he had to destroy £3. 12. -. worth and that he lost the sale of £22. 11. 8. worth. If we allow about 10% profit on the £22. 11. 8. worth this makes it a bit over £2. As regards the stuff which was destroyed, this was surely partly his fault. But again we could if necessary settle with him for £5. I would be inclined to suggest making payment of £5 each as a matter of grace but perhaps Y.E. would like to discuss with H.C.T. before making a decision.

431

met his father
SFC has accepted the motion and voted for
scrapping. This has remained the subject of
the claim by Messrs Hardy & Smith

28/10/62

HCS
432
We spoke.

23.10.62

KIV 429

30th October,

62.

Sir,

429 I am directed to refer to your letter of 15th October, 1962, and to inform you that the question is still being considered, and as I am seeking advice outside the Colony the final decision may be somewhat delayed.

I am,

Sir,

Your obedient servant,

(Sgd.) R. H²-D. Manders

COLONIAL SECRETARY.

J. A. Hardy, Esq.,
STANLEY.

DRM/TB

29th October, 1962.

Dear Sir Henry,

Could you please give us advice in the following matter.

It was recently discovered that the tanks in which the water is stored for supplying Stanley were in need of the application of a preservative and bitumastic paint was applied. The time in which the tanks could be left empty was limited and when they were again filled with water it was found that the water had an unpleasant taste which seems to have been caused by the action of the paint on the ehlorine. It was finally decided to scrape the tanks and not to paint them again till further advice has been received. Letters have been received from two manufacturers of aerated waters of which I enclose copies. Aerated waters are also manufactured by the Falkland Islands Company who have not put in a claim.

414-415

To make small ex-gratia payment equivalent to the amount of profit that might have been lost would not cost Government much but it might be a dangerous precedent. The examination of the water by the medical officer revealed that it was quite wholesome but it is certainly true that it had an unpleasant taste. When Government or a public body provides a water supply and charges water rates it presunably by implication guarantees wholesome water but can it be regarded as guaranteeing that the water will taste nice? Perhaps there will be precedents in England and anyhow we should be grateful for advice on the legal aspect.

Your sincerely,

R. H. D. Manders.

Sir H. Webb,
c/o Crown Agents for Oversea Governments and Administrations,
4, Millbank,
LONDON, S.W.1.

RHDH/TB

Received 438

ACF 435

436

S/C yes pl but wisent after date of his ltr "regarding compensation for loss of minerals"

Similar letter to 433 for the writer of 415 ?

DRM 30.10.62

31.10.62

0491/II.

437

12 November,

62.

Sir,

415 I am directed to refer to your letter of 14th September, 1962, regarding compensation for loss of minerals, and to inform you that the question is still being considered, and as I am seeking advice outside the Colony the final decision may be somewhat delayed.

I am,

Sir,

Your obedient servant,

(Sgd.) R. H. D. Manders.

COLONIAL SECRETARY.

Mr. J. W. Smith,
STANLEY.

ara/TB

BW 15.1.63 (R 434)

BVF

Highlands Hotel.

Crowborough. 18.11.1962.

134 Reg. Year. 0491/II of 29/10.

Dear Maunders -

You are correct that a supplier of water for payment must supply water that is wholesome, but as regards the taste of the water I think it would be a matter of degree. You say that the taste was "unpleasant" - But was it absolutely nauseating, or did you attempt to drink it, and wash your teeth with it - making faces the while? Or what did you do? Was no other water, from wells, or rain water, available? If the water was just slightly unpleasant, and, still more, if other water was procurable without excessive

inconvenience or expense, my opinion is that Government is not liable.

3/4. on the other hand, the degree of unpleasantness was such that one would not have expected the soda water etc. I suggest an ex gratia payment after a proper enquiry as to the amount of damage accompanied by a firm disclaimer of liability. 4. I wonder if the Company's customers found themselves unable to drink the water - or that the Company had a sufficient stock in hand to discontinue immediately during the period when the water was available. I hope that the Government will help.

Yours sincerely,

Henry Webb

439.

Answers to queries in 438 which I have marked 1-4

1. We DID continue to drink it, making faces and/or rude remarks unless we could get rain water

(argument against having)

2. Probably rain water was NOT available in quantities which could have been used by the manufacturers.

3. I think the answer is that had we been standing ten days in an open boat we would have relished the aerated waters but that in the normal circumstances of life the only point in drinking such things is to get a pleasant (to some) sweet flavour and that having a flavour of chlorine people would not bother to buy them and in point of fact I do not think any were actually sold by the Company or anybody else

4. I believe that the Company just didn't supply them during the period.

On the balance I would say that as the stranger of the answer to 3 there is a case for making an ex gratia payment - vide 430.

H.C.T.

or father unless blame

2/12/62

1440

H.C.S.,

In gratia - agree. Sir Henry's (3)
seems to be the correct attitude to adopt.

L.G.

6.12.62

441.

H.C.T. (How) if we should now go to SFL.
Will you deal with this?
6/12/62

1442

Mr L.S.,

Noted for next S.F.L., thank you

A.S.

6.12.62. J

BU 2263

18 February, 65.

Sir,

447

I am directed to refer to your letter of the 13th February, 1965, and to state that Government does not admit any liability. Whether in spite of this any ex gratia payment could be made or not is a matter which will receive the attention of Government as soon as possible.

I am,
Sir,
Your obedient servant,

(Sgd.) ~~H.L. Bound~~ *JL*

~~for~~

COLONIAL SECRETARY.

J.A. Hardy, Esq.,
Keiper Store,
STANLEY.

450
SFC. approved total payment
£10. to two claimants.

RHDM/IM.

bound Bu 28.2.65

0491/II.

451

9th March,

63.

Sir,

249
As stated in my letter of the 10th February, 1963 Government does not admit any liability. It has been decided however that an ex gratia payment of £5 can be made.

I am,

Sir,

Your obedient servant,

(Sgd.) R.H.D. Manders

COLONIAL SECRETARY.

J.A. Hardy, Esq.,
Kilner Store,
STANLEY.

Ack at 461 in
Vol III

RNDM/IM.

0491/II.

44⁶ March,

63.

Sir,

L-16
I am directed to refer to my letter of the 19th January, 1963, and to say that Government does not admit any liability. It has been decided however that an ex gratia payment of \$5 can be made.

I am,

Sir,

Your obedient servant,

(Sgd.) R.H.D. Manders

COLONIAL SECRETARY.

Mr. J.W. Smith,
STANLEY.

ESM/IM.

Vouchers
prepared
by Treasury.

536