

MEDICAL.

Board of Health.

1920.

C.S.

No. 722/20

Board of Health.

SUBJECT.

1920

21st Sept:

Practice of dumping rubbish on the foreshore.

Suggests purchase of an Incinerator.

Previous Paper.

721/20

MINUTES.

(1)

H. E.

Submitted.

for C. S.
23/9/20.

(2)

Col. Ing: for his remarks ~~with~~ as ^{from England} ~~to~~ ^{giving} cost of an incinerator, or of the building of one locally - keeping in view his Estimate for 1921 for expenses in connection with Sea Wall.

W.D.M.
23.9.20

The Hon: lrd: Secretary.

To prepare plans so as to obtain the estimated cost of an incinerator would take some time, as data would have to be collected. I should be glad to know if H. E wishes me to go forward with this matter.

Subsequent Paper.

723/20

R.D.B.
C.E.
3/3/21.

H.E. the Governor,

Submitted, for instructions to Col: Engineer.

H. W. Thompson

A. C. S. 10/3/21.

H.E.S.

Will you please ask the Colonial Surgeon
to advise on this proposal ^{and} the type
of incinerator which in his view would be
most suitable.

H. W. Thompson

11 March 1921.

Hon: Col: Surgeon,

For the favour of your report please.

H. W. Thompson

A. C. S. 11/3/21.

Report from Hon: Col: Surgeon, dated 15th March 1921, Encl: (2).

H.E. the Governor,

Submitted.

2. Presumably the cost will not be great, or have the Board
of Health considered this, and at the present moment.

H. W. Thompson

A. C. S. 15/3/21.

H.E.S.

In an interview today Col: Surgeon informed me
that it might be possible to construct locally
an incinerator which for practical purposes would
meet requirements of the town: will you please
refer this paper to Colonial Surgeon for further
report.

H. W. Thompson

2 May 1921.

Hon:Colonial Surgeon,

For the favour of your report.

H. C. S.
A. C. S. 2/5/21.

Hon Colonial Secretary

The type of incinerator I would recommend is the one used in fixed camps in the Army, which could very easily be constructed locally at a small cost: sketch of which is submitted please.

6/5/21

Colonial Surgeon

H.E. the Governor,

Submitted.

H. C. S.
A. C. S. 9/5/21.

H.C.S.

Will you please ask Col. Inyanin to prepare specifications for ~~an~~ an incinerator of type shown in sketch.

1. Advise Col. Inyanin a suitable site.

2. ~~Advise~~ When specifications are approved

F.S.C. may be asked to prepare an

estimate of cost of construction: it is work which they can undertake.

H. C. S.

13 May 1921.

Colonial Engineer,

Will you kindly comply with 1 & 2
of His Excellency the Governor's minute of 13/5/21.

A. W. Thompson

A. C. S. 14/5/21.

The Hon. Col. Secy.,

For the past few months
particulars as to quantity and nature of Stanley
refuse have been noted.

2. The average number of loads of refuse appears
to be about 10 loads per house per annum. Two
hundred could be taken as the number of occupied
houses in Stanley giving 2000 loads per annum.
Half a ton is the estimated weight of the heaviest
load, but the weight varies in accordance with the
quantity of moisture in the refuse, making 1000
tons per annum, or 2.7 tons per day, as the
approximate weight of refuse to be destroyed.

The component parts of Stanley refuse are
peat-ash (burnt to a fine powder), dust, bottles,
metals (including tins), crockery, glass and a
very small percentage of bone. The calorific value,
with the exception of the bone, is practically nil.

The carting of refuse is done at irregular
intervals, the largest amount being removed during
the winter months.

3. To enable an incinerator or refuse destructor
to work satisfactorily it requires that the refuse
be combustible and have calorific value, such as
breeze, cinders, rags, paper, straw, fibrous
material and vegetable matter; also that the supply
be constant.

4. Considering the nature of the refuse to be
dealt with, I am of opinion that an incinerator
could neither be run economically nor to advantage
in Stanley.

5. From the

5. From the sectional elevation of suggested incinerator, prepared by the Hon. Col. Surgeon, it would appear that the plant works on the "Meldrum" system, though the uptake for the gases to pass through is not shewn. This is a most important item seeing that the gases require to heat the air, supplied to the blowers, to about 350^o Fahr. so doing away with the drying hearth.

6. Should it still be desired that a specification be prepared for the plant suggested by the Hon. Col. Surgeon, I should be glad if the following particulars, which are not shewn on the sectional elevation, could be given.

- A. Length and width (outside measurement) of Plant.
- B. Length, width and height of furnace.
- C. Length and width of fire-grate.

R. B. Basely.

Colonial Engineer.

15/12/22.

*Hon. Col. Surp.
Referred*

H.H.H.

24/12/22

Hon Col. Secretary.

May this be referred to the Consulting Engineer for his observations please?

When proposing this memorial I meant that the report

Soil which surely has some
Caloric value should be
dealt with by it please.

23/12/22. J. H. Deane
Colonial Surgeon

J. H.

Submitted

1. In the chief article of calorific value
for the ~~incineration~~ ^{to} be right soil
the proposal had better await Mr.
Neave's recommendations which will
it is understood cover provision for
waterborne sewerage?

J. H. 29/12/22

This should await Mr Neave's
Recommendations

20 DEC 1922

Mr Col. Secy.

Dr W. H. S.

J. H. 20/12/22

Mr Col. Secy.

Notice please.

30/12/22 J. H. Deane
Colonial Surgeon

Dr W. H. S.

J. H. 1/1/23

The Hon. Col. Secy.,

Noted and returned.

R. B. Basely.

Colonial Engineer.

2/1/23.

The Honourable
The Colonial Secretary.

The question of disposal of refuse has been dealt with in paragraphs 69 to 75 of my preliminary report on Port Stanley dated 28th February, 1923 in which the provision of an incinerator for the destruction of general household refuse (as distinct from peat ashes) was advocated. The question of incineration of E.C. pail contents was not at that time contemplated as I so strongly urged the adoption of a proper water borne sewage system for the town.

2. The position has however altered owing to the decision of the Executive Council at their meeting held on 29th March, 1923 that the expense of such sewage scheme could not be met, at any rate at present, although the drainage scheme is to be designed ~~to~~ such manner that it can ultimately be adapted to carry sewage and that the E.C. system is to be continued but on more sanitary lines than those now in existence. It will therefore be necessary to provide for the incineration of earth closet refuse in addition to household refuse.

3. The type incinerator I recommend is one in which has an overhead feed in which the refuse is shot on to a drying hearth situated between the furnace proper and the main flue outlet so that the hot and flaming gases passing over it exercise a drying effect prior to the refuse being raked into the furnace proper. This is preferably arranged with a ramp so that carts can reach the high level and shoot the refuse direct into a hopper leading down to the drying hearth without double handling.

4. The process of fractional distillation and recovery of ammoniacal liquor advocated by the Colonial Surgeon whilst admirable in suitable situations could not under local conditions be recommended as an economic proposition. The provision of forced draught either by way of steam or compressed air from a centrifugal fan or 'Roots' blower is advantageous but it is not absolutely essential to satisfactory incineration.

5. Whilst

5. Whilst a suitable incinerator can be designed locally in view of local conditions regarding construction I do not recommend this course.

6. The Colony is totally lacking in natural resources in way of brick, firebrick or iron or steel and practically the whole of the materials (with the exception of aggregate for concrete foundations) would have to be imported, and owing to the scarcity of skilled labour or modern workshops I do not consider that any advantage would be gained over the practical course already proposed in paragraph 75 of my preliminary report above mentioned of obtaining competitive tenders for supply from one of the several English firms who specialise in this class of work, and whose wide experience doubtless covers destruction of refuse in places where peat is the commonly used fuel.

7. I attach specification and submit that tenders for supply of an incinerator be invited through the Crown Agents from the following firms :-

Messrs Manlove & Alliott & Co: Ltd:,
Brooksgrove Works,
Nottingham.

♠ Messrs The New Destructor Co.,
Walter House, Bedford Street,
Strand, W.C.2.

Messrs Meldrums Ltd:,
108 Victoria Street,
Westminster, S.W.1.

Messrs Heenan & Frowde Ltd:,
Worcester Engineering Works,
Worcester.

♠ Makers of the Horsfall Destructor.



R. M. Inst. C.E.

8th August, 1923

Enclosure 6 Copies Specification.

For letter to C.A. please requesting them to call for tenders on the lines of the draft ^{and stating} ~~that~~ that this Government will be glad to receive the tenders for consideration, as in the absence of knowledge as to cost, it has not yet been definitely decided to install an incinerator.

13/20/23

Inside Minute Paper.

Both drawn
and filed in
M. P. 24/24

Lettering of "huldrum" Refuse Destructor
and Water Heater, Encl. (4)
Specification for incinerator Encl. (5)
Letter to Crown Agents, 16/8/23. Encl. (6)

SEE UTI/PWD/1#18

(1)

1

BOARD OF HEALTH,
STANLEY.

21st September 1920.

Sir,

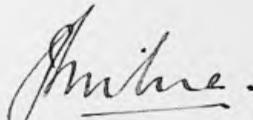
I am requested by the Board of Health to inform you that at a meeting of the Board held on the 20th instant, the present method of disposing of the Town's refuse was under discussion. The Board are strongly of the opinion that the practice of dumping rubbish in a heap on the foreshore is insanitary. Further a rubbish heap (besides being unsightly) is without doubt a breeding place for rats, and it will be useless to attempt to exterminate rats as long as the present system of dumping rubbish is continued.

2. The Board therefore desire to recommend to the Administrator that a proper Incinerator be procured from England, and erected on a suitable site at the east end of Stanley. All rubbish, refuse, offal, and other offensive matter could then be dealt with in a manner entirely satisfactory, and the Board have no doubt that the general health of the people would be greatly benefited thereby.

I have the honour to be,

Sir,

Your obedient servant,



Ag. Clerk to the Board.

THE HONOURABLE
THE COLONIAL SECRETARY,
STANLEY.

Hon Col Secretary

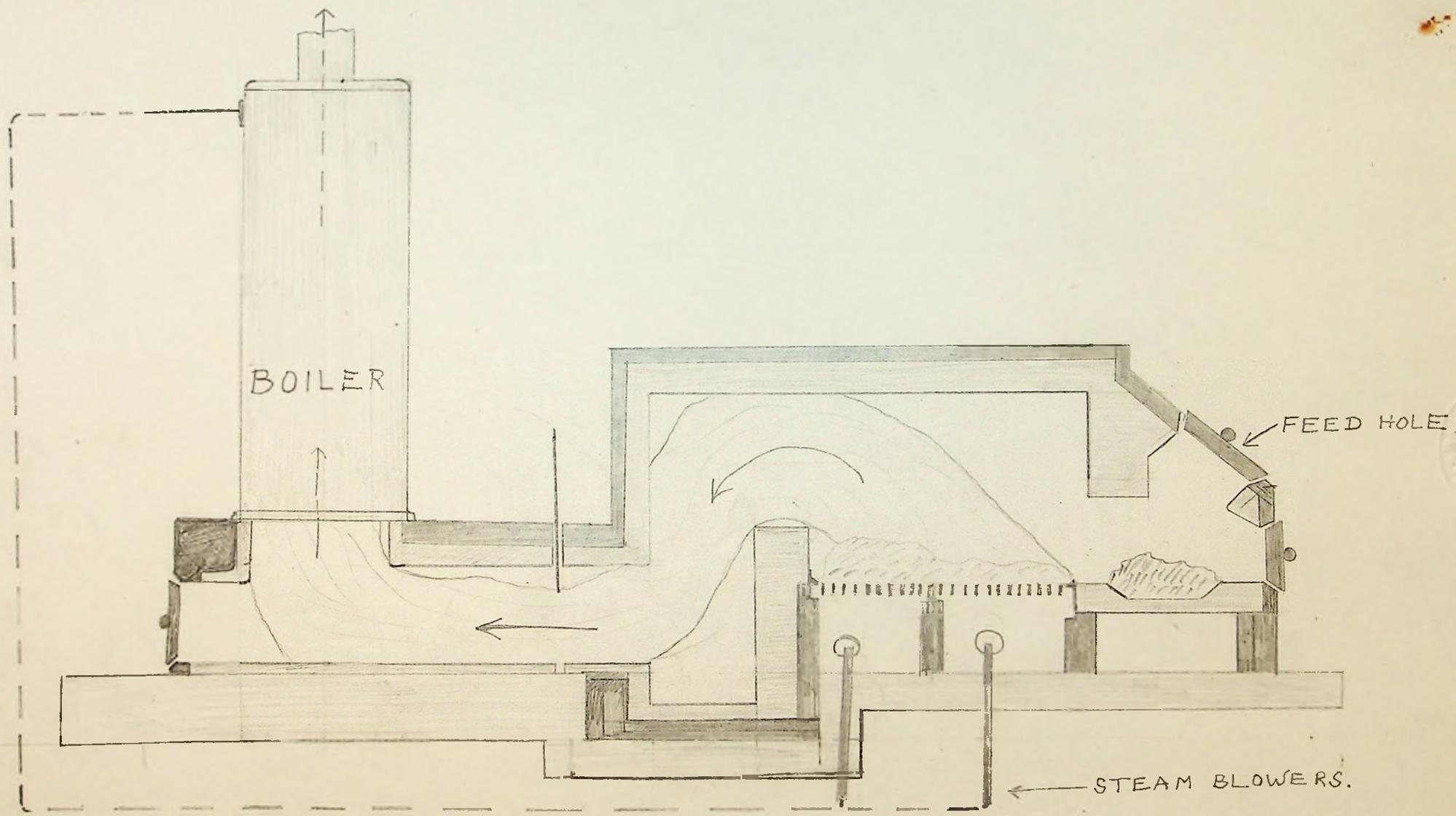
Report on incinerator please-

- (1) The proposal to erect an incinerator is undoubtedly a good one.
- (2) The type of incinerator I would recommend is the installation which aims at destroying organic matter by a process of fractional distillation, the final product of which resembles coke. The gases are aspirated off by means of a fan and are condensed, with the recovery of a valuable ammoniacal disinfectant and sufficient oil to work the oil-engine. The non-condensable gas is highly combustible and is led into a hopper where it is used to burn off the coke-like product of the distillation process. The oil-engine supplies all the power required to make the installation wholly self-supporting when once the cycle has been fully established.



Colonial Surgeon

15.3.21



BOILER

FEED HOLE

STEAM BLOWERS.

20