- NIR BOARD



Aug 71 Dec. 73.

FILE 3/1

CONSERVATION

WATER AND SOIL CONSERVATION ACT.
WATER POLLUTION

SEE SPECIAL FILE 3/1 FOR MEETINGS

GRRESPONDENCE FROM AUGUST 1974
TO DECEMBER 1973

Previous No 3/1



All Correspondence to: The Secretary ARA Private Bag Auckland 1, N.Z.

AUCKLAND REGIONAL AUTHORITY

Regional House, 121 Hobson St, Auckland 1, New Zealand.

. Telephone: 364-420 Telegrams: Regional

RECD. 11 JAN1974

ACKD.

14/10/3

in your real

20 December 1973

The Secretary, Auckland Harbour Board, P.O. Box 1259, AUCKLAND.

Dear Sir,

WATER & SOIL CONSERVATION ACT 1967 GENERAL AUTHORISATIONS FOR THE USE OF WATER

Further to my letter of 30 July on the draft general authorisations for the use of water, I enclose herewith a report prepared on the submissions lodged together with the recommended proposed general authorisations for use in the Auckland Regional Water Board area.

The Water Board at its December meeting adopted the report and thus the general authorisations as listed now apply.

If you have any questions or comments on these general authorisations would you please contact the undersigned.

Yours faithfully,

A.G. Dibble Manager

REGIONAL WATER BOARD

Enc1.

APPENDIX "X"

(This report is for the information of members only and is not to be construed as the Authority's policy until adopted by the Authority).

SUBJECT : GENERAL AUTHORISATIONS FOR THE USE OF WATER

FROM : Director of Works

TO : Regional Water Board Committee

DATE: 14th November 1973

Mt. Eden

A report on possible general authorisations for the use of water was submitted to the Committee on 29 June. This report was subsequently circulated amongst public authorities for comment. The comments received have been considered and in many cases further consultations have taken place.

In the light of these comments and consultations and of experience gained in handling water right applications some amendments have been made to the suggested general authorisations.

A summary of the local authority comments and action taken is as follows:

| Local Authority | Proposal | Action or Comments |
|-----------------|---|---|
| Auckland City | Inclusion of discharges from payed areas. Inclusion of roof discharges to watercourses subject to a max. area. Removal of max. roof area restriction when discharge is not to a watercourse. Amend terminology. | Included with roofs Included Removed max. roof area for underground discharges Amended. |
| Birkenhead | Inclusion of minimum standard for household wastes. | Impossible to set a minimum standard while pit privies are still allowed. Delegated to local authorities. |
| Devonport | Inclusion of discharge of water directed on to roads as well as from roads. | Gutters and water tables specifically provided for. |
| East Coast Bays | No comment. | |
| Franklin County | Taking quantity for cooling milk and for washing down to be increased in line with Agriculture Department recommendations. | Quantities increased to maximum recommended by the Agriculture Department. |
| Howick | No comment. | |
| Mt. Albert | No comment. | |
| | | |

No comment.

| Local Authority | Proposa1 | Action or Comments |
|------------------|---|--|
| One Tree Hill | Removal of max. roof area restriction when discharge is to underground. | Removed restriction Borough Engineer Onehunga is agreeable to safeguards. |
| Onehunga | Deletion of takings in Onehunga on the assumption that by-laws regarding bores in Onehunga will not apply after the abolition of the Underground Water Authority | that the proposals can stand. |
| Papatoetoe City | Inclusion of intermediate stages of culverting. | Intermediate stages of culvert ing and stormwater sewers included subject to a water right having been issued for the completed scheme. |
| Manukau City | Inclusion of discharges from intermediate stages of stormwater reticulation. | Included see above. |
| Rodney County | Inclusion of roof discharge to watercourse subject to a maximum area. Include dams for liquids that may pollute. Increase height of dams and storage capacity. Increase quantity of takings for cooling water and washing down. Include discharge underground of all household wastes. Include discharges from cowsheds, barns and piggeries | Included and max. area increased. Such ponds are not normally dammings under the Act. Considered unsafe until by-laws governing dam construction have been framed. Increased. Included. It is considered that these should either by spray irrigated in such a way that a right is not required or treatment provided and a right applied for. |
| Waitemata County | Include discharge of stormwater to a piped system. Delete distance limitation on discharge of household wastes into the ground. | Not necessary. Specifically no "right" is required under the Act. The limitation may necessitate numerous rights at places like Whangaparaoa where water takings for domestic purposes are numerous. Distance limitation removed but qualifications increased. |

Local Authority

Proposa1

Action or Comments

Included.

Include sullage water and privy discharges into ground. Include culverting.

Included when an intermediate stage of a larger scheme see Papatoetoe City proposal.

Auckland Harbour Board

Delete discharges from roads in new subdivisions. Add reference to Harbour Board for road discharges to the harbours. Roof discharges to the harbour not to be included. Limit public road discharges to 15 inch diameter pipes.

Private subdivisions were not included. The Act does not provide for a general authorisation to discharge to the sea. See note above.

Set standard of pollution for discharges to gutter or water table. Set standards for slopes on which dams can be built for safety. Reconsider size of subsurface Restriction considered drains Increase allowed takings for cooling milk and washing down. Reconsider provision for takings in Onehunga and

Probably pipes which are larger are part of a stormwater sewer system and will therefore require a "right". Delegated to local authority.

Franklin because would cross the intent of underground

Qualifications for dams increased.

adequate. Increased.

Reconsider discharges from septic tanks since approval in one local authority may affect another. Set standards for unpolluted

water districts.

Not necessary. All bores in Onehunga and Franklin will still require a permit but the subsequent taking from these bores may not require a "right" with the proposed general authorisations. These problems should be rare but this authorisation should be frequently reviewed.

This would be very difficult to do generally. This could be considered as meaning without noticeable pollution.

RECOMMENDATION:

That the following general authorisations and special conditions be adopted.

General Authorisations:

It is recommended that the following authorisations under Section 22 of the Water and Soil Conservation Act apply for two years in the Auckland Water Region.

The discharge of stormwater into any river, stream, drain, lake or 1. underground water by a public authority from the surface or gutters or watertable of a motorway, highway, road, path or paved area provided that the discharge will not cause flooding or erosion or have any other adverse effects.

X /4 The temporary discharge of stormwater for up to ten years into any 2. river, stream, drain, lake or underground water from a stormwater reticulation sewer or culvert provided that the sewer or culvert will form part of a comprehensive system for which a discharge and diversion water rights have been issued and provided the temporary discharge is agreed to by affected adjacent owners and approved by the local authority. The discharge of unpolluted rain water from a roof or paved area 3. into any river, stream, drain or lake provided that: the catchment area does not exceed one thousand square meters, and the discharge is at normal water level, and (b) (c) the discharge will not cause erosion or nuisance, and (d) any works are flush with the banks and bottom and will not create an obstruction or collect debris, and (e) the discharge is approved by the local authority. The discharge of unpolluted rain water from a roof or paved area into 4. underground water provided that no nuisance will be created and that the discharge is approved by the local authority and that in the case of commercial and industrial premises the local authority is satisfied that there is no risk of significant quantities of harmful materials being washed into underground water following accidental spillages. The discharge of unpolluted water to the gutter or water table of a 5. road provided the discharge is approved by the local authority. The discharge of unpolluted water from a piped water supply or an 6. irrigation system provided that the discharge will not cause erosion or flooding or nuisance. The construction of a dam to form a pond not exceeding one hundred 7. cubic meters in capacity for domestic or stock use or firefighting needs or as an ornamental or fish pond provided that: the dam is no more than five hundred millimeters high (a) and is constructed of earth with side slopes no steeper than one vertical to five horizontal, and (b) the overflow arrangements are adequate and safe for the largest flood. the dam and pond are entirely on land in one ownership (c) and will create no flooding or waterlogging on upstream the dam will not cause any shortage of water or danger (d) to downstream property.

X '5 The discharge of water into any pond covered by General Authorisation 8. No. 7. 9. The discharge of any surface drain or subsurface drain into any river, stream, drain, lake or underground water provided that:the drain and the discharge are contained within the land of one owner, and (b) the drain is not more than two hundred millimeters in diameter or width, and (c) the discharge will not cause erosion or flooding or adversely affect neighbouring land, and (d) the discharge contains no pollutants. The discharge of household wastes in a manner approved by the local 10. authority provided that the wastes are discharged into the ground and the local authority is satisfied there is no risk of pollution to any underground water at a point of extraction or surface water and further provided that the discharge may continue only so long as there remains no risk of pollution of underground water at point of extraction for the time being or of surface water. The taking of water for the purpose of making, improving or maintaining 11. roads, provided that this use will not affect other users. The taking of water for the purpose of cooling milk and of providing 12. animal dips and of providing make up water for horticultural or agricultural sprays provided that in all cases both the taking and the usage is on land in one ownership and does not exceed sixty litres per minute in total and provided the necessary discharge rights have been obtained. The taking of water for washing down purposes provided that the total 13. rate of such takings within the boundaries of land in one ownership does not exceed sixty litres per minute and provided that a discharge right has been obtained, if necessary, for the discharge of water polluted by the washing down. Special Conditions: The above general authorisations will be subject to the following special conditions: The Regional Water Board may require an application to (a) be made forthwith for a right under Section 21 of the Act in respect of any damming, diversion, taking or use of natural water and of any discharge of water or waste into natural water notwithstanding that this may be authorised by a general authorisation. In its decision on such application the Board may cancel such authorisation in respect of all or any of the matters covered in the application. (cont .../6)

(d) No authorisation can be given to discharge waste into any natural water that has been classified in accordance with the Act.

(e) Where an authorisation is given to discharge waste into natural water and that water is subsequently classified in accordance with the Act, such authority will cease to have effect as from the date of the classification in respect to the discharge of any waste into that water.

(f) Any person may apply for a right to do any act in respect to natural water notwithstanding that this act in respect to natural water is authorised by a general authorisation.

(g) A water right is not required to divert, take or use sea water.

(h) It is lawful for any person to take or use any natural water that is reasonably required for his domestic needs and the needs of the animals for which he has responsibility and for or in connection with firefighting purposes. Water rights are not required for these purposes.

(i) There is no provision for general authorisations concerning discharge into the sea and all such discharges will require a right.

> G.A. TAIT Director of Works

Per:



All Correspondence to: The Secretary, ARA Private Bag Auckland I, N.Z.

AUCKLAND REGIONAL AUTHORITY

Regional House, 121 Hobson St, Auckland 1, New Zealand. Telephone: 364-420 Telegrams: Regional

| | Please quote |
|---|---------------|
| | |
| _ | in your reply |

AUCKLAND REGIONAL WATER BOARD

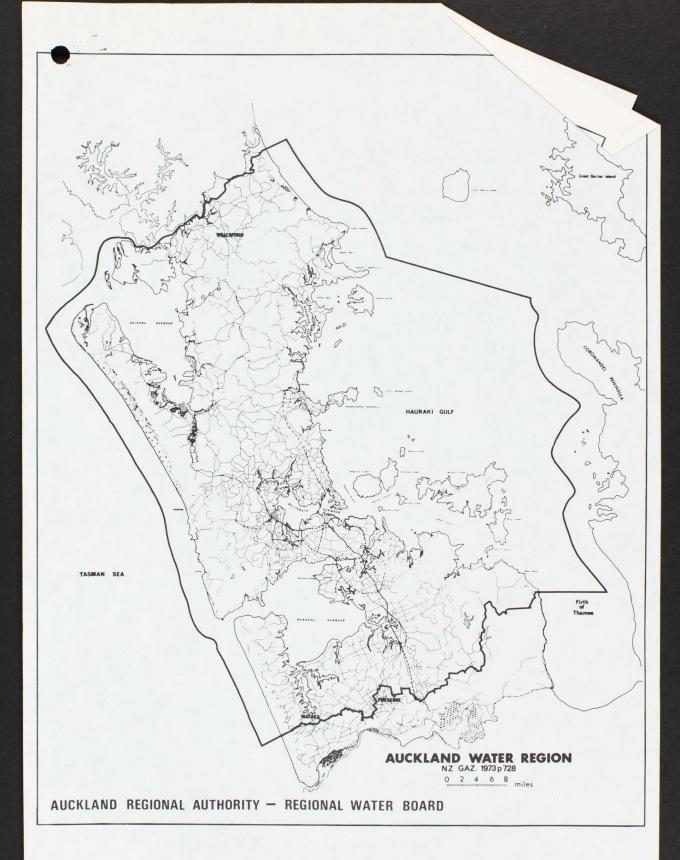
WATER AND SOIL CONSERVATION ACT 1967 GENERAL AUTHORISATIONS UNDER SECTION 22

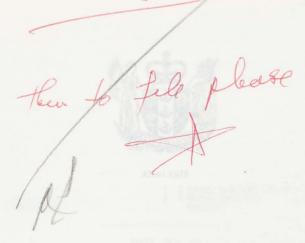
Take notice that the Auckland Regional Water Board has resolved that: -

The following general authorisations under Section 22 of the Water and Soil Conservation Act shall apply till the 1st January 1976 in the Auckland Water Region.

- 1. The discharge of stormwater into any river, stream, drain, lake or underground water by a public authority from the surface or gutters or watertable of a motorway, highway, road, path or paved area provided that the discharge will not cause flooding or erosion or have any other adverse effects.
- 2. The temporary discharge of stormwater into any river, stream, drain, lake or underground water from a stormwater reticulation sewer or culvert provided that the sewer or culvert will form part of a comprehensive system for which discharge and diversion water rights have been issued and provided the temporary discharge is agreed to by affected adjacent owners and approved by the local authority.
- 3. The discharge of unpolluted rain water from a roof or paved area into any river, stream, drain or lake provided that:
 - (a) the catchment area does not exceed one thousand square metres (10,764 sq.feet); and
 - (b) the discharge is at normal water level; and
 - (c) the discharge will not cause erosion or nuisance; and
 - (d) any works are flush with the banks and bottom and will not create an obstruction or collect debris; and
 - (e) the discharge is approved by the local authority.
- 4. The discharge of unpolluted rain water from a roof or paved area into underground water provided that no nuisance will be created and that the discharge is approved by the local authority and that in the case of commercial and industrial premises the local authority is satisfied that there is no risk of significant quantities of harmful materials being washed into underground water following accidental spillages.

- 2 -The discharge of unpolluted water to the gutter or water table 5. of a road provided the discharge is approved by the local authority. The discharge of unpolluted water from a piped water supply or an 6. irrigation system provided that the discharge will not cause erosion or flooding or nuisance. The construction of a dam to form a pond not exceeding one hundred cubic metres in capacity for domestic or stock use or firefighting needs or as an ornamental or fish pond provided that: (a) the dam is no more than five hundred millimetres high and is constructed of earth with side slopes no steeper than one vertical to five horizontal, and (b) the overflow arrangements are adequate and safe for the largest flood. (c) the dam and pond are entirely on land in one ownership and will create no flooding or waterlogging on upstream property. (d) the dam will not cause any shortage of water or danger to downstream property. 8. The discharge of water into any pond covered by General Authorisation 9. The discharge of any surface drain or subsurface drain into any river, stream, drain, lake or underground water provided that: -(a) the drain and the discharge are contained within the land of one owner, and (b) the drain is not more than two hundred millimetres in diameter or width, and (c) the discharge will not cause erosion or flooding or adversely affect neighbouring land, and (d) the discharge contains no pollutants. The discharge of household wastes in a manner approved by the local authority provided that the wastes are discharged into the ground and the local authority is satisfied there is no risk of pollution to any underground water at a point of extraction or surface water and further provided that the discharge may continue only so long as there remains no risk of pollution of underground water at point of extraction for the time being or of surface water. 11. The taking of water for the purpose of making, improving or maintaining roads, provided that this use will not affect other users. The taking of water for the purpose of cooling milk and of providing animal dips and of providing make up water for horticultural or agricultural sprays provided that in all cases both the taking and





. 3

in Parliament assembled, and by the authority of the same, as follows:

- 1. Short Title—This Act may be cited as the Soil Conservation and Rivers Control Amendment Act 1973, and shall be read together with and deemed part of the Soil Conservation and Rivers Control Act 1941 (hereinafter referred to as the principal Act).
- 2. Money to be paid into bank—(1) Section 111 of the principal Act is hereby amended by inserting in subsection (2) (as substituted by section 2 of the Soil Conservation and Rivers Control Amendment Act 1965), after the word "cheque", the words "or other instrument (not being a promissory note or bill)".

(2) The said section 111 is hereby further amended by adding the following subsection:

"(3) Every payment of money by the Board shall be authorised by a prior resolution of the Board or shall be submitted to the Board for confirmation at its first ordinary meeting after the date of payment."

Public—91

Price 5c



ANALYSIS

Title 1. Short Title 2. Money to be paid into bank 3. Metric conversions

Schedule

1973, No. 91

An Act to amend the Soil Conservation and Rivers Control [21 November 1973

BE IT ENACTED by the General Assembly of New Zealand in Parliament assembled, and by the authority of the same, as follows:

- 1. Short Title—This Act may be cited as the Soil Conservation and Rivers Control Amendment Act 1973, and shall be read together with and deemed part of the Soil Conservation and Rivers Control Act 1941 (hereinafter referred to as the principal Act).
- 2. Money to be paid into bank—(1) Section 111 of the principal Act is hereby amended by inserting in subsection (2) (as substituted by section 2 of the Soil Conservation and Rivers Control Amendment Act 1965), after the word "cheque", the words "or other instrument (not being a promissory note or bill)".

(2) The said section 111 is hereby further amended by

adding the following subsection:

"(3) Every payment of money by the Board shall be authorised by a prior resolution of the Board or shall be submitted to the Board for confirmation at its first ordinary meeting after the date of payment."

Public-91

Price 5c

1973, No. 91

(2) Notwithstanding anything in subsection (1) of this section, anything validly done under any provision amended by that subsection shall not be invalidated by reason of any such amendment.

Section 3

SCHEDULE

Amendments to Soil Conservation and Rivers Control Act 1941

Section Amended

Section 92 (as amended by section 13 of the Soil Conservation and Rivers Control Amendment Act 1952 and section 16 of the Soil Conservation and Rivers Control Amendment Act 1959)

Section 100B (as inserted by section 4 of the Soil Conservation and Rivers Control and Rivers Control Conservation and Rivers Control Conservation and Rivers Control Conservation and Rivers Control

the Soil Conservation and Rivers Control Amendment Act 1964) Section 106B (as inserted by section 20 of the Soil Conservation and Rivers Control Amendment Act 1959) By omitting from subsection (3) the word "acreage", and substituting the word "area".

Amendment

By omitting from subsection (4) the word "acreage", and substituting the word "area".

By omitting the word "acreage", wherever it occurs, and substituting in each case the word "area".

By omitting from subsection (1) the word "acre", and substituting the word "hectare".

By omitting from paragraph (cc) in subsection (6) the word "acreages", and substituting the words "area in hectares". By repealing paragraph (a) of subsection (0) and substituting the following paragraph (a) of subsection (b) and substituting the following paragraph (b) and subsection (continued to the following paragraph (continued to the following to the following paragraph (continued to the following to the f

(9), and substituting the following paragraph:

graph:

"(a) If the area of his rateable property included in the defined lands (determined in accordance with paragraph (b) of this subsection) does not exceed 40 hectares, he shall have 1 vote; if it exceeds 40 hectares but does not exceed 80 hectares, he shall have 2 votes; and if it exceeds 80 hectares he shall have 3 votes."

AMENDA

Section A

Section 106E serted by of the Soil tion and R trol Amend 1959)—con

This Act is a

Wellington, Ne Governm Act is hereby

dule to this Act. ion (1) of this

ovision amended by reason of any

SCHEDULE—continued

Amendments to Soil Conservation and Rivers Control Act 1941-continued

| Section Amended | Amendment |
|---|---|
| Section 106B (as inserted by section 20 of the Soil Conservation and Rivers Control Amendment Act 1959)—continued | By omitting from paragraph (b) of subsection (9) the word "acre" in both places where it occurs, and substituting in each case the word "hectare". By omitting from subsection (10) (as substituted by section 176 (1) of the Rating Act 1967) the word "acre", and substituting the word "hectare". By omitting from subsection (11) the word "acre", and substituting the word "hectare". |

This Act is administered in the Ministry of Works and Development.

ONTROL ACT 1941

THE PARTY OF THE P

nt

tion (3) the word ituting the word

tion (4) the word ituting the word

acreage", wherever uting in each case

tion (1) the word uting the word

raph (cc) in subd "acreages", and "area in hectares". (a) of subsection he following para-

this rateable prothe defined lands rdance with parabsection) does not e shall have 1 vote; cares but does not he shall have 2 eds 80 hectares he

Wellington, New Zealand: Printed under the authority of the New Zealand Government, by A. R. Shearer, Government Printer—1973

37502F—73 G

Sur. Goord

6 sæ please

Then fell 60 3/14/2.

ADMINISTRATION

of

WATER AND SOIL
CONSERVATION

in

NEW ZEALAND

FRANKLIN UNDERGROUND WATER COMMITTEE

수 수 수

By-Law No 1, 1958

The Manager Incinolet Distribution, P.O. Box 12330, Penrose, Auckland.

30 July 1973

Dear Sir,

"INCINOLET" ALL ELECTRIC TOILETS.

We have been recently in correspondence with Research Products of United States with regard 'Incinolet' toilets.

I now note from a brochure I received the other day that your firm is handling this product. As we are at the present time investigating pollution free toilets for harbour craft I would be obliged if you would let me know when an 'Incinolet' toilet arrives so that we may evaluate it.

Yours faithfully,

E.L. Swales, MECHANICAL ENGINEER.

Copy to:

The Chief Engineer for Information.

JMB:AF.

Airmail.

Hamworthy Engineering Australia Pty.Ltd., 12 Alban Str. Alban N.S.W. 2144

30 July 1973.

Attention: Mr. R.G. Ford.

Dear Sir,

TRIDENT SEWAGE SYSTEM.

Mention of the above sewage system has been noted in the latest issue of the "Marine Engineer's Review".

As the fitting of sewage systems to our harbour tugs is being investigated, I would appreciate any information you could supply on a system suitable for ten persons.

Thank you,

Yours faithfully,

Copy to:

Chief Engineer for Information.

E.L. Swales, MECHANICAL ENGINEER.

NN:AF.

23 May 1973 THE SECRETARY THE CHIEF ENGINEER MANGERE COLLEGE It is assumed that this is some sort of school project and as such I would suggest that the following report and attachments be forwarded for their assistance. Pollution CHIEF ENGINEER TO THE BOARD DLG:GJG

 FROM

OFFICE SUPERVISOR

TO

THE CHIEF ENGINEER PROPERTY OFFICER

The following is an extract from The New Zealand Gazette No. 31 Pages 728/729/730 and is forwarded for your information.

Constituting the Auckland Water Region

DENIS BLUNDELL, Governor-General ORDER IN COUNCIL

At the Government Buildings at Wellington this 2nd day of April 1973

Present:

THE HON. M. RATA PRESIDING IN COUNCIL

PURSUANT to the Water and Soil Conservation Act 1967 and PURSUANT to the Water and Soil Conservation Act 1967 and the Local Government Commission Act 1967, His Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, hereby constitutes the area described in the Schedule hereto a water region within the meaning of the Water and Soil Conservation Act 1967, which region shall be known as the Auckland Water Region, and hereby constitutes the Auckland Regional Authority constituted under the Auckland Regional Authority Act 1963 as the Regional Water Board under the Water and Soil Conservation Act 1967 for the said region and hereby declares that this order shall be subject to the following provisions:

1. Every committee to which the Auckland Regional Authority delegates any of its functions, rights, powers, and duties as a regional water board, pursuant to section 178 of the Auckland Regional Authority Act 1963, shall include, in addition to the members specified in subsection (2) of that section, 1 member appointed by the Auckland Harbour Reards.

2. Within the said region, the Auckland Regional Authority shall have all of the functions, rights, powers, and duties conferred on catchment boards and regional water boards by any enactment or otherwise (with the exception of the provisions of Part V and Part VI of the Soil Conservation and Rivers Control Act 1941) and those functions, rights, powers, and duties shall be a new regional service which the Authority is empowered to undertake and operate under section 32 of the Auckland Regional Authority Act 1963.

SCHEDULE

ALL those areas of land above the line of mean high water in the North Auckland Land District, Counties of Rodney, Waitemata, Waiheke, and Franklin, Cities of Takapuna, Auckland, Manukau, and Papatoetoe, Boroughs of Birkenhead, Devonport, East Coast Bays, Ellerslie, Glen Eden, Helensville, Henderson, Howick, Mount Albert, Mount Eden, Mount Roskill, Mount Wellington, New Lynn, Newmarket, Northcote, Onehunga, One Tree Hill, Otahuhu, Papakura, and Waiuku, and the Town District of Warkworth, being within the area bounded by a line commencing on the line of mean high water of the Tasman Sea at a point in line of mean high water of the Tasman Sea at a point in line with the north-western boundary of Allotment 468, Waipipi Parish, in Block II, Maioro Survey District, and proceeding easterly generally along the southern sides of Gap Road easterly generally along the

across Karioitahi Road to its southern side in Block III, Maioro Survey Districit, thence north-easterly generally along the southern sides of that road and Pacific Street and the last-mentioned roadside produced across Queen Street to and along its eastern side and the southern side of France Street and Kaiwako Road and the last roadside produced across Colombo Road to and north-easterly along the south-eastern side of the last-mentioned road to and easterly generally along the southern sides of Waiuku Road and Waiuku - Aka Road to a point in line with the eastern boundary of Allotment 64, Waiuku East Parish, thence to and northerly generally along that boundary or side of Waiuku Road and Bald Hill Road to and along the northern boundary of Lot 1, D.P. 19767, to the northernmost corner of Lot 1, D.P. 3152; thence along a right line to the southernmost corner of Lot 1, D.P. 52657, and proceeding along the south-eastern and north-eastern boundaries of that lot and north-eastern generally along the eastern side of Bald Hill Road and along the south-eastern boundaries of Hat 10 and north-easterly generally along the southern and eastern boundaries of L.D.P. 222-22, the south-eastern boundaries of Lot 1, D.P. 222-22, the south-eastern boundaries of Lot 1, D.P. 322-22, the south-eastern boundary of Lot 2, D.P. 222-22, the south-eastern boundary of Lot 2, D.P. 222-22, the south-eastern boundaries of Lot 1, D.P. 3087, to and southerly along the western sides of Waller Road in Block XIV, Drury Survey District, to a point due west of the westernmost corner of Lot 1, D.P. 3049; thence across Waller Road to that corner, and easterly generally along the north-western and northern boundaries of Lot 3, D.P. 41349, and southerly along the north-eastern boundaries of that Lot 1, the southern boundaries of Lot 2, D.P. 525623, and continuing along middle of Willy Road to a point in line with the north-eastern boundaries of Allotment 13, Puni Parish, to and southerly along the south-western boundaries of Section with a south-east

les, seagar

6 see

shall de

across Birdwood Road to the southernmost corner of Allotment 78, Pukekohe Parish; thence north-easterly generally along the north-western side of Birdwood Road, the eastern side of Helvetia Road to and along the north-western boundaries of Lots 1, 2, 3, 4, 5, and 6, D.P. 41383, to the northernmost corner of Lot 6 aforesaid; thence northerly along a right line parallel to the eastern side of Helvetia Road to and easterly along a right line across Beatty Road to and along the southern boundary of Allotments 139 and 132, along a right line across Beatty Road to and along the southern boundary of Allotment 126, the eastern end of Keith Road, the eastern boundaries of Allotment 126 and northerly along the eastern boundary of Allotment 126, the eastern boundaries of Allotment 121, along a right line across Paerata Road (State Highway No. 22) to and along the southern boundary of Allotment 297 to its southernstern corner, all the aforesaid allotments being of Suburban Section 2, Pukekohe Parish; thence along a right line to and along the southern boundary of Allotment 3, Pukekohe Parish, to its intersection with the production of a line parallel to and distant 1000 links eastward of the eastern side of Valley Road; thence southerly along the eaforesaid line and its production across Lot 3, D.P. 28052, part Allotment 13, part Allotment 14, parts Allotment 12, Golding Road, part Lot 2, Deeds Plan 373, and East Street to its intersection with the southern side of that street; thence again southerly along a right line between the last-mentioned point and the northernmost corner of Allotment 24 to its intersection with the southern boundary of part Allotment 16 comprised in certificate of title, Volume 589, folio 294; thence easterly along the southern boundaries of those parts of Allotments 16 and 39 comprised in that certificate of title and along the western side of Golding Road to a point in line with the southern boundary of Lot 2, Deeds Plan 1099; thence to and along the southern boundaries of Lot 1, D.P. 62212, and itile and along the western side of Golding Road to a point in line with the southern boundary of Lot 2, Deeds Plan 1099; thence to and along the southern boundaries of Lot 1, Deeds Plan 1099, and continuing along the southern boundary of Lot 1, D.P. 62212, and the southern and eastern boundary of Lot 1, D.P. 62212, and the southern and eastern boundary of Lot 1, D.P. 62212, and the southern and eastern boundaries of Lot 2, D.P. 62212, in Block XVI, Drury Survey District, to the northernmost corner of that Lot 2; thence along a right line across Pukekohe East Road to the southernmost corner of that part of Allotment 7 comprised in certificate of title, Volume 970, folio 260, and along the eastern side of Runciman Road and the southern side of Rutherford Road to and south-easterly generally along the western boundary of Lot 1, D.P. 55216, in Block XII. Drury Survey District, the northern and eastern boundaries of the last-mentioned part Allotment 7 and the eastern boundary of Allotment 26, all the aforesaid allotments being of Pukekohe Parish, and continuing along the eastern boundary of Lot 1, D.P. 62448, to its junction with the northernmost corner of Allotment 31, Mangatawhiri Parish, and along the eastern boundary of the said Allotment 31 and that boundary produced across Beaver Road to and easterly generally along the southern side of that road to the westernmost corner of that part of Allotment 35 comprised in certificate of title, Volume 572, folio 219, and along the south-eastern boundary of Allotment 35, the south-eastern boundaries of the said part Allotment 35, the south-eastern boundaries of the said part Allotment 35, the south-eastern boundary of Allotment 34 to its easternmost corner in Block XIII, Opaheke Survey District; thence along a right line across Razorback Road, to and along the south-eastern and eastern boundary of Allotment 37, Suburban Section 2. Mangatawhiri Parish, the generally southern and eastern boundaries of Allotment 175 and north-easterly along the morth-emstern boundary of th to and along the northern and eastern boundaries of the last-mentioned lot and the eastern boundary of Lot 5, D.P. 7824, to a point in line with the southern boundary of Lot 2, D.P. 18419; thence across Matheson Road to and along the southern and eastern boundaries of Allotment Gastern boundaries of Allotment 160 to a point due east of the southernmost corner of Little, and Allotment 64 in Block VII. Opaheke Survey District, and Allotment 65 to and northerly along the western boundary of Allotment 160; thence due west to the said outhernmost corner and northerly along the western boundary of Allotment 654 and northerly along the eastern boundaries of that part of Allotment 152, crossing both Allotments 655 and 99, along the southern and eastern boundaries of that part of Allotment 152, crossing both Allotments 656 and 99, along the southern and eastern boundaries of that allotment and Allotments 158, 167, and 169 to the morthermost corner of Allotment 79; there along a right linearies of that allotment and Allotments 158, 167, and 169 to the northermost corner of Allotment 79; there along a right linearies of that allotment and Allotment 174, folio 877, and continuing still northerly along the generally eastern boundaries of that allotment and Allotment 174, folio 877, and continuing still northerly along the eastern boundary of that Allotment 168 in Block XIIV, Wairoa Survey District, and the last-mentioned boundary produced to and north-easterly along the generally northern boundary of Allotment 168 to its junction with the north-western boundary of the land shown on D.P. 1918A in Block XIV, Wairoa Survey District, and the last-mentioned boundary of Allotment 168 and the intervening northern boundaries of Allotment 168 and the intervening northern boundaries of Allotment 168 and the intervening northern boundaries of Allotment 168 and the intervening of the south-western boundaries of Allotment 168 and the intervening northern boundaries of Allotment 168 and the intervening northern boundaries of Allotment 97

southern boundaries of that Allotment 9; thence southwesterly generally along the middle of that public road and the public roads forming the north-eastern boundaries of Allotment N43, and the north-western boundaries of Allotments N43, M43, NW43, NE50, NEM 50, W50, 51, NW53, NE53, S53, NW61, NW71, SE71, NE72, NEM72, SWM72, SW72, NE76, SW76, and 77 to and north-westerly along the middle of the public road forming the north-eastern boundary of Allotment 250, all the aforesaid allotments being of Oruawharo Parish, to the eastern boundary of Otioro and Te Topuni Block; thence northerly along the said eastern boundary to and westerly along the southern boundary of Lot 2, D.P. 30610, in Block VIII, Otamatea Survey District, and that boundary produced to the middle of State Highway No. 1; thence northerly along the middle of that State highway to and south-westerly along the middle of the State highway to and south-westerly along the middle of the Newmarket-Opua Railway; thence northerly along the middle of that railway to its junction with the middle of a tributary of the Topuni River in Block VII, Otamatea Survey District, shown on S.O. Plan 16358; thence westerly generally down the middle of that tributary and the Topuni and Oruawharo Rivers and along the middle of the Kaipara Harbour and the Kaipara Entrance, and south-westerly along a right line to the outer limit of the territorial sea as show on the aforesaid sea chart N.Z. 220; thence south-easterly generally along that outer limit to the production south-westerly of the north-western boundary of Allotment 468, Waipipi Parish; thence north-easterly along that right line to the point of commencement.

P. G. MILLEN, Clerk of the Executive Council. (P.W. 75/9)

P. G. MILLEN, Clerk of the Executive Council.

(P.W. 75/9)

OFFICE SUPERVISOR



THE WATER AND SOIL CONSERVATION AMENDMENT ACT COMMENCEMENT ORDER 1973

DENIS BLUNDELL, Governor-General ORDER IN COUNCIL

At the Government Buildings at Wellington this 26th day of March 1973

Present:

THE HON. N. E. KIRK PRESIDING IN COUNCIL

Pursuant to the Water and Soil Conservation Amendment Act 1971, His Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, hereby makes the following order.

ORDER

- 1. Title—This order may be cited as the Water and Soil Conservation Amendment Act Commencement Order 1973.
- 2. Commencement of Act—Part I of the Water and Soil Conservation Amendment Act 1971 shall come into force on the 1st day of April 1973.

P. G. MILLEN, Clerk of the Executive Council.

Issued under the authority of the Regulations Act 1936. Date of notification in *Gazette*: 29 March 1973. This order is administered in the Ministry of Works.

Wellington, New Zealand: Printed under the authority of the New Zealand Government, by A. R. Shearer, Government Printer—1973

24524J—73 G

Price 5c

O/E Tomote please.

DRAFI Walsh to Charteau The General Manager, 13 March, 1973 Engr's file 3/1 AUCKLAND HARBOUR BOARD. WATER AND SOIL CONSERVATION ACT 1967 LOCAL GOVERNMENT COMMISSION AUCKLAND WATER REGION DECISIONS MADE BY THE COMMISSION In July 1972, the Local Government Commission issued a Provisional Local Scheme for the constitution of the Auckland Water Region and that the Auckland Regional Authority be the Regional Water Board. Objections to the Scheme were to be lodged before
11 September 1972 and having regard to the need for the Board to
have some statutory representation on the Water Board rather than an outside situation relying on consultation, the Board resolved on 26 September to object and make submissions to the Commission on the basis that: the Scheme does not properly provide for the functions of the Board as the port authority or the requirements of the port and shipping to be recognised by the Regional Water Board the Scheme makes no provision for the Board to be represented on the Regional Water Board and having regard to the magnitude of its interest in the harbours such representation is fully warranted and could supplement the consultative procedure provided for in the Principal Act. (b) The Board would seek representation at both Member and Officer level. The Board's submissions were heard by the Commission on 8 November 1972 and the decisions of the Commission related to the Auckland Water Region were given on 19 February 1973. As it concerns the Auckland Harbour Board the decision of the Commission is: "We have no difficulty in agreeing that the Harbour Board has indeed a primary interest in quality standards in the waters under its jurisdiction and we accept its request for direct representation as reasonable. We are not persuaded, however, that such representation should be of the extent of two persons - one member and one officer." "We shall provide in the final local scheme as a matter incidental to the Scheme that any Committee that may be set up under the provisions of Section 17B Auckland Regional Authority Act 1963 shall include, in addition to the members specified in sub-section 2 of that section, one person appointed by the Auckland Harbour Board." (b) "It will be for the Harbour Board itself to decide whether such person shall be a member or an officer of the Board. (c) ...

Le Chief Engineer of reconnected accordingly

General branager

... ...

...

REPORT FROM MR.J.M.BRAY, ASST. MECH. ENG., ON RECENT VISIT TO SYDNEY

Mr. Bray has reported to me as follows:-

"During the five days spent at Sydney I arranged the following visits to carry out investigations into:-

- (a) TUG DESIGN AND CONSTRUCTION TECHNIQUES:
 Carrington Slipway Pty. Ltd., Newcastle.
 Vickers Cockatoo Dockyard Pty. Ltd., Sydney.
 Barnes & Fleck Pty. Ltd., Naval Architects, Newcastle.
- (b) INVESTIGATE MEASURES TO COMBAT POLLUTION OF HARBOUR AREAS:
 Maritime Services Board of N.S.W. Sydney.
 Australian Oil Refining Pty. Ltd., Botany Bay.

(a) Tug Design and Construction Techniques:

General: Two modern shipyards were chosen in order to study the latest shipbuilding techniques; Carrington Slipway Pty. Ltd. at Newcastle specializing mainly in the construction of tugs and Vickers Cockatoo Dockyard Pty. Ltd. at Sydney, a large establishment which contracts to the Navy for the construction of ships, major overhauls of submarines and also the construction of commercial vessels.

Vickers Cockatoo Yard: This is a large establishment employing over two thousand men, their hull construction section has been modernized over the past year and is now equipped with 1/10 scale lofting and automatic plate preparation and cutting systems.

Carringtons Slipway: Carringtons have been well known as probably the most efficient small shippard in Australia. They have recently built a new modern yard at Tomago, just out of Newcastle. The layout incorporates a side launching slipway, modern fabrication shop and 20 ton capacity overhead travelling cranes for the assembly of ship sections.

I had discussions with the General Manager, Mr. D.Laverick with regard to modern tug design; he told me that they had just completed an order for four tugs for the Howard Smith Company, all vessels being of 33 ton bollard pull capacity, the first two with fixed nozzles and the others twin steerable 'Kort' nozzles.

Mr. Laverick commented that it has been found that the steerable nozzle vessels are highly manoeuvrable, their construction costs being about \$600,000 per vessel.

I was interested in this tug design and arranged to meet the naval architects at Newcastle who had designed the vessels. This was very worthwhile and I obtained a general arrangement drawing and technical details of their performance. (Refer attached drawing No. 76/01 - Appendix 1.).

Although the construction cost of a 85ft. steerable nozzle tug is stated at \$600,000 at the Carrington yard, to construct the same vessels with modification to our requirements would be approximately \$800,000 here in New Zealand.

(b) Investigate measures to combat pollution of harbour areas:

Maritime Services Board of N.S.W.: The introduction I had with the Board was with Mr. Ian McKee, Senior Preservation & Research Engineer in charge of an Engineer's Department sub-branch. This branch was mainly staffed by industrial chemists, biologists, technicians and one chemical engineer.

Mr. McKee explained that his sub-branch duties were to deal with all aspects of harbour pollution, i.e. oil, smoke and noise etc. but also to look after such problems as dangerous goods associated with all New South Wales ports. (Refer appendix 2 & 3).

Oil Pollution of Harbour Waters: The Preservation & Research sub-branch receive all reports of harbour oil spills, investigate all reports, carry out analyses of oil and arrange for the cleaning up. They also check suspected sources where appropriate, as prescribed by the Board's legal branch. (Refer to appendix 4, 5 & 6).

Over the past year in Sydney harbour there has been 45 oil spills with fines ranging from \$10 to \$1000, the average being approximately \$250. (Note the maximum fines still remain at \$2000).

The chemical engineer attached to the P & R branch is in charge of the supply and purchase of all oil dispersal equipment.

It was difficult to obtain from this officer what equipment the MSB actually had, that is quantity and type. In conversation it would appear that they had water/dispersant spraying units similar to that used by our Board plus additional equipment hired from an outside firm. At the present moment the branch had investigated a suitable oil boom and had recommended to the Board the purchase of 500ft. of "Stamford" boom. (Refer appendix 9).

Air pollution of harbour areas: (Refer appendix 7).

Under the "Port Authority - Smoke Control Regulations, NSW"the Board has the right to control the emission of smoke as set
out in the above regulations. All District Officers, and Inspectors
are issued with "Ringelman Smoke Density Charts" - and I was told
that the M.S.B. have had several successful prosecutions with the
evidence of one person using the chart.

Noise pollution of harbour areas: (Refer appendix 8 pages 24 to 28). In 1972 the "Maritime Services Act 1935 - Management of Waters and Waterside Land Regulations - NSW" was revised by the M.S.B. legal branch to include noise as a nuisance and an offence under the above regulations.

Gertain officers in the P & R sub-branch consider that prosecutions under these regulations would not be successful. They are going to be revised to also include a maximum noise level of 85 decibels at 100 ft. for all motor propelled craft. All Inspectors, District Officers have been issued with portable noise meters at an approximate cost of A\$300 per unit. (Refer appendix 10).

...

- 3 -Australian Oil Refining Pty. Ltd.: Mr. N. Tullock, Manager of the Auckland branch of Caltex Oil (NZ) Ltd. arranged through Australia a visit to their large oil refinery at Botany Bay. I met Mr. Jim Russel, oil pollution officer at the refinery with whom I discussed all aspects of harbour pollution methods of detection, control and equipment used for cleaning oil pollutants from land and water areas. Mr. Russel showed me around the installation, the equipment used and the control centres. The refinery has a very efficient system of control and organization, up to date equipment to clean up oil contaminats and a manual setting out all procedures and lists of equipment etc. I have included the "A.O.R. Manual" as appendix 11 to this report as it is self-explanatory and is full of first class information. This document could be of great assistance if a similar organization was set up in this Port. One important fact I gained during my trip to A.O.R. was that after exhaustive investigations into oil booms available throughout the world, they had purchased 1000ft. of "Gamlen" boom, 500ft. is stored ready for use and the remainder kept on stand-by. There are photographs in the manual which indicate the ease and quickness that the boom can be operated.' The appendices refer red to by Mr. Bray are held in the office of Mechanical Engineer. CHIEF ENGINEER TO THE BOARD. RAJS: JARP Copies to: DEFUTY CHIEF ENGINEER CHIEF ASSISTANT ENGINEER : For Information NoterRal HARDOUR MASTER LIBRARIAN MECHANICAL ENGINEER ENGINEER TO THE BOARD.

ces to be performed by safest and most convenient means excluding any contamination of ship's living and operation accommodations,

Regulation

Ships engaged in transportation of noxious substances to the state of which may liberate noxious gases are recommended to be equipped with a system of signalization about the appearance of such gases.

Regulation

Ships engaged in transportation of noxious substances to have on board the "International Code of Marine Transportation of Hazardous Goods" or quotations from the said Code concerning noxious substances being transported by the ship.

The text marked to be substituted by:

"Regulations for the disposal of Ship-Generated waste and Faecal Sewage Water and Garbage".

The Regulations of this Annex

this Annex will apply to be stated, As to waste and faecal water the Regulations of this Convention apply to ships enumerated in Article 3 of the Convention excluding ships on which the total amount of crew and passengers is less than 6 persons;

As to garbage they apply to all ships without exception. *)

Regulation 2

Definitions of Terms Used in this

ANNEX V REGULATIONS FOR THE DISPOSAL OF

SHIP-GENERATED SEWAGE AND GARBAGE FROM SHIPS Regulation I

Application Particulars of vessels to which

serted such as sewage ,garbage, seunit, holding tanks, etc.

"Waste water" is sewage water from wash basins (cabine and general), wash tubs, bathes, galley, snackbor, restaurant, and laundry equipment Particulars of terms used to be in- and from drain scuppers of sanitary and service accomodations.

"Faecal water" is sewage water from lavatory pans, urinals and WC wage disposal unit, garbage disposal scuppers (cabin, general and from medical premises), as well as from wash basins, wash tubs and scuppers in medical premises (dispensary, sick-bay, etc.).

> "Garbage" are all kinds of solid victual, domestic, and operational waste generated under normal operation of the ship and liable to be disposed of continuously or periodically.

portation of noxious substances.

Recommended as a measure for timely detection of danger of pollution of pollution of the atmosphere and subsequent undertaking of effective measures for elimination of source of pollution.

The Availability of the "International Code of Marine Transportation of Hazardous Goods" or quotations thereof enables the crew toperform the transportation of norions substances more efficiently .. . In correspondence with the termino-.

^{*)} The question of extending the application of Annex V on fishing vessels with reference to their size to be analyzed additionally.

Regulation 3

Control of Sewage and Garbage The discharge of ship-generated sewage, The text marked to be substituted by: except when theated so as to comply with Ca Regulation & hereunder, shall be prohibited while the vessel is within the following:

breas or minimum distance from the land

or other conditions to be specified.

"Arrangement for disposal of waster water " is the whole system of pipings with fittings and auxiliary equipment designed for collection. treatment, discharge or disposal ashore of waste water.

"Arranggement for disposal of faecal water" is the whole system of pipings with fittings and auxiliary equipment designed for collection. treatment, dischargeor disposal ashore of faecal water.

"Arrangement for disposal of garbage" means refuse chutes, containers, arrangements for treatment and disposal of garbage. etc.

"Holding tanks "means tanks for separate collection of waste water, faecal water, and garbage.

"Disinfection" teams 'the treatment of cleaned waste water and faecal water ensuring the annihilation of pathogenic microorganisms. The text marked to be substituted by:

"Control of Discharge of Waste Water , Faexal Water, and Garbage".

"... if the following conditions are not satisfied : (a) Waste waters and faecal waters meet the requirements of Regulation 4 (I) after cleaning and disinfection.

(b) Waste water not disinfected shall be discharged on condition that the ship is at a distance not less than 25 miles from the nearest shore:

(c) faecal waters not cleaned and disinfected shall be . . discharged on condition that the ship is at a distance not less than 50 miles from the nearest shore. or disposed of into shore sewer system or reception craft.

(2) With the exception of cases enumerated . hereunder in Regulation 5 the discharge of ship generated garbage is prohibited if the following conditions are not fulfilled:

(a) the ship is at a distance of more than 50 miles from the nearest shore ;

(b) the ship is beyond the Black or Baltit Seas. The Contracting Governments shall undertake necessary measures to ensure that new ships to which this Convention applies shall by 1980 be equipped to secure complete annihilation or collection of ship generated garbage for its disposal . ashore."

Secure protection of shore line from contamination by sewage waters.

On the same reasons but with account of higher concentration of bacteria in faecal sewage waters.

Regulation 4

Disposal Units for Sewage or Garbage (I) Ships to which this Annex applies shall be so fitted as to prevent, so far as is reasonable and practicable the discharge of sewage or garbage in contravention of this

Convention.

(2) There disposal units for sewage or garbage are fitted they shall be capable of achieving the following standards:

(a) standards for effluents from sewase disposal units to be prescribed. The text marked to be substituted by:
"Each ship shall be equipped with a pipeline and
end connection led on to the open deck for the
disposal of waste and faecal water ashore or on
reception craft.

The end connection shall be supplied with a flange of international pattern approved for pipe lines designed for discharge of oily water.

- The text marked to be substituted by:
- "(3) Waste and faecal waters discharged after cleaning and disinfection to comply with the following requirements;
- (a) total biochemical need of Oxigen(BNO20)-not more than $5\text{Cmg/lit.}0_2$ at 20°C.
- (b) Coli-factor-not more than IO.000(titre-not less than O.I ml.);
- (c) pathogenic organisms to be detected in water neither by directly nor indirectly.

To facilitate and speed up disposal of waste and faccal sowage waters in ports.

These standards are recommended for the nearest 5-6 years with account of to-date technical possibilities at the merchant marine. It is recommended to decrease subsequently the BNO to IO mg./lit.

(b) standards for discharges from garbage disposal units to be prescribed .

Regulation 5 Exemptions

Regulation 2 of this Annex shall not apply to:
(a) the discharge of sewage or garbage for the purpose of avoiding danger to human life at sea or danage to cargo;

(b) the escape of sewage or garbage resulting from damage to a ship or unavoidable leakage provided all reasonable precautions have been taken after the occurrence of the damage or discovery of the leakage for the purpose of pfeventing or minimizing the escape.

9 March 1973 THE CHIEF ENGINEER THE GENERAL MANAGER M.R.I.S. REPORT Attached is a detailed report on the above. Little additional information has stemmed from it as matters affecting shipping are inconclusive. Controls on pleasure craft are in force, but little information is provided on their effectiveness. CHIEF ENGINEER TO THE BOARD DLG:GJG

M.R.I.S. REPORT

TREATMENT AND DISPOSAL OF VESSEL SANITARY WASTE

This report is concerned with the flow of pollutants from marine vessels operating on the navigable inland and coastal waters of the United States and Canada. While the review is limited to the above waters it is recognised that many of these vessels will also operate in international waters and compatible world wide standards and requirements cannot be overlooked as an eventual goal. Consideration of the disposal of vessel wastes has been narrowed down to two basic principles.

- 1. Temporarily retained aboard and discharged to shore or in unrestricted waterways.
- 2. Treated and discharged to the waterway in an acceptable form.

Both of these methods have technological and economic implications and have been dealt with.

In any installation aboard considerations are not limited to cost of installations, but also require consideration on the loss of room for cargo. Standards pertaining to trade routes and ports of call are required to be known so that owners may incorporate adequate waste disposal facilities to last the life of the ship. It also seems evident that irrespective of the current trend, that land disposal facilities will be required. In the U.S. and Canada the development of land disposal facilities started with pleasure craft, before proceeding onto the larger ships.

Reasons for pleasure craft being able to lead the way are summarised as

- 1. Pleasure craft are not restricted to specific waterways and hence have broader fields for polluting and policing.
- 2. Legislation in the U.S. is far ahead of the technology to enforce it over a variety of ports. Local ports can enforce local shipping to conform easier than international or ships with wider venues.
- 3. Two above is related to vessel owners being reluctant to invest in sanitary systems until/selected service will serve him adequately at all ports of call. Variations in standards of discharge and in types of fittings of pump out facilities are some of the imponderables.

Background information is provided in the report indicating the implications of introducing sewerage systems into vessels. Space used by holding tanks, treatment plants and piping is indicated as being paramount, with concern for ship stability also being of major concern. Crew quarters are usually installed on a gravity system where as in passenger liners and most pleasure vessels sewage drains to well down in the ship and is pumped up from below for discharge. Besides these two main types, vessel facilities have to allow for fishing boats, tugs towboats servicing. Ships have to be serviced whether in port or on anchor. Servicing of sewerage plants needs consideration as replacement parts and modes of maintenance are not familiar making servicing at sea difficult. Servicing while in port would be inappropriate as this is the time at which sewage treatment is most needed.

Treatment of vessel sewage is different to shore installations. Galley wastes vary from body wastes in B.O.D. and Suspended Solid content in differente proporations making the efficiency of current means of treatment very low. The ship's motion also upsets gravity settling or sediment tanks. Load variations are more pronounced in marine sanitary systems than land based municipal systems, making treatment in a restricted area ineffective or very expensive. There is therefore considered to be a wide scope for the development of shipboard techniques of sewage

. . .

. . .

treatment suitable to marine environments instead of the land based techniques at present being adopted.

Treated sewage effluent from ships is expected to have an equivalent quality of secondary treatment outflows from municipal plants. Present legislation governs the quality of effluent that may be discharged into waterways and favours a system of dilution particularly when small vessels are being considered. However, this practice is not particularly suitable to shipboard treatment where a minimum of liquid is most desirable for treatment. Present W.H.O. standards being adopted relate effluent discharges to suspended solid and B.O.D. based on a dilution of 20 gallons per person per day whereas it is considered more appropriate for a standard applied to shipping to take into consideration the dilution factor to allow more comparable terms of treatment. Also associated with this is the lack of consideration given to the existing standard of the water quality in the waterway. In a ship's sanitary system it is an essential object to cut waste water usage to a minimum mainly because of the lack of space available. Sink garbage grinders are therefore out and it is suggested that garbage be compressed and disinfected for disposal ashore. Vacuum or air pressure is considered to be the most desirable development for the transporting media of solids in lieu of water. The air source is likely to be complimentary to combustion used in decomposing solids. Waste heat from ship's machinery combined with the plentiful supply of water and air is mentioned as other elements that may lead to the compactness of future sewage treatment plants. Other space saving methods are recirculating systems similar to those used on air liners. Such recirculating systems similar to those used on air liners. Such recirculating systems similar to those used on air liners. Such recirculating systems similar to those used on air liners are quired if galley wastes are added. Various design figures are quoted for recirculating systems.

Temporary retainment on board is the only system functioning at the present time. This has been instigated in the pleasure craft sector for in addition to the reasons already mentioned they mainly drew their water supply from the water into which they would discharge sewage and the holding tank method generally with recirculation would be the only foreseeable method of accommodating a sewerage system. Consequently marina facilities all have pump out systems, which must allow for several successive flushings including saltwater. Marina pump out systems are also subject to peak loading times. The U.S. Navy require solid sewage entry to be limited to 1 inch particle sizes for pump out equipment which would consequently require to be macerated before pump out. They also suggest the introduction of 50 to 75 cubic feet of air per minute per 1000 cubic feet of sewage to diffuse solids tending to settle on the bottom and to forestall anaerobic conditions. Tanks and small craft are usually 10 to 20 gallon capacity and cost \$150 to \$300 to install in U.S. Merchant ships currently being constructed have holding tanks of \$,000 to \$40,000 to \$,500 gallons being immporated for a cost of \$30,000 to \$40,000 while existing ships fitting similar tanks are faced with a cost of \$125,000. Commercial vessel pump outs are considered likely to adopt a barge system possible incorporated with fuelling operations. It is anticipated that some form of retention system will be required on all vessels as an emergency requirement. In addition to this with present technological development the holding tank provides the cheapest form of treatment and is the only method that is likely to meet present and future standards of pollution control.

On board treatment falls into two classes; biological and non-biological. Biological systems involve the reduction of organic matter with or without oxygen - aerobic or anaerobic. Anaerobic systems have been unsuccessful in confined areas

...

because of the smells and fumes produced from the process.

Aerobic treatments can be satisfactory with tertiary treatment but have the draw back of; untreated sludge disposal, sensitive to loadings, both in quantity and quality, and are upset by the motion of the ship. Tests carried out by the U.S. Corp of Engineers indicated that this type of treatment plant was unsatisfactory for use with shipping. Non biological treatments involve macerating and disinfecting the effluent discharging it after straining or diluting. This method is generally more acceptable to ship board use as it can be very compact, but the discharged solids still have to undergo biological digestion in the receiving waters. Suggested systems of treatment are set out for various sized vessels, one involves a system of filters. Most treatment plants biological or non biological, do not perform as efficiently for shipboard use as they do for general use, nor are laboratory test results from plants relevant unless they have been tested on a ship. It is suggested that shipboard waste treatments are a specialised field, in which little development has been made.

Estimated costs of implimenting present legislation in U.S. are set out for various shipping categories. The overall costs to the marine community for servicing U.S. vessels alone is estimated at 1,042 million dollars. Pleasure craft figures average at \$156 for craft less than 16 feet, up to \$962 for craft 45 to 65 feet. Average cost for servicing marinas in U.S. was \$3875. Details of the cost build up for these estimates is set out in the appendices to the report. The appendices also set out the legislation enforced by various ports on the U.S. and Canadian Coast. The non standardisation of legislation has deterred shippers from installing treatment facilities. New ships are given two years sailing to comply, while old vessels are given five years. The information collected was from questionnaires sent to 70 American Port Authorities and of which 60 replies were received. An appendix summarises the information collected.

SUMMARY

The main contribution of the report is that it supplies the result of a survey carried out in 60 American and Canadian Ports. It also lists some current trends and recent experiments on the treatment of vessel sewage. Apart from highlighting the implication of legislation streaming ahead of technical knowledge, it indicates that N.Z. is well informed on sewage treatment processes, but may not be advancing research into the specialised field of vessel sewage treatment as fast as the U.S. A very convenient collection of data.

a good appreciation and Summary by Goone.

MARINE POLLUTION BILL

This Bill is very comprehensive and assuming that the principles to control and supervise are set then my comments are solely related to Board's future responsibilities in "New Zealand Waters" inside harbour limits for the Port of Auckland and the Manukau Harbour.

- 1. Enforcement of the Provisions of the Act. The Harbourmaster assumes this responsibility for the Board where stated within a pattern of responsibility by the Minister, Surveyor of Ships and duly authorised persons.
 - The Engineer will continue to make available specialist staff to the Harbournaster in cases of oil and pollutant discharges from shipping.
- 2. Particular Matters to be the Responsibility of Harbour Boards.

 (a) Section 9. See that Oil Companies with wharf pipelines and shore installations provide equipment to comply the requirements stated in Subsection (1) (a) and (b) if Regulations are promulgated to so require.
 - (b) Section 12. To provide by Harbour Boards or in conjunction with others reception facilities enabling ships using the harbour to discharge or deposit oil residues or pollutant residues. The Minister retains and overriding power to direct the Harbour Board to provide such facilities.

I see these matters as requiring some technical assistance and planning.

- 3. Sections 3(1)(b) and 15(1) record that if the discharge or escape is from a place on land within harbour limits the occupier shall immediately inform the Harbourmaster. This is somewhat related to pipelines being responsible for a discharge but more complicated if industries other than the oil industry are involved. One can imagine oil coming from private drains to the harbour and from public drains. The Harbourmaster will be responsible to clean up the mess, but past experience has shown that it is always difficult to establish who may be responsible and who should be responsible for the costs of dispersal or recovery. It certainly is not assimple as shipping.
- 4. Remainder of the Bill.
 No comment.

elegraphic Address: Navycharge, Devonport Telephone 454 000 Extension



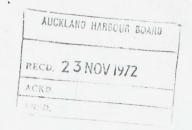
ROYAL NEW ZEALAND NAVY

Please quote; NC 162/7
Correspondence to be addressed to:

COMMODORE AUCKLAND
HMNZ NAVAL BASE
DEVONPORT
AUCKLAND

2 2 NOV 1972

The General Manager, Auckland Harbour Board, P.O. Box 1259, AUCKLAND.



Dear Sir,

DISPOSAL OF CONTAMINATED FUEL - U.S.S. TRIGGER

I would like to thank your staff, particularly the Works Department for their ready co-operation and assistance during the problems experienced recently while fuelling U.S.S. TRIGGER.

As our tank cleaning vessel is under refit the disposal of contaminated fuel was a major problem. However, the prompt and cheerful assistance of your staff ensured a minimum hold-up and TRIGGER was able to sail on schedule.

Yours faithfully

(E.R. ELLISON)
Captain RNZN

For Commodore Auckland

Absent on Duty

Mr. Toirer

Plass note of inform Hose concerned

27.11.75

Copies to

Amino

Auckland Harbour Board. See & relien 72/251 P.O. Box 1765, Wellington. 3 October 1972 Conveyes eithe elequil MEMORANDUM Alace on lower + Save I enclose for your consideration a copy of a United States Government document dealing with marine sanitation standards. Secretary. Enc. Le Seagat

AUCKLAND HARBOUR BOARD RECD. 11 OCT 1972 THE HARBOURS ASSOCIATION OF NEW ZEALAND 72/251 P.O. Box 1765, Wellington. 3 October 1972 MEMORANDUM for All Chief Executive Officers. Protection of the Environment Marine Sanitation Standards I enclose for your consideration a copy of a United States Government document dealing with marine sanitation standards. Secretary. Enc. be Sougal

FRIDAY, JUNE 23, 1972

TITLE 40

PROTECTION OF ENVIRONMENT

Chapter 1 - Environmental Protection Agency

THE HARBOURS ASSOCIATION

OF NEW ZEALAND

Part 140 - Marine Saritation Device Standard

Standards of Performance

On May 12, 1972, a notice of proposed rule making was published in the Federal Register (36 F.R. 8739), setting forth the proposed text of regulations promulgating Federal standards of performance for marine sanitation devices as required by section 13 of the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1163.

Pursuant to the above notice, several public hearings were held. In addition, numerous written comments were received from interested persons. In light of these hearings and comments, and after further consideration of the economic costs involved and the limits of available technology, the regulations as proposed have been modified, and, as modified, are hereby promulgated.

The proposed regulations would have required marine sanitation devices to provide a high level of treatment, approximately the equivalent of the secondary treatment standards for municipal waste facilities. However, it has been found that flow-through devices to meet this standard are presently not available for smaller vessels, and are not expected to be available in time for installation by the effective date of the regulation.

Within the constraints of present technology, essentially two choices of standards were presented: A standard which could be met by a flow-through device providing primary treatment and disinfection, or a standard requiring no discharge of sewage. Both types of standards would pose problems. On the one hand, flow-through devices will not always operate at designed levels of treatment, due to lack of proper maintenance; and there is no practical way for enforcement personnel to insure that proper maintenance will be carried out. Moreover, the treatment provided by an onboard flow-through device could be considered inadequate in certain waters, and as a result there would be a demand for creation of no discharge zone permits

covided for in section 13 (f) of the Act. Yet widespread es blishment of such zones would destroy the uniformity which Congress was attempting to achieve in this area by authorizing the establishment of Federal standards.

The alternative - no discharge of sewage - also poses problems.

Pumpout facilities are unavailable in most docks and marinas.

In many cases the level of treatment which the wastes would receive on shore after having been pumped out would be inadequate. And for certain types of vessels, on-board retention or complete disposal on board of sewage is not feasible. However, for the reasons explained below, we think these problems are solvable in a reasonable period of time.

After consideration of these and other factors, it was decided to promulgate a standard requiring no discharge. A provision is added to the effect that boat owners who install a device on existing vessels providing primary treatment and disinfection prior to the effective date of the standards will be considered to be in compliance with the standards for a period of time after the effective date.

Permitting the installation of primary devices has been done to obtain the maximum amount of immediate pollution abatement during that period required for the widespread installation of pumpout facilities. It is realized that this will require a period of 4 to 5 years and that the installation of such facilities will take place as the need for them grows.

The problem of vessels for which no discharge devices are not feasible, will be substantially alleviated by the provision permitting existing vessels to install primary treatment with disinfection prior to the effective date of the standards. The problem could be further alleviated by the granting of waivers pursuant to section 13 (c) (2) of the Act, and the Environmental Protection Agency plans to cooperate with the Coast Guard in determining which vessels should be exempt from the no discharge requirement, either because such requirement is not practicable for certain vessels or because of an undue economic burden imposed. In light of this waiver provision, it was believed that the general Federal standard should not be drawn to accommodate the particular problems of certain vessels, so long as the standard is generally feasible.

The treatment that onshore facilities can provide is always likely to be better than thetreatment provided by any onboard treatment device that is presently available or is developed in the future - especially in the case of on-board devices on small vessels - since

lack of space, cost constrain and the lack of trained personnel to operate and maintain an onboard device will inevitably limit its effectiveness as compared with on-shore treatment plant. Thus it is believed that the standard herein promulgated, once it is supplemented by development of pump-out facilities and adequate onshore treatment facilities will insure the maximum possible pollution abatement. And in the meantime, the provision encouraging the installation of primary treatment and disinfection on existing vessels prior to the effective date of the standards will lead to some immediate pollution abatement pending the effective date of the

Initial standards and regulations promulgated under section 13 of the Act preempt any statute or regulation of a State or political subdivision with respect to the design, manufacture, or installation or use of any marine sanitation device on any vessel subject to section 13. However, such premption does not take place until the effective date of the initial standards and regulations, including the regulations to be promulgated by the Secretary of Transportation. In accordance with section 13, this regulation becomes effective for new vessels 2 years after promulgation of the regulations by the Secretary of Transportation and for existing vessels 5 years after such promulgation.

It should be noted that, in accordance with section 13 of the Act, these standards apply only to navigable waters of the United States. Many inland lakes and rivers do not connect with bodies of water used in interstate commerce and hence are not part of the navigable waters of the United States. Consequently, they are not covered by these regulations.

Sec.

140.1 Definitions.

140.2 Scope of standard. .

no discharge standard.

140.3 Standard.

140.4 Complete prohibition.

140.5 Analytical procedures.

AUTHORITY: The provisions of this Part 140 are issued under sec. 13, 70 Stat. 506, as amended, 33 U.S.C. 1163. Interpret or apply sec 13 (b) (1), 84 Stat. 100, 33 U.S.C. 1163 (b) (1).

140.1 Definitions.

For the purpose of these standards the following definitions shall apply:

A REAL MARCHES WAS TROOPED

(a) "Sewage" means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes;

(b) "Discharge" includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping;

- (c) "Marine sanitation device" includes any equipment for installation on board a vessel and which is designed to receive, retain, treat, or discharge sewage, and any process to treat such sewage;
- (d), "Vessel" includes every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on the navigable waters of the United States;
- (e) "New vessel" refers to any vessel on which construction was initiated on or after the date of promulgation of the standards and regulations;
- (f) "Existing vessel" refers to any vessel on which construction was initiated prior to the date of promulgation of the standards and regulations;
- (g) "Fecal coliform bacteria" are those organisms associated with the intestine of warm blooded animals that are commonly used to indicate the presence of fecal material and the potential presence of organisms capable of causing disease in man.

140.2 Scope of standard.

The standard adopted herein applies only to vessels on which a marine toilet facility has been installed. The standard does not require the installation of a toilet facility on any vessel that is not so equipped. The standard applies to vessels owned and operated by the United States unless the Secretary of Defense finds that compliance would not be in the interest of national security.

140.3 Standard.

- (a) Marine sanitation devices installed on vessels covered by these regulations shall be designed and operated to prevent the overboard discharge of sewage, treated or untreated, or of any waste derived from sewage into the navigable waters of the United States.
- (b) This standard shall be effective for new vessels 2 years after initial promulgation of implementing Coast Guard regulations under section 13 (b) (l) of the Act (or, in the case of vessels owned and operated by the Department of Defense, 2 years after promulgation of implementing regulations by the Secretary of Defense under section 13 (d) of the Act), and for existing vessels 5 years after such

, ,, 5 -

(c) Any existing vessel equipped with a marine sanitation device which is certified by the Coast Guard as being capable of providing a degree of treatment which (1) under the conditions of the certification program to be established by the Coast Guard, will reduce fecal coliform bacteria to no more than 1,000 per 100 milliliters and prevent the discharge of an effluent with visible floating solids; and (2) is intalled on or before the date of initial promulgation of implementing Coast Guard regulations under section 13 (b) (1) of the Act, or within 3 years afterthe time of promulgation, shall not be required to comply with paragraph (a) of this section. This exemption from compliance with paragraph (a) of this section shall continue so long as the device remains operable.

- (d) Any existing vessel equipped with a marine sanitation device certified as provided in paragraph (c) of this section which is installed after 3 years from the date of initial promulgation of implementing Coast Guard regulations under section 13 (b) (l) of the Act, but before the effective date of paragraph (a) of this section with respect to existing vessels, shall not be required to comply with paragraph (a) of this section for 3 years following such effective date: Provided, That the device remains operable.
- (e) The degree of treatment described in paragraph (c) of this section is an "appropriate standard" for purposes of Coast Guard and Department of Defense certification pursuant to section 13 (g) (2) of the Act.
- (f) This section is not to be construed to accelerate the effective date of section 13 (g) (l) of the Act.

140.4 Complete prohibition.

A State may make a written application to the Administrator, Environmental Protection Agency, for the issuance of a regulation completely prohibiting discharge from a vessel of any sewage (whether treated or not) into particular waters of the Sate, or specified portions thereof, where such waters constitute navigable waters of the United States. Such application shall specify with particularity the waters, or portions thereof for which a complete prohibition is desired. The application shall also demonstrate that a complete prohibition is desired. The application shall also demonstrate that a complete prohibition is required by applicable water quality standards; and in this connection the application shall include:

(a) A statement of the applicable water quality standards; and (b) justification for the belief that the discharge of sewage from vessels may contribute to a violation of water quality standards in the waters or portions thereof which are the subject of the application.

on the basis of the "State's application and any other information av lable to him, the Administrator is unable to make a finding that applicable water quality standards require a complete prohibition of any discharge in the waters or portions thereof covered by the application, he shall state the reasons why he cannot make such a finding, and shall deny the application. If the Administrator makes a finding that applicable water quality standards require a complete prohibition of any discharge in all or any part of the waters or portions thereof covered by the State's application, he shall publish such finding together with a notice of proposed rule making, and then shall proceed in accordance with 5 U.S.C. 553. If the Administrator's finding is that applicable water quality standards require a complete prohibition covering a more restricted or more expanded area than that applied for by the State, he shall state the reasons why his finding differs in scope from that requested in the State's application. No regulation under this section shall be issued to take effect sooner than the effective date of the initial standards and regulations issued under section 13 (b) (1) of the Act. Analytical procedures.

In determining the composition and quality of effluent discharged from marine sanitation devices the procedures contined inthe current "Standard Methods for the Examination of Water and Wastewater," or subsequent revisions or amendments thereto, shall be employed.

in the transfer of the Dated: June 20, 1972

我们在这一个时间,我们^{这个}

William D. Ruckelshaus, Administrator. Administrator.

> (FR Doc. 72-9497 Filed 6-22-72; 8:51 am)

11th October 1972 Dr. John S. Werry, University of Auckland, School of Medicine, I have received your letter of 6th October 1972, in which you express your concern at the action of an employee of the Board in dropping orange peel from the towboat "Tika" into the Thank you for drawing this matter to our attention. Yours faithfully, SECRETARY The Chief Engineer. A copy of Dr. Werry's letter is attached for your information and attention. Would you please ensure that the crews of the work vessels of your Department set an example in keeping the harbour waters clear of pollution. lead out to staff beetey 7.11.72. Triver - rubbieth containers on boats? boy - savge holding founds on floaty plant

Private Bag, AUCKLAND.

Dear Sir,

harbour.

AUCKLAND HARBOUR BOARD

1 O OCT 1972

University of Auckland, School of Medicine, P.B., Auckland.

6 October 1972

The Secretary,
Auckland Harbour Board,
P.O. Box 1259,
AUCKLAND.

'Dear Sir,

On Tuesday, October 4th, at 8.05 a.m. as I boarded the Stanley Bay launch, I observed in your tug "Tira"(?), a crew member peeling an orange and dropping the peel into the sea.

I am concerned at this what I assume to be a breach of harbour board regulations for two reasons. First, I would expect harbour board employees to set an example to fellow citizens, not in full view of a crowded launch show a contempt for our harbour and ecosystem. Second, if this is the way that harbour board employees on the water customarily disperse of their garbage then the amount of pollution contributed by them must be substantial.

In conclusion, I might say that I am not interested in a punitive approach to this employee, I am more interested to see that your employees are aware of the need to respect the environment.

Yours sincerely,

(John S. Werry) (Dr.)

9 October 1972

The Terminal Manager, Mobil Oil N.Z. Ltd., P.O. Box 1709, AUCKLAND

ATTENTION: Mr Barron

Dear Sir,

We are pleased to be of assistance to you in your pollution study, and my office has already been in contact with your Mr McIntyre and arranged the collection data.

The Harbour Board is also carrying out its own study on pollution and would be very interested in the outcome of your surveys as well as receiving any additional information that you may collect on the Auckland Harbour.

Yours faithfully,

CHIEF ENGINEER TO THE BOARD

DLG:GJG

Copy to SECRETARY

For your information.

CHIEF ENGINEER TO THE BOARD

AUCKLAND HARBOUR BOARD

TO Chief Carrier

PLEASE ACKNOWLEDGE

PLEASE REPLY DIRECT SUBMITTING COPY TO HEAD OFFICE

PLEASE REPORT

FOR YOUR INFORMATION AND RETURN PLEASE

FOR NECESSARY ACTION PLEASE

HO 38

GENERAL MANAGER
SECRETARY

Mobil Oil New Zealand Limited CHELSEA HOUSE 85 FORT STREET P.O. BOX 1709 AUCKLAND TELEPHONE 32-759 TELEGRAMS & CABLES REE October 3, 1972. AUCKLAND HARROUR BOARD The Chief Engineer, Auckland Harbour Board, P.O. Box 1259, RECD. = 4 OCT 1972 AUCKLAND. ACKD. Dear Sir, ANSD. Further to discussions our Mr. McIntyre has been having with your Hydrographer, we would be grateful if you could supply us with any information you have relating to Tide and Current movements between North Head and Kauri Point. If prevailing wind direction and velocity characteristics are also available, these would be of additional value to us. Our purpose in asking is to enable us to complete a survey Mobil are at present conducting at all Ports with Terminal facilities, to evaluate pollution risk from an oil spillage. You will appreciate, therefore, the information we require will be incorporated in the survey, which without doubt will be to our mutual benefit. Yours faithfully JRKBarron:efh D.S. Hoggard TERMINAL MANAGER. OLE -2

Auckland Harbour Board

MEMORANDUM

26 September 1972

FROM

THE GENERAL MANAGER

THE CHIEF ENGINEER

M.R.I.S. REPORT

Auckland Harbour Board.

Place couseder of breeze s on a proposal currently being studied sultative Organisation concerning

be studied with a view to having any o the Board in dealing with matters s by sewage from marine vessels

nerated sewage and garbage from ships".

ern amendments to the draft that have been hey indicate the lines along which proposed ow the line being taken by one country

posed convention would apply

arge into the sea would be permitted and ischarged in these areas

o accept sewage from ships

of the M.R.I.S. Report is being made.

ENCL.

lav. Seagar

Auckland Harbour Board

MEMORANDUM

26 September 1972

GENERAL MANAGER

TO

THE CHIEF ENGINEER

M.R.I.S. REPORT

lease arrange for the enclosed report to be studied with a view to having any information that could be of assistance to the Board in dealing with matters relating to the pollution of harbour waters by sewage from marine vessels evaluated and assembled in a concise form.

I am also enclosing a copy of some notes on a proposal currently being studied by the Inter-Governmental Maritime Consultative Organisation concerning "Regulations for the disposal of ship-generated sewage and garbage from ships".

These notes which are fragmentary concern amendments to the draft that have been submitted by the Soviet Government. They indicate the lines along which proposed regulations are being formulated and show the line being taken by one country towards -

size of vessels to which the proposed convention would apply

areas of the oceans where discharge into the sea would be permitted and the standards for effluent discharged in these areas

provision at ports of facilities to accept sewage from ships

and may be helpful when the evaluation of the M.R.I.S. Report is being made.

R.T. Lorimer

GENERAL MANAGER

ENCL.

lav. Seagar

AUCKLAND HARBOUR BOARD SE 19 PLEASE ACKNOWLEDGE PLEASE REPLY DIRECT SUBMITTING COPY TO HEAD OFFICE PLEASE REPORT FOR YOUR INFORMATION AND RETURN PLEASE FOR NECESSARY ACTION PLEASE GENERAL MANAGER HO 38

10 Kohekohe St Kelston, Auckland, 7. 1st September, 1972. AUCKLAND HARSOUR BOAND RECU. - 4 SEP 1972 Head Office. Auckland Harbour Board. Princes Court. ACKP Princes St, ANSD. Auckland, 1. Dear Sir, I am a pupil attending Mt.Albert Grammar School and for the third term, I am going to be doing a project for Science on Water Pollution and in order to gain some useful information in this field, I have written this letter to you to ask if there is some way you can assist me in my project, possibly by forwarding any literature on the subject of water pollution to my address. If not, would it be possible for you to answer these questions for me. I 1. Is there any water pollution in the Auckland Harbour and if so, to what degree? 2. What is being done about water pollution or the chances of water pollution in Auckland. 3. What are the causes of water pollution in Auckland? I would be very grateful if you could help me in any way. Yours Faithfully, Howard atkinson

12 September 1972 Mr Howard Atkinson, 10 Kohekohe Street, Kelston, AUCKLAND 7 Dear Howard, In reply to your request dated 1 September the following abstracts are enclosed:-(a) Waitemata Harbour Study - Harbour Waters(b) Sources and Control of Water Pollution by K. Ford. You have no doubt been aware of the various articles in the Herald and Star over the past two months on attempts to determine harbour pollution mainly in the Waitemata. In an endeavour to provide information sought by your questions the following comments are made. Pollution of natural waters including Harbour Waters occurs whenever any foreign substance enters it and naturally the Auckland Harbours must, in relatively small parts, become polluted at some stage. Most pollutants such as oil etc. would be cleaned up in a matter of hours after its detection. Most other pollutants would possibly only last a tidal cycle. Some pollutants could be continually discharged into the Harbour through streams etc. These pollutants would mainly be absorbed and diluted in the main harbour flows and would be hard to detect without taking extensive water samples for testing in a laboratory. The Waitemata Harbour in the main, has a relatively good water quality especially considering the massive urban and industrial areas that surround it. A law has now been made whereby all streams, rivers, lakes, harbours etc. are to have a desired standard of water quality by June 1974 (Water and Soil Conservation Act 1967). This law will allow anyone polluting water contrary to the standard set down to be prosecuted. There is a very grave risk of the Auckland Harbours becoming polluted mainly from the various streams and drains draining into them from the surrounding areas. Close control placed on drainage entering the Harbours by the Auckland Harbour Board has maintained reasonably unpolluted water in Auckland. Not the least contribution to this has been the diversion of all domestic and most trade sewage through the sewerage treatment plant at Mangere. Likely causes of water pollution in Auckland are:- (i) Inadvertent spillage of oil from ships.
 (ii) Discharge of untreated sewage into streams or harbours in cases of sewers overflowing in emergencies or similar unauthorised and undetected discharges. (iii) Portions of the harbour being cut off from adequate flushing action of the tides, either by man made or natural obstructions. (iv) Drainage from existing or closed rubbish tips in close

- 2 proximity to stream banks or the harbour shoreline, where adequate stop banking has not been carried out.
(v) Sewage discharges from ships not being adequately controlled.

(vi) Large quantities of water being taken for cooling processes in industry, using up the free oxygen molecules in the water. Finally pollution is a process of education firstly in the ability to recognise pollution and secondly by a knowledge of necessary precautions to control pollution. I hope that this is line with your requirements. Yours faithfully, CHIEF ENGINEER TO THE BOARD DLG:GJG

DRAFT

WATER & SOIL CONSERVATION ACT 1967 LOCAL GOVERNMENT COMMISSION PROVISIONAL LOCAL SCHEME FOR THE CONSTITUTION OF AN AUCKLAND WATER REGION

The Board has been notified that as a continuation of the intentions expressed in the Final Scheme for Local Government in Auckland and in accordance with a requirement from the Water & Soil Conservation Authority a Local Scheme is advertised which

- a) Abolishes Underground Water Supply Authorities
- b) Constitutes a Water Region to be known as the Auckland
 Water Region the area described in the Schedule
- c) Constitutes the Auckland Regional Authority the Regional Water Board for the area.

Objections by this Board to the Scheme, may be lodged before 11 September 1972.

The Water & Soil Conservation Act is an extremely lengthy and complicated piece of legislation, the purpose of which is reasonably clear but the full effects of its application have yet to be felt.

As this legislation will ultimately affect Harbour Boards it is difficult to read, but an effort has been made to judge the effects from matters that are reasonably known and applied now and subjequent possible effects to this Board that could result later, when the Auckland Regional Water Board is formally promulgated.

In order to appreciate such matters that would be of consequence towards determining whether there is a case for objection to safeguard the Board's interests within the proposed Auckland Water Region, a series of attachments are assembled with this report. There are:

...

RELATIONSHIP OF WATER & SOIL CONSERVATION ACT AS IT MAY AFFECT THE AUCKLAND HARBOUR BOARD

- 1. The purpose of the Act is to promote a national policy in respect of natural water (which means all forms of water including sea water) and to make better provision for the conservation, allocation, use and quality of natural water, and for promoting soil conservation and preventing damage by flood and erosion, and for promoting and controlling multiple uses of natural water and the drainage of land and for ensuring that adequate account is taken of the needs of primary and secondary industry, water supplies of local authorities, fisheries, wild life habitats and all recreational uses of natural water.
- 2. Bodies to participate in the administration of this Act in order of consequence are:
 - a) National basis.
 - (i) National Water & Soil Conservation Authority which will prepare co-ordinate and delegate national policy.
 - (11) Water Resources Council upon which the Marine
 Department is represented and would be the only avenue
 for Harbours Association or Harbour Boards to be given
 access to the system. This Council is represented by
 one member on the Authority.
 - (iii) Soil Conservation and Rivers Control Council. This Council is represented by one member on the Authority.
 - b) Regional Basis.

A total of not more than twenty-five water regions shall be created for New Zealand and shall comprise of existing catchment districts or areas, the Waikato Valley Authority and every other water region, existing or new constituted under this Act.

Under Section 19 of the Act the majority of N.Z. by virtue of being catchment districts or areas have been constituted water regions. As it concerns the Auckland Region, no catchment district exists and it is necessary to constitute

a water region. Hence the provisional scheme for a Water Region with the Regional Authority as the Regional Water Board is being advertised and objections called.

The functions, powers and duties of a Regional Water Board for Auckland will be conferred by the Order in Council by which it is constituted or any subsequent Order in Councils. Generally it shall exercise all functions, rights, powers and duties expressly delegated to it by or with the approval of the Authority, and two Councils, and shall promote the conservation and most beneficial uses of natural water within the Region, which includes the planning for and promotion of works and projects for the conservation of natural water and projects for the multiple use of natural water. The Board shall apply the directions of the Water Resources Council in respect of natural water with the region, and in respect of the classification and quality control of all natural water within the region. (this includes harbour and coastal waters). It shall have due regard to recreational needs and the safeguarding of scenic and natural features, fisheries, wildlife habitats, and shall consult the appropriate authority controlling fisheries and wildlife where they are likely to be affected.

The remaining essential statutory authority is to quote Section 20 (5) (i).

"The Board shall undertake, exercise and perform in respect of the territorial sea and internal waters of N.Z. and the lands from time to time covered or affected thereby, the same functions, rights powers and duties as it may undertake exercise and perform in respect of rivers and streams and lands affected thereby except to the extent that those functions, rights, powers and duties are or may be undertaken exercised and performed by a Harbour Board."

...

- 3 -3. Particular Intentions of the Act. a) Rights in Respect of Natural Water. Sec. 21. The Grown is vested with the sole right to dam any river or stream to divert or take or discharge natural water or waste into natural water or use natural water subject to provisions of the Act, provided that nothing in this Section shall restrict the right to divert, take or use sea water. The granting of rights to discharge etc. waste or natural water to natural water (fresh or sea) is delegated to Regional Water Boards. b) Classification of Natural Water. -Section 26A & 26B. The Authority, Water Resources Council or Regional Water Board within its region may of their own volition or at the request of any person or authority having an interest in the maintenance of the quality of natural water carry out investigation to establish stated requirements. As it concerns a Harbour Board this would mean that the sea or coastal waters inside harbour limits is subject to these procedures. Section 260 provides for classification of coastal waters by the Water Resources Council. The effects and approvals for discharge of wastes and trade wastes comes under the aegis of the Regional Water Board. 4. Conclusions. As it would be related to the statutory powers of this Board, this Act clearly records that for the future a) All water - stormwater, waste or tradewastes that must find its way to the harbours under the Boards jurisdiction will be subject to the approval and granting of a right to so do by the Auckland Regional Water Board. b) The harbour water s will be classified and the responsibility to police and safeguard the water quality will be the responsibility of the Water Resources Council and the Regional

Water Board. The Harbour Board will become a local authority required to apply measures either statutory or non-statutory to ensure that any uses directly controlled by the Board i.e. shipping and pleasure boating, port and wharf activities, are such as to maintain standards and criteria that can be laid down to maintain or improve harbour water quality.

c) As it concerns "except to the extent that those functions, rights, powers and duties are or may be undertaken, exercised and performed by Harbour Boards" and what this means as it relates to the Board's responsibilities for harbours within the Water Region, there is no firm understanding or directives in the matter. Some thoughts are propounded in Appendix.

ATTACHMENT 3 RELATIONSHIP OF AUCKLAND HARBOUR BOARD TO AUCKLAND REGIONAL WATER BOARD ON OTHER ASPECTS OF HARBOURS IN THE WATER REGION It is not clear from the Provisional Scheme to create the Auckland Water Region and an Auckland Regional Water Board the exact extent of area that the Water Board has direct control upon. The schedule defines the area, as land within a total block of land and sea. It is probable that the sea portion which includes the harbours of Waitemata and Manukau will come under the purview of the Water & Soil Conservation Authority and Water Resources Council and such matters affecting the sea will be decided by the Authority and where necessary requirements conveyed to the Regional Water Board to apply. As the Auckland Regional Water Board assumes the powers under the Soil Conservation and Rivers Act it has no rights to move upon the harbour and carry out harbour works except by approval pursuant to the Harbours Act. Having regard to the intent and purpose of the Water and Soil Conservation Act it would appear however that harbour works could be the subject of scrutiny and consideration by the W & S.C. Authority and hence the Regional Water Board, and it could be reasonable to believe that within the harbours under the control

of this Board the following aspects will be subject to scrutiny or direction on the grounds of water conservation.

- (a) Ability to control forward planning of the harbour in the various facets of harbour activities.
- (b) Dredging and reclamation including disposal of dredgings.
- (c) Groynes and other sea training structures.
- (d) Regulation of industry requiring harbour water resources.
- (e) Harbour and Port Structures.
- (f) Discharges over foreshores.

It has been propounded before that the harbours in Auckland, the major urban area of New Zealand, are a considerable body of natural waters with a high incidence of use, and the demands for use are accelerating, particularly in the Waitemata Harbour. This Board has considerable responsibilities in the development of

both harbours and water conservation is an essential and integral part of those responsibilities. Planning and development of harbours and utilization of the waters to maintain adequate and satisfactory situations is related to expertise and experience found in the Harbour Board. If this is to be by-passed by a system of consulation with the Regional Water Board, rather than by inclusion of suitable representation in the Water Board, then it is possible that this Board can be subjected to policies and requirements which lack a true understanding of situations, with consequential difficult resolution.

The intention of Government to initiate and require

Environmental Impact Assessment Reports for new projects, particularly
those related to the Water and Soil Conservation Act, will mean that
development proposals in harbours will in all probability be subject
to this procedure. It is possible that such Reports will become
mandatory, in which case the Auckland Regional Water Board could
no doubt be involved in appraisals and comment on such aspects
as stated in (a) - (f) above.

Again the Provisional Scheme does not indicate how and on what basis the Regional Water Board will function within the Regional Authority structure. Had a Water Board been constituted separately as for a Catchment Board it would be an independent body. It would seem that with the Regional Authority also the Water Board, it will be sitting in judgement on its own requirements which will include any action which can effect the harbours under the control of the Board.

ATTACHMENT 4

RELATIONSHIP OF HARBOUR BOARDS TO REGIONAL WATER BOARDS ON THE SUBJECT OF WATER QUALITY AND HARBOUR POLLUTION PRECIS OF MINISTERIAL CORRESPONDENCE

- 1. Minister of Marine to Harbours Assoc. 25 May 1971.

 Seeking support from Minister of Works for Harbour Board

 participation in the Water & Soil Conservation Council structure

 or that regional water boards should be required to consult

 individual harbour boards before issuing rights to discharge

 into harbours.
- 2. Minister of Marine to Harbours Assoc. 2 July 1971.

 Minister of Works had replied that the proposed new Water
 Resources Council could only provide for representation for those
 for which water management is a major part of their functions.

 The Water & Soil Conservation Authority feel that the interests
 of those not directly represented, would be better served by
 district consultation with the appropriate Regional Water
 Board rather than by representation on any national body. The
 Minister of Works feels that direct representation of individual
 harbour boards on regional water boards does not seem appropriate
 as water boards are concerned with the functions of the Soil
 Conservation and Rivers Control Act as well as those associated
 with water management. All non-elected members of such boards
 are officers of Government Departments appointed for their
 knowledge and experience on matters of concern to the boards.
- Advising that unless concrete examples or arguments to show that the interests of harbour boards, which largely coincide with the public interest in the harbour waters, will not be adequately served by Regional Water Boards as at present established or envisaged it was difficult to pursue the matter of representation. He reiterates that Regional Water Boards are charged with the responsibility of maintaining or improving harbour waters to meet water quality criteria laid down and it is felt that this should relieve harbour boards of a considerable amount of work which is not their normal field

...

of responsibility under the Harbours Act. Conclusions It has always been a responsibility of Harbour Boards to exercise supervision and control of any activity that would be detrimental to harbour water quality. The public in the main, looks to the Harbour Board as the guardian of the harbour in this regard. The law requires the Auckland Regional Water Board to assume such a function. Technically this is desirable in many respects and it is doubtful if this Board would not agree. However, the Board is relegated to a minor figure in the new order in that it still has a public responsibility but no direct representation in the Water Board to participate in decisions, and this situation relies on a system of consultation to be effective. Primarily, concern would be that shipping and water recreation activities which are under the control of the Board could be subject to certain requirements that are difficult to apply and control as it effects water quality of the harbour. As for land source discharges, provided a competent assessment and control is applied then it is best that the Board be released from some responsibilities. This of course must mean that somewhere along the line, the Auckland Metropolitan and North Shore Drainage Acts as it concerns this Board's statutory powers to authorise discharges to harbours will have to be repealed, and perhaps amendments made to the Harbours, Counties and Municipal Corporations Acts, and the Board's powers to control the harbour waters pursuant to such Acts will cease.

PROPOSED AUCKLAND WATER REGION SOME STATISTICAL INFORMATION CONCERNING THE AUCKLAND HARBOUR BOARD ASSOCIATION WITH THE WATER REGION

| 1. | a) | Territorial Sea, Coastal and Harbours in the Water Region | 1,920 | sq.miles |
|----|----|---|---------|----------|
| | b) | Ditto under control of the Auckland Harbour Board | 255 | sq.miles |
| 2. | a) | Regional Population | 693,700 | sq.miles |
| | b) | Urban Population directly associated with the two harbours under the Board's control | 655,307 | sq.miles |
| 3. | a) | Total Area of Land in the Water Region | 1,673 | sq.miles |
| | b) | Total Area of Land catchment related to the two harbours under the control of | | |
| | | the Board. | 545 | sq.miles |

30 August, 1972 The General Manager, AUCKLAND HARBOUR BOAR WATER & SOIL CONSERVATION ACT 1967 LOCAL GOVERNMENT COMMISSION PROVISIONAL LOCAL SCHEME FOR THE CONSTITUTION OF AN AUCKLAND WATER REGION The Board has been notified that, as a continuation of the intentions expressed in the Final Scheme for Local Government in auckland and in accordance with a requirement from the Water & Soil Conservation Authority, a Local Scheme is advertised which -Abolishes Underground Water Supply Authorities Constitutes a Water Region to be known as the Auckland Water Region - the area described in the Schedule Constitutes the Auckland Regional Authority the Regional Water Board for the area. Objections by this Board to the Scheme, may be lodged before 11 September 1972. The Water & Soil Conservation Act is an extremely lengthy and complicated piece of legislation, the purpose of which is reasonably clear, but the full effects of its application have yet to be felt. How this legislation will ultimately affect Harbour Boards is difficult to read, but an effort has been made to judge the effects from matters that are reasonably known and applied now and subsequent possible effects to this Board that could result later, when the Auckland Regional Water Board is formally promulgated. In order to appreciate such matters that would be of consequence towards determining whether there is a case for objection to safeguard the Board's interests within the proposed Auckland Water Region, a series of attachments are assembled with this report. These are: Attachment 1 Plan of Water Region. Relationship of Water & Soil Conservation Act as Attachment 2 it may affect the Auckland Harbour Board. Relationship of Auckland Harbour Board to Auckland Regional Water Board on other aspects of Harbours in the Water Region. Attachment 3 Relationship of Harbour Boards to Regional Water Attachment 4 Boards on the subject of Water Quality and Harbour Pollution. Auckland Water Region - Some statistical information Attachment 5 concerning Auckland Harbour Board association with the Water Region.

- 2 -Having regard to this resume of the subject, the following questions appear to require consideration. With the considerable importance of the Waitemata and Manukau Harbours under the control of this Board and within the Water Region, is the Board satisfied that the Water Board will not conflict with or adversely reduce the Harbour Board's control and its capability to develop and maintain the harbours or adversely affect its political status within projected regional government. The Board has considerable knowledge and expertise regarding both harbours within the Water Region and it is a matter as to whether, consultation from the Water Board to the Board will be adequate in the interest of the Board and the public, for the future, or whether the Board should have some statutory representation on the Water Board either relities. political or technical. CHIEF ENGINEER TO THE BOARD.

ATTACHMENT 2 RELATIONSHIP OF WATER & SOIL CONSERVATION ACT AS IT MAY AFFECT THE AUGKLAND HARBOUR BOARD 1. The purpose of the Act is to promote a national porespect of natural water (which means all forms of including sea water) and to make better provision conservation, allocation, use and quality of nature

- 1. The purpose of the Act is to promote a national policy in respect of natural water (which means all forms of water including sea water) and to make better provision for the conservation, allocation, use and quality of natural water, and for promoting soil conservation and preventing damage by flood and erosion, and for promoting and controlling multiple uses of natural water and the drainage of land and for ensuring that adequate account is taken of the needs of primary and secondary industry, water supplies of local authorities, fisheries, wild life habitats and all recreational uses of natural water.
- 2. Bodies to participate in the administration of this Act in order of consequence are:-

(a) National basis.

- (i) National Water & Soil Conservation Authority which will prepare co-ordinate and delegate national policy.
- (ii) Water Resources Council on which the Marine
 Department is represented and would be the only
 avenue for Harbours Association or Harbour Boards
 to be given access to the system. This Council is
 represented on the Authority by one member.
- (iii) Soil Conservationaand Rivers Control Council. This Council is represented on the Authority by one member.

(b) Regional Basis.

A total of not more than twenty-five water regions shall be created for New Zealand and shall comprise of existing catchment districts or areas, the Waikato Valley Authority and every other water region existing or new, constituted under this Act.

Under Section 19 of the Act the majority of N.Z. by virtue of being catchment districts or areas have been constituted water regions. As it concerns the Auckland Region, no catchment district exists and it is necessary to constitute a water region. Hence, the provisional scheme for a Water Region with the Regional Authority as the Regional Water Board is being advertised and objections called.

The functions, powers and duties of a Regional Water Board for Auckland will be conferred by the Order in Council by which it is constituted or any subsequent Order in Councils. Generally it shall exercise all functions, rights, powers and duties expressly delegated to it by or with the approval of the Authority, and two Councils. It shall promote the conservation and most beneficial uses of natural water within the Region, which includes the planning for and promotion of works and projects for the conservation of natural water and projects for the multiple use of natural water. It shall apply the directions of the Water Resources Council in respect of natural water with the region, and in respect of the classification and quality control of all natural water within the region (this includes harbour and coastal waters).

... ...

It shall have due regard to recreational needs and the safeguarding of scenic and natural features, fisheries, wildlife habitats, and shall consult the appropriate authority controlling fisheries and wildlife where they are likely to be affected. The remaining essential statutory authority is to quote Section 20 (5) (i). "The Board shall undertake, exercise and perform in respect of the territorial sea and internal waters of N.Z. and the lands from time to time covered or affected thereby, the same functions, rights powers and duties as it may undertake exercise and perform in respect of rivers and streams and lands affected thereby except to the extent that those functions, rights, powers and duties are or may be undertaken exercised and performed by a Harbour Board." 3. Particular Intentions of the Act. (a) Rights in Respect of Natural Water. Sec. 21. The Crown is vested with the sole right to dam any river or stream to divert or take or discharge natural water or waste into natural water or use natural water subject to provisions of the Act, provided that nothing in this Section shall restrict the right to divert, take or use sea water. The granting of rights to discharge waste or natural water to natural water (fresh or sea) is delegated to Regional Water Boards. (b) Classification of Natural Water. - Sec. 26A & 26B. The Authority, Water Resources Council, or Regional Water Board within the water region, may of their own volition or at the request of any person or authority having an interest in the maintenance of the quality of natural water carry out investigation to establish stated requirements. As it concerns a Harbour Board this would means that the sea or coastal waters inside harbour limits is subject to these procedures. Section 26C provides for classification of coastal waters by the Water Resources Council. The effects and approvals for discharge of wastes and trade wastes comes under the aegis of the Regional Water Board. 4. Conclusions. As it would be related to the statutory powers of this Board, this Act clearly records that for the future (a) All water - stormwater, waste or tradewastes that must find its way to the harbours under the Boards jurisdiction will be subject to the approval and granting of a right to so do by the Auckland Regional Water Board.

(b) The harbour waters will be classified and the responsibility to police and safeguard the water quality will be the responsibility of the Water Resources Council and the Regional Water Board. The Harbour Board will become a local authority, required to apply measures either

...

- 3 -

statutory or non-statutory to ensure that any uses directly controlled by the Board ile. shipping and pleasure boating, port and wharf activities, are such as to maintain standards and criteria that can be imposed to maintain or improve harbour water quality.

(c) As it concerns "except to the extent that those functions, rights, powers and duties are or may be undertaken, exercised and performed by Harbour Boards" and what this means as it relates to the Board's responsibilities for harbours within the Water Region, there is no firm understanding or directives in the matter. Some thoughts are propounded in Attachment 3.

ATTACHMENT 3 RELATIONSHIP OF AUCKLAND HARBOUR BOARD TO AUCKLAND REGIONAL It is not clear from the Provisional Scheme to create the Auckland Water Region and an Auckland Regional Water Board, the exact extent of area that the Water Board has direct control upon. The schedule defines the area, as land within a total block of land and sea. It is probable that the sea portion which includes the harbours of Waitemata and Manukau will come under the purview of the Water & Soil Conservation Authority and Water Resources Council and such matters affecting the sea will be decided by the Authority and Council and where necessary requirements conveyed to the Regional Water Board to apply. As the Auckland Regional Water Board assumes the powers of a Catchment Board under the Soil Conservation and Rivers control Act, it has no rights to move upon the harbour and carry out harbour works except by approval pursuant to the Harbours Act. Having regard to the intent and purpose of the Water and Soil Conservation act it would appear however that harbour works could be the subject of scrutiny and consideration by the Water and Soil Conservation Authority and hence the Regional Water Board, and it could be reasonable to believe that within the harbours under the control of this Board, the following aspects will be subject to scrutiny or direction on the grounds of water conservation. (a) Ability to control forward planning of the harbour in the various facets of harbour activities. Dredging and reclamation including disposal of dredgings. (c) Sea training structures to combat erosion, tidal and wave action.

- (d) Regulation of industry requiring harbour water resources.
- (e) Harbour and Port Structures.
- (f) Discharges onto or over foreshores.

It has been propounded before that the harbours in Auckland, the major urban area of New Zealand, are a considerable body of natural waters with a high incidence of use, and the demands for use are accelerating, particularly in the Waitemata Harbour. This Board has considerable responsibilities in the development of both harbours and water conservation is an essential and integral part of those responsibilities. Planning and development of harbours and utilization of the waters to maintain adequate and satisfactory situations is related to expertise and experience found in the Harbour Board. If this is to be by-passed by a system of consultation with the Regional Water Board, rather than by inclusion of suitable representation in the Water Board, then it is possible that this Board can be subjected to policies and requirements which lack a true understanding of situations, with consequential difficult resolution.

The intention of Government to initiate and require Environmental Impact Assessment Reports for new projects, particularly those related to the Water and Soil Conservation Act, will mean that development proposals in harbours will in all probability be subject to this procedure. It is possible that such Reports will become mandatory, in which case the Auckland Regional Water Board could no doubt be involved in appraisals and comment on such aspects as stated in (a) - (f) above.

...

Again the Provisional Scheme does not indicate how and on what basis the Regional Water Board will function within the Regional Authority structure. Had a Water Board been constituted separately as for a Catchment Board it would be an independent body. It would seem that with the Regional Authority also the Water Board, it will be sitting in judgement on its own requirements which will include any action which can effect the harbours under the control of the Board.

ATTACHMENT 4

RELATIONSHIP OF HARBOUR BOARDS TO REGIONAL WATER BOARDS ON THE SUBJECT OF WATER QUALITY AND HARBOUR POLLUTION PRECIS OF MINISTERIAL CORRESPONDENCE

1. Minister of Marine to Harbours Assoc. 25 May 1971.

Seeking support from Minister of Works for Harbour Board participation in the Water & Soil Conservation Council structure or that regional water boards should be required to consult individual harbour boards before issuing rights to discharge into harbours.

2. Minister of Marine to Harbours Assoc. 2 July 1971.

Minister of Works had replied that the proposed new Water Resources Council could only provide for representation for those for which water management is a major part of their functions. The Water & Soil Conservation Authority feel that the interests of those not directly represented, would be better served by district consultation with the appropriate Regional Water Board rather than by representation on any national body. The Minister of Works feels that direct representation of individual harbour boards on regional water boards does not seem appropriate as water boards are concerned with the functions of the Soil Conservation and Rivers Control Act as well as those associated with water management. All non-elected members of such boards are officers of Government Departments appointed for their knowledge and experience on matters of concern to the boards.

3. Minister of Marine to Harbours Assoc. 20 September 1971.

Advising that, unless concrete examples or arguments to show that the interests of harbour boards, which largely coincide with the public interest in the harbour waters, will not be adequately served by Regional Water Boards as at present established or envisaged it was difficult to pursus the matter of representation. He reiterates that Regional Water Boards are charged with the responsibility of maintaining or improving harbour waters to meet water quality criteria laid down and it is felt that this should relieve harbour boards of a considerable amount of work which is not their normal field of responsibility under the Harbours act.

Conclusions

It has always been a responsibility of Harbour Boards to exercise supervision and control of any activity that would be detrimental to harbour water quality. The public in the main, looks to the Harbour Board as the guardian of the harbour in this regard.

The law requires the Auckland Regional Water Board to assume such a function. Technically this is desirable in many respects and it is doubtful if this Board would not agree. However, the Board is relegated to a minor figure in the new order in that it still has a public responsibility but no direct representation in the Water Board to participate in decisions, and this situation relies on a system of consultation to be effective.

Primarily, concern would be that shipping and water recreation activities which are under the control of the Beard could be subject to certain requirements that are difficult to apply and control as it effects water quality of the harbour.

...

As for land source discharges, provided a competent assessment and control is applied then it is best that the Board be released from some responsibilities. This of course must mean that somewhere along the line, the Auckland Metropolitan and North Shore Drainage Acts as it concerns this Board's statutory powers to authorise discharges to harbours will have to be repealed, and perhaps amendments made to the Harbours, Counties and Municipal Corporations Acts, and the Board's powers to control the harbour waters pursuant to such Acts will cease.

ATTACHMENT 5

PROPOSED AUCKLAND WATER REGION SOME STATISTICAL INFORMATION CONCERNING

THE AUCKLAND HARBOUR BOARD ASSOCIATION WITH THE WATER REGION

1. a) Territorial Sea, Coastal and Harbours in the Water Region

1,920 sq.miles

b) Ditto under control of the Auckland Harbour Board

255 sq.miles

2. a) Regional Population

693,700

b) Urban Population directly associated with the two harbours under the Board's control

655,307

3. a) Total Area of Land in the Water Region

1,673 sq.miles

b) Total Area of Land catchment related to the two harbours under the control of the Board.

545 sq.miles.

Auckland Harbour Board

MEMORANDUM

30 August 1972

FROM

OFFICE SUPERVISOR

TO

CHIEF ENGINEER

The following extract is taken from the New Zealand Gazette No.70 dated 24 August 1972 Page 1818:

APPOINTING DEPUTIES TO MEMBERS OF THE WATER RESOURCES COUNCIL

ARTHUR PORRITT, Governor-General

By his Deputy ALEXANDER TURNER

Pursuant to the Water and Soil Conservation Act 1967, I, Sir Erthur Espie Porritt, Bornet, the Governor-General of New Zealand, hereby appoint:

Keith MacPherson Dunning, Wellington, civil engineer, as deputy to Neville George Pickering.

John Holdsworth Nairn, Waipawa, farmer, as deputy to Douglas Gordon Dymock.

William Norman Gough Dunlop, Christchurch, farmer, as deputy to Alexander Campbell Begg.

Daniel Patrick O'Connor, Oamaru, farmer, as deputy to John Bower Prior.

to the Water Resources Council from and including the 21st day of August 1972.

As witness the hand of His Excellency the Governor-General this 17th day of August 1972.

PERCY B. ALLEN, Minister of Works

OFFICE SUPERVISOR

Auckland Harbour Board

MEMORANDUM

30 August 1972

FROM

OFFICE SUPERVISOR

TO

CHIEF ENGINEER

The following extract is taken from the New Zealand Gazette No.70 dated 24 August 1972 Page 1818:

APPOINTING DEPUTIES TO MEMBERS OF THE WATER RESOURCES COUNCIL

ARTHUR PORRITT, Governor-General

By his Deputy ALEXANDER TURNER

Pursuant to the Water and Soil Conservation Act 1967, I, Sir Arthur Espie Porritt, Bornet, the Governor-General of New Zealand, hereby appoint:

Keith MacPherson Dunning, Wellington, civil engineer, as deputy to Neville George Pickering.

John Holdsworth Nairn, Waipawa, farmer, as deputy to Douglas Gordon Dymock.

William Norman Gough Dunlop, Christchurch, farmer, as deputy to Alexander Campbell Begg.

Daniel Patrick O'Connor, Oamaru, farmer, as deputy to John Bower Prior.

to the Water Resources Council from and including the 21st day of August 1972.

As witness the hand of His Excellency the Governor-General this 17th day of August 1972.

PERCY B. ALLEN, Minister of Works

1 Comel

las seagas to see please

LOCAL OVERNMENT COMMISSION AUCKLAND WATER REGION CONSTITUTION PROVISIONAL LOCAL SCHEME

M. Z. Hannici Tuas 18th July .

1) to this the busas of your report to Other sacraday?

2 A los of L. A. are don't full aslarving the full water Board Control 10 The AR.A. Seeawa of the political and passible sechnical influence of the new Was ALA 10 suit Reguinal drawage 4 words scheme.

(3) Now would be also die to convene office bocal Ashandies do formulante a more descrable

(A) The protect of Die Branch A H. 15. (4) Hambourding on whater Booner would provide ALH. B. with facilities for baing works of change works affecting the Hambours.

DXC M/AM.

EXTRACT FROM NUTES
BOATHARBOUT SORY
COMMITTEE
15 AUG 1972

6. MINISTRY OF WORKS: WATER AND SOIL DIVISION PUBLICATION: MARINA ASSESSMENT GUIDELINES

The Committee dealt with the report of the Chief Engineer which advised that the Water and Soil Division of the Ministry of Works, which is responsible for the implementation and direction of the Water and Soil Conservation Act, had prepared a document for the assistance of those authorities and others who have responsibility to evaluate proposals for marina developments in harbours and lakes and a copy had been forwarded for the Board's comments. The Chief Engineer dealt with the contents of the report and concluded with his recommendations which the General Manager endorsed.

It was RESOLVED that the reports be adopted.

REMAINED IN COMMITTEE

No.

The General Manager, AUCKLAND HARBOUR BOARD

MINISTRY OF WORKS: WATER AND SOIL DIVISION PUBLICATION: MARINA ASSESSMENT GUIDELINES

The Water and Soil Division of the Ministry of Works, which is responsible for the implementation and direction of the Water and Soil Conservation Act, has prepared a document for the assistance of those authorities and others who have responsibility to evaluate proposals for marina developments in harbours and lakes.

In a letter dated 16 June 1972 the Ministry of Works has forwarded a copy of the document for the Board's consideration and has advised that it has been issued to selected authorities on a trial basis. If the trial indicates the guidelines to be useful it is intended to publish them for distribution on a wider basis. It is requested that comment be offered as to what assistance the guidelines might be to other local authorities.

All marinas are known to introduce special problems which make their site selection and design an important matter if they are to be acceptable and functional as a community or private facility and the report attempts to deal with these in a concise and logical manner.

Dealing with the contents more particularly the following are noted:

- 1. Definitions: These are descriptive rather than precise and would be of little value for legal or town planning purposes. The definition "Marina Subdivision" is included and is analogous to the proposed Ngataringa Bay marine residential development.
 - Emphasis in the definition of marina appears to be on the berthing facilities provided rather than concept of an integrated development of berthage and shore facilities.
- 2. Legal Requirements: A brief mention is made of the principal Acts to which this form of development is subject and it is recommended that legal advice should be sought at an early stage of planning.
- 3. General Considerations: This section commences with the question "should a marina be built at all?" and answers it by stating that political emphasis should be on preserving the shore zone in its natural state as a viable best use, rather than on its development for economic gain. Without a supplementary statement that political analysis must carefully balance the current demands of the boating and water recreation users against the possible effects on the natural state, the statement is negative and almost a directive for the "status quo". Furthermore, it is questionable whether a public boat harbour can be considered to be developed for "economic gain".

Other considerations of public access to lake and sea shores, and ownership status make little distinction between public and private development and appear only to restate Government policies which have been applied previously in relation to development proposals in the Waitemata Harbour.

. . .

- 2 -Marina Proposals: Particular site requirements and design factors which apply to marinas are discussed in general terms and the section includes an examination of the possible effects which a marina may have upon the existing environment. These effects are referred to as Environmental Impacts and the section deals with the known intent-ion of Government to induct a formal process of environ-mental impact assessment into the process of appraisal of all forms of development schemes. Having substantiated that any marina must cause environmental change it is recommended that to facilitate consideration of any proposal these changes should be evaluated by way of the two matrix systems supplied. The form and function of the two matrices is as follows:-(a) The Water and Soil Division Environmental Impact
Assessment Matrix lists all possible existing characteristics and conditions of the environment and the proposed actions which may cause environmental impact. By comparison of these lists it is possible to establish points of relationship between an action and a specific aspect of the environment. The effect of these relationships is assessed as to both the magnitude of the impact and its importance. Such assessments are to be recorded numerically and where the impact is found to be concentrated upon particular aspects of the environment or to have high numerical values of magnitude and importance assigned

to them an accompanying text should provide a full discussion. It would also appear possible that with further development some form of arithmetic process could be applied to establish overall benefits or disadvantages indicated by the analysis.

Perhaps the main advantages of the scheme would be

- (i) Recognition of all the characteristics and actions that should be taken into account.
- (ii) There is a standard method of appraisal to ensure that all parties are working within the same framework of consideration.

It must however be recognised that at this stage the matrix is in an experimental form only, and considerable difficulties attach to its use.

(b) Environmental Impact of Recreational Activities Matrix

This matrix is being developed for use in the coastal zone of California and is in the form of "consequence tree" which traces and identifies the environmental consequences of specific water and shoreline uses. It would be possible to assign numerical values to each of the consequences in order to assess the costs and benefits of either the overall development or of any specific aspects of it.

The matrix is more explicit than the one prepared by the Water and Soil Division and appears to provide a better basis on which to consider development proposals. Unfortunately the matrix has only been developed to a stage where adverse consequences are considered and if it is to be used objectively substantial modification is required to include within it any beneficial consequences.

5. Conclusion

With the increasing demand for water recreation facilities in New Zealand it is anticipated that a growing number of

- 3 marina developments will be proposed for harbour and lake locations, and in some cases these proposals will have to be evaluated by local authorities having little experience in such matters. The need for some form of authoritative guide is therefore apparent and the Ministry of Work!s document could provide this assistance. In its present form however, it is difficult to judge whether the document is to be taken as a means for local authorities and others to develop proposals or whether it authorities and others to develop proposals or whether it is a series of policy systems by which a proposal will be judged as to its acceptability or otherwise to Government agencies. Generally the document does not substantiate the claim made in the Forward that it "has assembled as much technical knowledge as is currently available, and has related it to New Zealand conditions", and there are a number of matters referred to in the text which indicate a lack of experience in marina development, are of obscure meaning or may be misleading. The use of matrices is in line with current planning practice and it is considered that they could form a logical framework within which proposals could be evaluated. Considerable care must be taken with their format however, to ensure that the nature of the impacts or consequences being considered are dearly stated and objectively evaluated. 6. Recommendation: The Ministry of Works be advised that: (i) The Board believes the document will be of benefit for planning and development. (ii) The Board feels that some improvements could be made to the proposed "Guidelines". With the considerable experience and expertise that the Board has accumulated in the planning and operation of marinas and boat-harbours the Officers of the Board are available to assist in reviewing the document before final publication. ENGINEER TO THE BOARD Enc. Copy of "Guidelines" The Chairman, Boatharbours Advisory Committee, AUCKLAND HARBOUR BOARD. Recommended. R.T. Lorimer 9th August 1972 GENERAL MANAGER

SOME GUIDELINES FOR THE ASSESSMENT OF. MARINA PROPOSALS MINISTRY OF WORKS WATER AND SOIL DIVISION MAY 1972 The marina is a new type of development which is now

appearing in our harbours and along our lakeshores. While overseas types are more sophisticated than those we have experienced here to date, nevertheless all marinas are known to introduce special problems which make their site selection and design an important matter if they are to be functional and acceptable as a community or private facility.

Because much care is required in dealing with marina proposals, this report has been prepared by the Water and Soil Division of the Ministry of Works with advice from the Town and Country Flanning Division with a view to assisting those who have this responsibility. It has assembled as much technical knowledge as is currently available, and has related it to New Zezland conditions and requirements.

Although brief, the report is a useful document, and I have pleasure in recommending it to all local authorities which will in future have the task of considering marina proposals.

> J.H. Macky Commissioner of Works

INDEX

| | | Selection and the Selection of the Selec |
|----|---|--|
| 1. | Scope of Guideline | 1 |
| 2. | Definitions adopted | 1 |
| | 2.1. Marina | |
| | 2.2. Marina Subdivision | |
| | 2.3. Fresh and Saltwater Marinas and Marina | |
| | Subdivisions | |
| 3. | Legal Requirements | 2 |
| 4. | Marina Proposals : General Considerations | 3 |
| | 4.1. Should the Marina be built at all? | |
| | 4.2. Effect on Public Access | |
| | 4.3. Ownership Status | |
| | 4.4. Regional Considerations | |
| 5. | Marina Proposals : Detailed Considerations | 5 |
| | 5.1. Finance and Management | |
| | 5.2. Site Requirements | |
| | 5.3. Design Factors | |
| 6. | Marina Proposals : Environmental Impact | 11 |
| | 6.1. Water Quality | |
| | 6.2. Erosion and Sedimentation | |
| | 6.3. Land Values | |
| | 6.4. Land Use | |
| | 6.5. Traffic Generation | |
| | 6.6. Visual Impact | |
| | 6.7. Impact Assessment | |
| 7. | Check List | 16 |
| 8. | References | 17 |
| 9. | Appendices | 19 |

\$. SCOPE OF GUIDELINE

The guideline is not intended to constitue a full technical handbook, rat er it is a collection of points to assist officers involved in assessing Marina proposals. It is hoped that the accompanying matrices, references, and terminal check list will prove useful.

Copies of reference shown with an asterisk (*) are available from Ministry of Works, Water and Soil Division.

2. DEFINITIONS ADOPTED

2.1 Marina

A Marina is a man-made harbour located on, or adjacent to, the shoreline of either a fresh or salt water mass. The harbour is divided by access ways to provide individual berths with services - these may be simple, or very complex.

Marinas may offer anything from a simple berth with a walkway access, to a "floating hotel" situation with vehicular access. The marina primarily serves pleasure craft, although some commercial craft may use it from time to time. Adjacent to, or within, the marina there is a launching ramp or ramps.

2.2 Marina Subdivision

This is a subdivision adjacent to, and usually associated with a marina. While section owners may enjoy the exclusive use of the boating facilities, often some provision is made for public use of the marina.

2.3 Fresh and Salt Water Marinas and Marina Subdivisions

Statements made are general, and apply to fresh, or salt water marinas or marina subdivisions. Distinctions are made where necessary.

- 2 -LEGAL REQUIREMENTS The following Acts ere relevant to Marinas and Marina Flanning: (1) Water and Soil Conservation Act 1967 and Amendments If the design or construction of the Marina involved damming a river or stream, diverting or taking natural water, or discharging waste (including sediment-laden water), a WATER RIGHT is required. At present this right is obtained, by the developer, from the controlling Regional Water Board. In areas not served by a regional water board the right is obtained from the Water and Soil Division of the Dinistry of Works. (11) Harbours Act 1950 This Act vests responsibility for the coastal zone (which is that part of the shoreline between tidal or other normal water fluctuation levels in rivers and lakes) in the Crown, and is delegated to the Marine Department. A foreshore licence must be obtained by the developer from the Marine Department

if the proposed development involves the use of the

The Act requires that a strip of land not less than 66 ft. in width must, when developing foreshores, be reserved as Crown land in the following situations: (a) Above Mean High Water mark of the sea, and of

foreshore.

(iii) Counties Amendment Act 1961

its bays, inlets and creeks.

(b) Along the margin of every lake with an area in excess of 20 acres.

(c) Along the banks of all rivers and streams which have an average width not less than 10 ft.

(iv) Town and Country Flanning Act 1953

This lays down the procedures governing the use to which land can be put, and the type of development permitted. The marina must comply with the district planning scheme - if necessary, a change to the scheme must be sought by the developer. The planning authority's approval must be obtained prior to any development commencing.

The above summary of key points may be useful, but should be regarded in the context of the full Acts. Legal opinions should be freely sought in all cases. As legal procedures may be protracted they must be initiated early in the planning sequence.

4. MARINA PROPOSALS - GENERAL CONSIDERATIONS

In deciding whether proposed marinas should be permitted, a number of general factors should be assessed.

4.1. Should the Marina Be Built At All?

Physical changes caused by the construction of a marina are not normally reversible, and hence with respect for posterity they should not be undertaken lightly. Society is increasingly concerned about the environmental quality of the shore zone, and political emphasis should be on preserving it in its natural state as a viable "best use", rather than on its development for economic gain. Marinas may replace

If the proposel is likely to result in the loss of the use and enjoyment of the shore to the public, consideration should be given to amending the design so as to provide an acceptable measure of public access. If this is not possible (either because of design problems or unwillingness on the part of the marina developers), serious consideration would then need to be given to whether it is in the public interest for the marina development to proceed.

4.3. Ownership Status

Should the marina be in public, as opposed to private ownership and management? From the outset, a decision should be made as to whether the marina should be a private or public sector operation. Generally, marinas should be seen as amenities to be enjoyed and used by the public; however, private sector operations can relieve the public sector of this responsibility, provided that reasonable provision is made for public use of the amenity. This provision should be clearly spelled out in the conditions attached to the granting of approval of the development.

It is likely that marina proposals could be associated with domain land. In such a case care will be necessary to ensure that the overall public interest is protected.

4.4. Regional Considerations

It is desirable that the marina fulfils a regional function by serving more people than the immediate inhabitants. The size And complexity required should be based on the best available population estimates, and surveys of need, with allowances made for future development or boating demands where applicable.

5. MARINA PROPOSALS - DETAILED CONSIDERATIONS

5.1. Finance and Management

The planning authority should clearly stipulate its requirements when granting its approval to the development. Methods of financing the construction and future management of a marina will to have a significant influence on the quality of its maintenance and performance. The local authority should ensure that the developer meets his responsibilities in this regard, and if necessary should stipulate suitable conditions as part of its approval. In the case of marina subdivisions, costs (both development and maintenance) should be carried by the section owners. However, if the general community benefits from the development through the provision of new amenities (e.g. pienic sites) contributions could be made from council funds, the community contribution reflecting the community benefit. If the "user pays" principle is applied (i.e. the public pays for the use of the launching ramps), then no rating assistance to costs is justified.

Both the actual construction and maintenance of marinas are expensive undertakings. Maintenance can be very costly of the function and appearance are not to be impaired.

Maintenance falls conveniently into two categories, occasional and regular. Occasional maintenance includes dredging and waste removal. It is most likely that weed growth will occur in marinas. A well designed marina sited, and constructed, with regard to the requirements of the following sections will be less plagued by weed growth and other problems than others. Local authorities should therefore seek professional and technical advice concerning the proposed marina design before granting approval. The Ministry of Works employs qualified staff who can assist in this matter. Without critical analysis of the marina design there could be a very real danger that the public sector could later become responsible for maintaining a weed infested private amenity.

Maintenance work can be carried out by the local authority or by a contract let by the owners' co-operative. All owners <u>MUST</u> be made aware of their responsibilities in this area at the time if the cale, preferably by binding agreement.

5.2. Site Requirements

5.2.1. Wave Action

Marinas should not be exposed to strong wave-action either natural or ship-generated. They should either be protected by sea-wall or breakwater structures, or be sited to avoid maximum wave action. The pattern and size of waves to be expected at a site can be predicted by theoretical methods. Structures are not normally designed to twithstand catastrophic events.

5.2.2. Currents

From a boat handling point of view it is desirable that marinas are not built in reaches or areas subjected to fast currents. Gentle currents however, can be advantageous in that they assist flushing.

5.2.3. Winds

Winds generate waves so that the orientation of the marina relative to the prevailing wind is important. Lend and see breeze effects should also be considered. As marina localities should be attractive and agreeable, dust or spume laden winds and accumulations of floating debris are not desirable. Marinas catering for sail boats should be designed to allow yachts to sail directly out and back to the berth, without assistance, at most times.

5.2.4. Tidal Action (Lake or River Level Fluctuations) If the range of movement is greater than 4 ft. - 5 ft. a floating system of piers and access ways is necessary. for smaller ranges variable water levels need not affect marine siting.

In the Southern Hemisphere the flood tide runs in along the true right of an estuarine reach and the ebb runs out along the true left. Thus salt water flora and fauna population density is higher on the true right. Harine clay deposits caused by the flocculation of suspended clay particles at the interface of the salt water wedge and the main stream can be a problem in estuaries.

5.2.5. Geotechnical

It is probable that any marina or marina subdivision will be 2.0CATED AT becaused to a difficult site, with sedimentary or alluvial soils subjected to rapidly varying water tables. These conditions can lead to slumping and settlement problems.

Sub-soil surveys are necessary to determine the loadbearing capability of the site. Soil may be required to
carry direct loading from breakwaters, fill or buildings.

If piling is required, competence to permit piling must
be assessed. Since many marinas have dredged channels
or basins, investigations should demonstrate whether
material can be handled by conventional dredging methods
and whether tailings are suitable for use as compacted
fill. All excavations and earthworks should be executed
using controlled techniques. In marina subdivisions
sections should be developed to the local body
specification.

In most cases professional engineering advice should be sought and certification of the competence of all materials, provided.

5.2.6. Available Land

Adequate land should be provided for car parking and auxiliary buildings and facilities. The actual amount of land required will depend on the types of boats likely to use the marine, (a high proportion of moored boats will require less axid then a marine catering largely for trailed boats), whether boats will be stored on site, and

the range of auxiliary facilities proposed. In the case of marina subdivisions, sections should be laid out in accordance with local regulations and best practice.

5.2.7. Road Access

The marina should be designed so that adequate access to the external road network can be provided. This access should permit easy movement in and out of the marina by cars pulling boat trailers, and should also have some provision for the "Backing up" of cara and trailers when leaving.

It is desirable that vehicular traffic imposes a minimum distrubance on the residential zone of a marina. subdivision.

5.3. Design Factors

5.3.1. The Mooring Area

The size and design of the mooring area should be based on the boats likely to use the marina. Marina proposals should be accompanied by some evidence as to likely demand for the proposal, such evidence being based on boat ownership and projections of it.

Adequate clearance space must be provided through the mooring area. Slipways must be sufficiently wide to be capable of taking the largest anticipated boats; the seaward (or lakeward) entrances to the mooring area should be sufficiently wide to permit easy passage for the widest boat in rough weather; adequate turning areas must be provided; if "finger jettles" are to be provided,

(boats mooring at right angles to the jetties), then the mooring spaces provided must be sufficiently wide to ensure that, even with large beamed boats, a gap is left between the hull and the dock surfaces. Channels within the mooring area should be generous enough to prevent congestion and collision of passing boats.

Good rules have been established for determining the actual layouts of beith sizes, turning requirements and jetty widths. Pages 27-37 in "Marinas" - Chancy are very explicit in this regard - see References.

5.3.2. The Land Area

Certain services must be regarded as essential at a marina, others optional.

Essential services are launching ramps, fire-fighting equipment, fresh water supply, toilet blocks, sewerage, sewage treatment, stormwater reticulation, and rubbish disposal facilities.

Fire risks can be reduced by careful siting of fuel bays and other high-risk facilities. In all cases foam and water fire-fighting equipment should be readily available. The range of optional services provided at a marina is very dependent on the proposed function. At the present New Zealand marinas are not as comprehensively serviced as many overseas ones are.

The recreational pattern resulting from our 40-hour nonstaggered working week militates against successful commercial enterprises at many marina sites. However, this is not valid at some fresh-water locations (where demands could be quite steady during the trout or salmon fishing season), or at the more popular holiday locations. Services which may be provided include tackle shops, ships chandlers, motor repair shops and fuel suppliers. In sophisticated developments many services can be made available to both users and the general public. Full shopping complexes can be provided, and in some cases restaurants and/or motel units.

6. MARINA FROPOSALS - MNYIRONMENTAL IMPACP

The development of a marina will have a variety of side effects. In appraising marina proposals, the following possible impacts should be studied.

6.1. Water Cuality

(a) Fresh Water

will grow abundantly in a marina.

Several species of imported aquatic plants are infesting the water ways, and semi-enclosed volumes of water provide ideal growing conditions. The presence of nutrients will encourage more prolific growth than would occur in their absence. Water movement through the channels is an essential feature as it removes foul water, but it is not thought to inhibit weed growth significantly. The control of weeds is achieved by spraying or cutting and removing. Spraying is desirable where it can be satisfacorily controlled but great care must be

It is almost certain that aquatic plants and algae

exercised to keept the spray localised. Dead or unharvested weeds themselves become significant pollutants and affect lake bed ecological systems and seepage characteristics. The unavoidable presence of fuel and other wastes may have a controlling influence on all aquatic life in and around the marina.

(b) Salt Water

Salt water is less sensitive to a given input of pollutant than fresh water. Algal growth is likely to be representative of general water quality in the area. Tidal action can be used to maintain essential water movement through the channels.

(c) General

Any discharge of wastes into a marina can lead to a lowering of water quality standards. In particular fuel and mineral wastes must not enter the water. With marina subdivisions, stormwater should be reticulated and discharged outside the marina itself. Where stormwater has a high nutrient content it may require some treatment. Urban stormwater is likely to have a high nutrient content when it runs off topdressed or unpaved areas. Discharge into moving water is preferable particularly in lakes where mirgulation may be limited.

Where the water is classified under the water and Soil **Conservation act No. 2, 4971 or the water Pollution Regulations 1963 all requirements under the legislation must be satisfied. Toilet facilities

- 13 and waste disposal systems commensurate with the sophistication of the development must be provided at any morina. 6.2 Prosion and Sedimentation Sediment movement patterns and processes along coasts and in rivers are complex. Balances which exist are very delicate. Littoral drift, the longshore sedimentation movement process on the coast and in lakes is particularly sensitive. Combined with direct wave action this influences the formation and maintenance of beaches. Structures which interrupt littoral currents induce sedimentation in their own vicinity. thus cutting off the downcurrent sediment supply. This results in degradation of the downcurrent shoreline. The capital cost of removing sedimentat the structure and where necessary replenishment and reconstruction of beaches can be exceedingly costly. Sedimentation is always likely in a basin owing to low

Sedimentation is always likely in a basin owing to low velocities. Where possible, water movement should be maintained. Ships propellers are quite efficient in lifting non-cohesive sediments into suspension.

By focussing wave action, structures may cause accelerated erosion. Susceptible Tocations and the structures themselves need protection with designed protection works.

6.3 Land Values

Land values adjacent to the proposed development could be increased or diminished, depending on the size and design of the marina, and the efficiency of its management.

6.4. Land Use

A marina could act as a catalyst for various types of urban development in its vicinity. The likelihood of new development should be recognised and steps should be taken (using the provisions of the Town and Country Planning Act), to either provide for or to prevent this development.

6.5. Traffic Generation

Marinas generate traffic. As far as possible this traffic should not create congestion on access highways.

Adequate off-street parking for cars and trailers is required.

6.6. Visual Impact

A marina is likely to have a considerable impact on its natural surrounding. It should be designed with professional care, and attention should be paid to details of structure and landscaping. "Back-Yard" efforts are to be discouraged.

The design of marina subdivisions offers considerable scope and challenge to the designer and developers should be encouraged to break away from traditional housing concepts. The Town and Country Flanning Division of the Ministry of Works publication "Coastal Development - policy issues and planning techniques", offers some useful guidelines in this regard.

6.7. Impact Assessment

It can be seen that a marina erbministorubativision has potential for inducing considerable change on its environment.

A satisfactory proposal will stand analysis by the local authority and convince it of its viability.

Use of the accompanying, Coastal Development Matrix and the Water and Soil Division Environmental Impact Assessment Matrix, is to be freely encouraged to aid assessment of the impact and possible effects of the proposal.

7. CHECK LIST

- (1) Has the <u>IMPACT</u> and the marina been competently assessed and found desirable? (Use of <u>EMVIRONMENTAL</u>

 <u>IMPACT ASSESSMENT MAURIX</u> to be encouraged.

 (pp. 10-13, Appendix).
- (2) Have WATER RIGHES been granted? (p. 2).
- (3) Has a FORESHORE LICENCE been obtained? (p.2).
- (4) Have <u>OROWN LAND</u> and <u>DOMAIN</u> requirements been considered? (pp.2, 4).
- (5) Does the proposal comply with the <u>DISTRICT PLANNING</u>

 <u>SCHEME</u> and satisfy <u>REGIONAL REQUIRMENTS?</u> (pp. 3, 4).
- (6) Are any major BCOSYSTEMS distupted?
- (7) Heve <u>FUBLIC ACCESS</u> to and <u>USE</u> of the marina and its facilities been investigated? (pp. 3, 4).
- (8) Have the owners or controlling authorities
 adequately negotiated future MAINTENANCE AGREEMENTS?

 (p. 5).
- (9) Are the <u>SERVICES</u> provided and <u>WASTE DISPOSAL</u>

 <u>FACILITIES</u> commensurate with the sophistication of the proposed development? (pp. 9, 10, 11).
- (10) Does the site satisfy PHYSICAL REQUIREMENTS wave action, currents, winds, tides and geophysical aspects? (pp. 6, 7, 8).
- (11) Does the <u>Layout</u> of the waterway and land areas permit the marina to fulfil its intended function efficiently? (pp. 3, 7, 8, 9).

Auckland Harbour Board

MEMORANDUM

5 July 1972

FROM

SECRETARY

TO

CHIEF ENGINEER

The following extract is taken from the New Zealand Gazette, No.53, dated 29 June 1972, Page 1323:

APPOINTING A DEPUTY TO A MEMBER OF THE NATIONAL WATER AND SOIL CONSERVATION AUTHORITY

ARTHUR PORRITT, Governor-General

Pursuant to the Water and Soil Conservation Act 1967, I, Sir Arthur Espie Porritt, Baronet, the Governor-General of New Zealand, hereby appoint

Edward Hamish Simpson

of Marton, as deputy to Bruce William Spooner on the National Water and Soil Conservation Authority from the 15th day of June 1972.

As witness the hand of His Excellency the Governor-General this 23rd day of June 1972.

PERCY B. ALLEN, Minister of Works.

SECRETARY

lui seagar to see please As

15 June, 1972

THE CHIEF ENGINEER

THE SECRETARY

MATER & SOIL CONSERVATION ACT 1967 S.W. OUTFALL H.J.BULL PEACOCK ST. GLENDOWIE

This application referred to the Board by Frazer, Thomas, Gunman, Shaw & Partners has been examined.

There is no conflict with the Board's interests and no further action is required.

CHIEF ENGINEER TO THE BOARD.

NS: JARP

FRASER, THOMAS, GUNMAN, SHAW & PARTNERS

Consulting Engineers, Registered Surveyors, Architects & Town Planners

152 KOLMAR ROAD PAPATOETOE AUCKLAND

3008 / 1
SHEET 1 OF 4 SHEETS

85/4

AUCKLAND HARBOUR BOARD

RECL 14 JUN1972

ACKD.

ANSD.

7 Barrell Cres,

Exam.

Auckland . 3.

13-6-12.

Dear Sio,

problems of pollution on the new Jealand masine ecosystem. I was interested to read your outile in the newspaper, and I would represent firstly information on the following: landson water water, I water quality, pollution, climate (with repet to the honlown over), post activity, water related industry, fill, and hostown development.

Yours faillifully. H. Hunduson (student).

RCIP

C.P.O. BOX NO. 1259, AUCKLAND TELEPHONE 74-610



Auchland Flarbour Board,

Princes Court,

Princes Street,

Auchland, 1, N. Ft.

14th June 1972

Mr H. Henderson, 7 Barrett Crescent, EPSOM.

Dear Sir,

To assist in providing the information sought in your letter dated 13th June, one of the Board's technical Engineering staff, Mr D. Goord, has agreed to discuss the questions with you.

Would you please ring him to arrange a time when it would be convenient to call, on 'phone 74-610, extension 829.

Yours faithfully,

SECRETARY.

RGP:CW

4.50 Monery. 19th Jan. 1972.



74/1/4/1

NATIONAL WATER AND SOIL CONSERVATION ORGANISATION

WELLINGTON, NEW ZEALAND

59989 TELEPHONE 46 080 THE DIRECTOR WATER AND SOIL CONSERVATION

MINISTRY OF WORKS P.O. BOX 12041 WELLINGTON NORTH, N.Z.

29 May, 1972

Chief Engineer, Auckland Harbour Board, C.P.O. Box 1259, AUCKLAND

Dear Sir,

WATER RESOURCES COUNCIL

In reply to your letter of 22 May 1972, Mr J.B.Prior is the President of the Tauranga Acclimatisation Society and resides in Te Puke.

Mr Prior was appointed as a member of the Council by the Governor-General on the joint recommendation of the Ministers of Works and Internal Affairs. He was appointed in a similar capacity as a member of the Water Pollution Control Council for a number of years until that Council was abolished in March this year.

Yours faithfully,

A. W. Gibson

Director of Water and Soil Conservation

Per:

(B.A. Martin)

Hunting, fishing, shooting lype. What about revealernal boating swinsing ste.? but. Leagar

Thee of

Auckland Harbour Board.

Water Love Conscrates

for confinalien Ned the before at hope.

TRADESWASTE DISCHARGES TO HARBOURS

Meeting on 24 May 1972 regarding the interpretation and implications of exemptions for the discharge of trade wastes to harbour waters with the jurisdiction of the Auckland Harbour Board reference Auckland Metropolitan Drainage Act and Water & Soil Conservation Act.

A.R.A. Tait, Sargent, Taylor
A.H.B. Seagar, Goord.

A.R.A. has received three applications for exemption to discharge trade wastes of which two are at Brighams Creek County of Waitemata for discharge to tidal waters. After discussion on the absence of classification of harbour waters as required by the Water & Soil Conservation Act, the application of that Act is limited until classification and possibly the Auckland Regional Water Board is functioning in true terms of that Act. Consequently such matters are subject to consideration under more than one Act.

The A.R.A. considers that the Metropolitan Drainage Act is still operative. It was therefore considered an interim and accepted procedure should be established to deal with such exemptions for trades wastes viz.

- 1. The applicant shall firstly inform the Local Authority of his requirements and the Local Authority shall be asked to refer the Applicant to the Auckland Regional Authority to make application for the trade waste exemption.
- 2. The Auckland Regional Authority will investigate the application in terms of Section 76 of the Metropolitan Drainage Act and prepare the basis of the exemption which will state the quality of, and/or the degree of pretreatment for the effluent to be discharge.
- 3. The Auckland Regional Authority shall refer the recommended basis for exemption to the Auckland Harbour Board under Section 76 (7) (c) who will signify that it has no objection to the authorisation of the discharged.
- 4. In addition, at the time of application to the Regional Authority the applicant will be notified by the Authority of his obligations to make application pursuant to the Water & Soil Conservation Act from the Regional Water Board for a right to discharge.
- 5. Following the authorisation of the discharge by the Auckland Harbour Board the Auckland Regional Authority will notify the Regional Water Board of the conditions related to the

*** *** ***

exemption which can be taken in account for the public notification and the conditions relative to the right to discharge that will be issued.

It was decided to make joint representation to the Acting Regional Water Board (M.O.W.) in an endeavour to obtain their co-operation in executing applications in the above manner.

N.SEAGAR 25/5/72

TRADESWASTE DISCHARGES TO HARBOURS

Meeting on 24 May 1972 regarding the interpretation and implications of exemptions for the discharge of trade wastes to harbour waters with the jurisdiction of the Auckland Harbour Board reference Auckland Metropolitan Drainage Act and Water & Soil Conservation Act.

A.R.A. Tait, Sargent, Taylor
A.H.B. Seagar, Goord.

A.R.A. has received three applications for exemption to discharge trade wastes of which two are at Brighams Creek County of Waitemata for discharge to tidal waters. After discussion on the absence of classification of harbour waters as required by the Water & Soil Conservation Act, the application of that Act is limited until classification and possibly the Auckland Regional Water Board is functioning in true terms of that Act. Consequently such matters are subject to consideration under more than one Act.

The A.R.A. considers that the Metropolitan Drainage Act is still operative. It was therefore considered an interim and accepted procedure should be established to deal with such exemptions for trades wastes viz.

- 1. The applicant shall firstly inform the Local Authority of his requirements and the Local Authority shall be asked to refer the Applicant to the Auckland Regional Authority to make application for the trade waste exemption.
- 2. The Auckland Regional Authority will investigate the application in terms of Section 76 of the Metropolitan Drainage Act and prepare the basis of the exemption which will state the quality of, and/or the degree of pretreatment for the effluent to be discharge.
- 3. The Auckland Regional Authority shall refer the recommended basis for exemption to the Auckland Harbour Board under Section 76 (7) (c) who will signify that it has no objection to the authorisation of the discharged.
- 4. In addition, at the time of application to the Regional Authority the applicant will be notified by the Authority of his obligations to make application pursuant to the Water & Soil Conservation Act from the Regional Water Board for a right to discharge.
- 5. Following the authorisation of the discharge by the Auckland Harbour Board the Auckland Regional Authority will notify the Regional Water Board of the conditions related to the

*** *** ***

exemption which can be taken in account for the public notification and the conditions relative to the right to discharge that will be issued.

It was decided to make joint representation to the Acting Regional Water Board (M.O.W.) in an endeavour to obtain their co-operation in executing applications in the above manner.

N.SEAGAR 25/5/72

22 May, 1972 The Director,
Water & Soil Conservation Organisation,
Ministry of Works,
P.O. Box 12041,
WELLINGTON NORTH Dear Sir, WATER & SOIL CONSERVATION AUTHORITY WATER RESOURCES COUNCIL I note from the New Zealand Gazette No.39, the appointment of Members to the Water Resources Council. Could you please provide me with brief biographical details on John Bower Prior, who is appointed to represent recreational interests in natural water. Yours faithfully, CHIEF ENGINEER TO THE BOARD. NS:JARP

Auckland Harbour Board MEMORANDUM 27th July 1972 THE SECRETARY THE CHIEF ENGINEER The following is an extract from the New Zealand Gazette No. 56 Page 1443 and is forwarded for your information. Appointing Deputies to Members of the Water Resources Council

ARTHUR PORRITT, Governor General

PURSUANT to the Water and Soil Conservation Act 1967, I, Sir Arthur Espie Porritt, Baronet, the Governor-General of New Zealand, hereby appoint

Norman Edgenton Briggs, Wellington, an officer of the Department of Agriculture, as deputy to Eric James Stonyer;

Ian Lawrence Baumgart, Wellington, an officer of the Department of Scientific and Industrial Research, as deputy to Richard Wright Willett;

Alexander Gordon Stirrat, Wellington, an officer of the Ministry of Works, as deputy to Norman Colin McLeod:

Gordon Muir MacFarlane, Wellington, an officer of the Department of Health, as deputy to Robert Richard Louis Harcourt;

Hubert David Maurice Jones, Wellington, an officer of the Marine Department, as deputy to Rodger Norman Kerr;

> Alfred Robert Tanner, of Longburn, farmer, as deputy to Edward Hamish Simpson;

> Jack Longbourne Vickerman, Tokoroa, civil engineer, as deputy to David Fulton Fowlds;

Vincent John Pooch, of Hamilton, Superintendent of Milk Products, as deputy to Alan Earl Cooper; and

Maxwell Stuart Carrie, of Christchurch, Research and Development Manager, as deputy to Darcy Freeman

on the Water Resources Council from and including the 20th day of June 1972.

As witness the hand of His Excellency the Governor-General this 23rd day of June 1972.

PERCY B. ALLEN, Minister of Works. (P.W. 74/1/4/1)

SECRETARY

lus. Seagar & ho. Gaard la See.

Auckland Harbour Board

MEMORANDUM

17 May 1972

FROM

SECRETARY

TO

CHIEF ENGINEER

The following is an extract from the New Zealand Gazette, No.39 Page 968, dated 4 May 1972:

Appointing Chairman and Members of the Water Resources Council

ARTHUR PORRITT, Governor-General
PURSUANT to section 5 of the Water and Soil Conservation
Amendment Act (No. 2) 1971, I, Sir Arthur Espie Porritt,
Barenet, the Governor-General of New Zealand, hereby

Bruce William Spooner, of Wellington, civil engineer;
Eric James Stonyer, an officer of the Department of Agriculture;
Richard Wright Willett, an officer of the Department of Scientific and Industrial Research;
Norman Colin McLeod, an officer of the Ministry of Works;
Robert Richard Louis Harcourt, an officer of the Department of Health;
Roger Norman Kerr, an officer of the Marine Department;
Neville George Pickering, Douglas Gordon Dymock, and
Edward Hamish Simpson to represent local authorities;
Alexander Campbell Begg, David Fulton Fowlds, Alan Earl
Cooper, and Darcy Freeman; and
John Bower Prior to represent recreational interests in
natural water

natural water

to be members of the Water Resources Council from and including the 1st day of April 1972; and I hereby appoint the said Bruce William Spooner to be Chairman of the Council.

As witness the hand of His Excellency the Governor-General this 11th day of April 1972.

PERCY B. ALLEN, Minister of Works.

(P.W. 74/100/1)

SECRETARY

hunder of Works to Herburg Assoc

Nater Mail Conservation let. Regional Sales Goards etc. ! heeling he bledses day. 23 hay loan at AUS. ACA. Jail, Sargent, Taylor. AUS League, Gaard. agunda. a Present sidualisin Ludes Almo. B tel. and N.S. D. B beb. b levelet applications under last. Bons, Act, may W as acting legional Interboard, Health left. Dishlets seeking application of Act. Law is ARA y thate bound gang to dear hell Thebane blakers. confliction hepere smobbed. ? approve seen des de seges : 41hB representation on Jales Down. Epelline dele. & Shablesto Cosseel procedures for 3/0 and others. New epplications Existen requiring Housian (Chelsea) (NZ Seel). Existen hor Salifactory. bonsulbulions with be of us, Health' and hisraine But procedure be Julies.

MR Seager . AR.A. wud 24 toams Manting Bust Buissing, A+T. -outs just . Walton & Sail Consemplies Fred -Olyet: dealing with outledes do and inlastes from How bours . (a) De applications (6) Reissding Licenses 3. Esdalish mudual agreemen A.R. A. /AH.B. above to opporoach 4.0 m. for co-operadari 3. Exchange ideas on. Journal Board These are a suggested dessies for above macting for while I presume you we proposed cen aganta. To we need to adriese A.R.A. of cletarled Any further work required ? 8.19.

Nx Steel. Pacefec Beck

15th May 1972 The Secretary, Harbours Association of New Zealand PORT RECEPTION FACILITIES NOXIOUS
CARGO WASHINGS Your memorandum of 28th April 1972 refers. After studying the Questionnaire the Board's Chief Engineer and Traffic Manager advise that because no facilities are available in this Port for receiving waste from bulk chemical carriers the questionnaire cannot be completed. The Port Incinerator operated by the Board is licensed to consume "domestic garbage" only. Any small spillage of dangerous material such as those of the chemical families named in the questionnaire are neutralised by water hose and dissipated into the tide. As the subject is of particular interest in view of the development of bulk transport of noxious substances other than oil we would be pleased to receive any information that may subsequently be published on this subject. Yours faithfully, SECRETARY The Chief Engineer Copy for your information. lock tog please so Mollever

P.O. Box 1765, WELLINGTON

Dear Sir,

RGP/JP

AUCKLAND HARBOUR BOARD MECHANICAL SECTION RECEIVED 19 MAY 1975

CHIEF ENGINEER

THE GENERAL MANAGER.

I.M.C.O. QUESTIONAIRE - PORT RECEPTION FACILITIES NOXIOUS CARGO WASHINGS.

Auckland Harbour Board

15/5/72

Hove drawered this
with hissaell Panny or found
that T. M. had already replied
to menor stating that only facility
was Post Invincated under the
Control of H.M. & C. E. Have
Pointed out to Russell the
Objections herein a told him
to state that we have no
facilities. The enclosed nemor
is only a backer up.

Mechanical Engineer for Information.

CJO:AF.

d the Traffic Managers comments to make:-

or for disposing of the products hedule would not be practicable as:

e Department of Agriculture is that ed for domestic refuse only, not

edule materials would not be complete redesign of the whole

hare should state that A.H.B. has ing of noxious cargo washings.

CHIEF ENGINEER TO THE BOARD.

THE GENERAL MANAGER.

I.M.C.O. QUESTIONAIRE - PORT RECEPTION FACILITIES NOXIOUS CARGO WASHINGS.

In reply to your memo and the Traffic Managers comments we the following remarks to make:-

Use of the Port Incinerator for disposing of the products listed in the I.M.C.O. schedule would not be practicable as:

- a) The agreement with the Department of Agriculture is that the incinerator be used for domestic refuse only, not trade wastes.
- b) Combustion of the schedule materials would not be practicable without complete redesign of the whole plant and facilities.
- 2) The reply to the questionare should state that A.H.B. has no facilities for disposing of noxious cargo washings.

CHIEF ENGINEER TO THE BOARD.

Copy to:

Mechanical Engineer for Information.

CJO:AF.

Auckland Harbour Board

AUCKLAND HARBOUR BOARD
MECHANICAL SECTION
RECEIVED 1 1 MAY 1972

The Chief Engineer,
The Traffic Manager,

I.M.C.O. QUESTIONNAIRE - PORT RECEPTION FACILITIES NOXIOUS CARGO WASHINGS

The Assistant General Manager has asked me to send you the attached copy of a Questionnaire received through the Harbours Association.

He requests your assistance as to whether any sections can be completed as far as Auckland is concerned.

As some delay has already occurred in transit would you kindly advise urgently. You will note a reply is requested in order that the answer to the questions can be sent to Norway by 15th May.

ADMINISTRATION OFFICER

Med Eng Please consult with Toafflewer viforaticable prepare a joint report

INTER-GOV IMENTAL MARITIME CONSULTATIVE ORGANIZATION

101-104 PICCADILLY, LONDON, WIV OAE

Telegrams: INMARCOR-LONDON, W.1 Telephone: 01-499 9040

T5/1.04



MPS/Circ.42 6 March 1972

27 APR 1972

IMCO

MARINE POLLUTION

PREPARATION FOR AN INTERNATIONAL CONFERENCE ON MARINE POLLUTION IN 1973

In order to prepare for the International Conference on Marine Pollution to be convened by IMCC in 1973, the Sub-Committee on Marine Pollution at its tenth session (10-14 May 1971), initiated nine studies on different aspects of prevention of marine pollution. One of these studies (Study IX) relates to Pollution caused by the discharge of noxious substances other than oil through the normal operational procedure of ships engaged in bulk transport. This study is being carried out by the Government of Norway.

At the twelfth session of the Sub-Committee (28 February-3 March 1972), when presenting the preliminary report on Study IX, the Norwegian delegation drew attention to the need for additional information with respect to the provision of shore facilities for the reception of waste from bulk chemical carriers.

To enable a more complete analysis of the problem to be made, the Sub-Committee prepared a questionnaire, a copy of which is attached hereto, and requested the Secretariat to invite Governments to supply relevant information.

Accordingly, Member Governments and Governments of States Parties to the International Convention on the Prevention of MPS/Circ.42

Pollution of the Sea by Oil, 1954, are invited to complete the attached questionnaire and to return it to the Government of Norway as soon as possible but not later than 15 May 1972.

QUESTIONNAIRE ON PORT RECEPTION FACILITIES FOR THE DISPOSAL OF RESIDUES AND WASHINGS OF NOXIOUS CARGOES OTHER THAN OIL

Note: Replies to this questionnaire should be completed preferably by 15 May 1972 and submitted to:

Mr. E. Hareide, Norwegian Maritime Directorate, Thv. Meyersgt. 7, Oslo-Dep., Norway.

Please complete the following for each installation in your country: 1. Where situated: Country Port 2. Name of operator (including telephone and/or telex Nos.): Will the installation accept residues from any ship? 3. 4. Type of installation: 4.1 Refinery - an installation which has means of refining residues received 4.2 Waste reception - storage facilities (possibly incorporating separation and/or evaporation) Mobile 4.3 - for example, barges, tank lorries, etc. 4.4 Others - specify

MPS/Circ.42

- 5. Number of berths available (in respect of 4.1, 4.2 and 4.4):

 (include length of berth and depth of water)
- 6. Charges, if any, for the use of the installation:
- 7. See table attached.
- 8. Specify in detail any restrictions in the use of the installation.

The following questions should be answered in a separate document:

- 9. What is the average rate of processing each substance or combination of substances, in metric tons?
- 10. How are received substances disposed of?
- II. Are there any new installations planned?

 If so, give same particulars in questions 1 to 10 above.

 State when these installations will be expected to be in use.

7. What substances can the installation receive:

| 7.1 Chemical family | 7.2 Nature of facility, i.e. Refinery/Waste Reception/Mobile/ Others | 7.3 Quantities of contaminated wash water containing: | | 7.4 Average rate for receiving contaminated wash water in |
|----------------------------------|--|---|------------------------------------|---|
| | | 7.3.1 Soluble sub- stances | 7.3.2 Non-soluble substances | metric tons per hour |
| Ethers | | | | |
| Sat. Aliphatic Hydrocarb | ons | | | |
| Esters | | | | |
| Animal and Veg. Oils | | | | |
| Sat. Halocarbons | | | | |
| Glycol Ethers | | | | |
| Unsat. Aliphatic Hydrocarbons | | | | |
| Alcohols/Glycols | × | | | |
| Amines | 4 | | | |
| Phenols | | | c | |
| Cyanohydrins | | | | |
| Vitriles | | [| | |
| Aldehydes/Ketones | | | | |
| Unsat. Halocarbons | | | | |
| Organic acids | | | | |
| Caustic Alkalis | | | | |
| Ammonia Frimary Amines | | | | |
| Inorganic Acids | | | | |
| Strong Oxidizing Agents | A. A. | | | |

ARTHUR PORRITT, Governor-General
PURSUANT to section 5 of the Water and Soil Conservation
Amendment Act (No. 2) 1971, I, Sir Arthur Espie Porritt,
Baronet, the Governor-General of New Zealand, hereby appoint Bruce William Spooner, of Wellington, civil engineer; Eric James Stonyer, an officer of the Department of Agri-Eric James Stonyer, an officer of the Department of Agriculture;
Richard Wright Willett, an officer of the Department of Scientific and Industrial Research;
Norman Colin McLeod, an officer of the Ministry of Works;
Robert Richard Louis Harcourt, an officer of the Department of Health;
Roger Norman Kerr, an officer of the Marine Department;
Neville George Pickering, Douglas Gordon Dymock, and Edward Hamish Simpson to represent local authorities;
Alexander Campbell Begg, David Fullen Fowlds, Alan Earl
Cooper, Darcy Freeman, and James Bower Prior to represent recreational interests in natural water to be members of the Water Resources Council from and including the 1st day of April 1972; and I hereby appoint the said Bruce William Spooner to be Chairman of the Council. As witness the hand of His Excellency the Governor-General this 11th day of April 1972. PERCY B. ALLEN, Minister of Works. (P.W. 74/100/1) lev. Seagar A 6- SECRETARY Auckland Marbour Board

Pleas Seagar D

Pewberton M

Pask AM.

Auckland Harbour Board

MEMORANDUM

FROM

DEPUTY GENERAL MANAGER

TO

24 January 1972

CHIEF ENGINEER

The following is an extract from the Australian Financial Review No. 2811 Page 1 and is forwarded for your information.

Scientists develop biological monitors'

Cockburn
Sound now
safe from
pollution

By JOHN McILWRAITH

SCIENTISTS working at Cockburn Sound, near Perth, have developed a unique series of "biological monitors" for detecting and predicting water pollution.

Their studies could have farreaching implications for protecting Australian waterways.

tecting Australian waterways.
In any case, the research program at Cockburn Sound (which is part of the outer harbour of the Port of Fremantle) is likely to become a model of its kind for ecologists.

The work is being undertaken for the Fremantle Port Authority and the Commonwealth Works Department, to ensure that the Sound is not harmed by the industrial development being carried on along its shores, and by the construction of a causeway to nearby Garden Island.

nearby Garden Island.

The island is to be the site of naval facilities for both the Royal Australian Navy, and occasionally, British and American warships.

The building of the causeway and the later development

The building of the causeway and the later development of the naval facilities was opposed by some environmental groups, on the grounds that the ecology of the Sound had already been endangered by the big industrial complex that has sprung up at Kwinana, and further pressures could cause irreparable damage.

further pressures could cause irreparable damage.

Both the Port Authority and the Works Department reassured the environmentalists that the Sound's ecological health was being watched carefully.

fully.

The development of techniques, together with the collection and evaluation of the environment.



Cockburn Sound now safe from pollution

From page 1

effects of chemicals in the water.

The most valuable results were obtained from epiphytes, tiny algal plants which live on the leaves of seagrass that proliferates in the Sound.

There are some 67 varieties of these microscopic plants in Cockburn Sound.

Research showed that about a third of these species occur only near the sources of effluents, which flow into the Sound from industries.

Another third live happily in either polluted or unpolluted water, and the remainder live only in water free of effluents.

The researchers, using these species, are able to predict the directions in which pollutants

will spread.

They are clear indicators for three quarters of a mile in advance of where effluents have any noticeable effect on sea-

Two other unwitting allies are the solitary sea squirts (asci-dians) and razor clams (bi-valves).

Ascidians live on the piles of Ascidians live on the piles of jettles and have a superb filtering system for collecting food (the system in fact is superior to most equipment that can be used in the standard research laboratory when it comes to filtering fine materials from large volumes of

Chemicals filtered by the ascidians stay in the creature. Simllar concentrations build up in the razor clams, which live on the sandy bed of the Sound.

the sandy bed of the Sound.

By comparing the concentrations of chemicals, in particular organs of ascidians and clams that live close to existing industries on the Sound, with others in distant parts, the scientists have been able to gain an accurate picture of pollution levels. the concenat live close to existing instries on the Sound, with
hers in distant parts, the scient
its have been able to gain an
currate picture of pollution
vels.

What is more important, the levels.

three groups of animals — the can be swallowed in a few days epiphytes, the ascidians and the clams — will provide a permanent monitoring system.

One of the disastors as the longest factor of the longest factors are the longest factors.

One of the directors of the research organisation carrying out this work points out that the biological monitors, while offer-ing great promise for future ecologists in other places, are no

"In other waterways, different animals would have to be found and studied, to be suitable moni-tors. While the idea is simple, implementing it required a great

deal of painstaking work."

The biological monitors are supported by other methods of monitoring—a very thin sample of mud is taken from the Sound's floor (it must be thin — even six inches deep heavily distorts results, because this depth represents the sedimentation of 300 years).

The authority and the department also support research programs to watch for possible beach erosion, or the deterioration of the seagrass meadows in the Sound.

It is these meadows that represent the key to the future stabilof the Sound's environment.

Most of the sandy shores around it are geologically very young — they were formed as recently as 3000 years ago.

This makes them vulnerable to change, and the seagrass carpets that lie in shallow water along the shores are the best insurance against a possibility of erosion.

The stabilising influence occurs

when sand from the beaches is washed into the Sound in winter.

The sand is prevented from drifting irretrievably into deep water by that seagrass carpet, which also protects the beaches from storm action in winter.

In addition, of course, the seagrass meadows are the home of much of the Sound's sea-life. As

movement of beach sand along 10 profiles at 17 stations on Gar-den Island and the mainland, at

monthly intervals.

Releases of dyed sand are also used to check sediment move-

The studies, so far, have yielded some pleasant surprises. One concerns the deep (60 to 70 feet) basin that exists in the Sound (the basin is one reason the sound is such an attractive har-

This deep basin is surrounded by a sandy shelf, only 10 feet below the surface, and is particularly shallow at the open ends.

Until the research program began, it had been believed that there would be little displace-ment of water from the deep basin.

This seemed a natural assump-tion in view of those shallow sills at each end.

In fact the hydrographic studies carried out have shown that instead of the deepest water being replaced, say every few years, it is completely "rinsed" in periods ranging between three

days and three weeks.

This discovery has some high ly encouraging implications for the Sound's ability to absorb industrial wastes and retain its natural environment.

For the researchers and the Port Authority are now dewyeyed sentimentalists about Cockburn Sound.

"Where there is industry, there ast be industrial wastes. Our "Where there is industry, there must be industrial wastes. Our job is to discover how much the Sound can absorb without significant environmental damage, and still remain both a splendid harbour for ships, and most important of all, a priceless recreational resource."

For Cockburn Sound is as beautiful as it is attractive to in-

"We think it is possible to we think it is possible to keep the Sound as pleasant as it is now — probably even improve it — for recreation, yet allow it to fill its role as an industrial complex and a harbour."

Specific results of the research on pollution are still not generally available yet (an outline of the program was given at a recent ANZAAS seminar).

Some pollution problems have been detected. However these are not irreversible and solutions are

in sight.
One of the objectives of the one of the objectives of the research program was to provide both a profile and a history of the sound, and to establish some baselines of conditions in it.

This way the Fremantle Port Authority would be able to com-

pare future conditions and maintain the waterway's "state of tain the waterway's health."

Altogether, there has probably never been such an intensive study of 43 square miles of an Australian body of water there has been at the Sound. water as

The researchers in esoteric fields as micro-meteorology, soils, and zoology have studied the surprisingly large body of academic, if obscure, literature on the area the area.

the area.

As many as 20 or 30 others join them (senior university students for example) to carry out some of the more intensive short-term field surveys on the

Nobody on the project makes such comparisons, but the work prompts the thought that if more had been known about the environmental hazards when Botany Bay was developed as an indus-trial area, similar research might have avoided the problems that exist there.

Even now, there are no easy answers. The work at Cockburn Sound is exacting — and very costly—to the two organisations costly—to the two organisations which have commissioned the

But their care reflects the high degree of responsibility and could pay huge dividends for other coastal areas.

RUSSELL MCVEAGH MCKENZIE BARTLEET & CO. BARRISTERS, SOLICITORS & NOTARIES PUBLIC SOUTH BRITISH AND GUARDIAN TRUST BUILDING 3 SHORTLAND STREET AUCKLAND, 1, N.Z. NEIL LLOYD MACKY TELEPHONE 34-369 EDGAR LLEWELLYN BARTLEET JOHN DEVON LETHBRIDGE JOHN WALLACE MCKENZIE ROBERT LLOYD MACKY EDMUND WALTER THOMAS PETER ALAN MILLER COLIN JOHN FERNYHOUGH P.O. BOX B CABLE ADDRESS "BARRISTER" COLIN JOHN FERNYHOUGH
JOHN HARVEY MARSHALL
JOHN COLLINGWOOD KING
JOHN OLLIVER LUSK
WARWICK MILES BROWN
DAVID ARTHUR RHODES WILLIAMS PLEASE REPLY TO MR. B.H.Giles REDERICK WILLIAM MONTEITH MCELREA AUCKLARO HARMOUR BOARD 6th December 1971. The Secretary, Auckland Harbour Board RECA - 7DEC 371 AUCKLAND. ACKE ANSD. Dear Sirs, Re: Water and Soil Conservation Amendment (No.2) Bill. We acknowledge receipt of your letter dated 26th November 1971 with its enclosures and also the enclosures forwarded to us on 6th December 1971. The writer has now considered the provisions of the Amendment Bill in some detail. We note the observations made by the Association's solicitors detailed in their letter dated 29th November 1971 and are in general agreement with their conclusions. It seems to the writer that there are two essential issues in the Amendment, namely the reconstitution of the Water Pollution Control Council and the Water Allocation Council in a new body to be known as the Vater Resources Council and the effect if any, that the powers of this new Council will have on Harbour Boards. So far as the first issue is concerned, it appears to the writer that the essential points have been well made in the Harbour Association's submission to the Land and Agriculture Committee on this particular Bill. It is obvious that the Water Resources Council is intended to combine the functions of the two former Authorities and it does seem somewhat inappropriate for the new legislation to deprive the Harbours Association of the right of representation formerly given it pursuant to the Waters Pollution Act 1953. All Harbour Boards are naturally concerned with the problem of water pollution and the need to restrict discharge of waste material into harbour waters and it seems desirable in the public and national interest for the Association to be represented on the new Council in order that those aspects of policy concerning harbour waters should have the benefit of the Association's knowledge and experience. The Minister has however already indicated that he does not consider such representation to be necessary and we very much doubt that the Bills Committee will make any alteration to the constitution of the new Council. The Minister has already commented that harbour waters are only a small part of the Council's ultimate jurisdiction and as noted in paragraph three of our letter dated 13th Cotober 1971 that observation is not without foundation. The situation is somewhat different in so far as it relates to the functions of the new Council. Received from Receiving 8/12/71 Discussed reply to Sharbours 1850c 44 Mr. Seagar

As we have already commented in our earlier letter the ...ater and Soil Conservation Act 1967 is given statutory supremacy over any other Act in a conflict situation. The Harbour Board is enjoined by Section 4(3) of the Act to be guided by the provisions of the 1967 Act and to give effect to the policy and directions communicated to it by the National Soil and water Conservation Authority. The Authority is directed to be guided by the intent and spirit of any other enactment when formulating such policy but none the less any conflict is statutorily resolved in its favour.

It is true that section 21 of the 1967 Act vests the sole right to discharge waste into natural water in the Crown. He concur with the suggestion made by the Wellington Harbour Board's solicitors that the relevant provisions of the Municipal Corporations Act and the Counties Act have been severly restricted by the new provisions proposed in clause 12 of the Bill. In view of the fact that this Act is the supreme Act, it appears to us that the Harbour Board would be in some difficulty if it desired to impose additional conditions after an authorisation had already been obtained from the Regional Water Board.

We do not however share the view of the Wellington Board's solicitors that these provisions can be said to have been impliedly repealed. The new Bill does not expressly repeal them and throughout negotiations between the Association and the Minister of Marine there has been frequent reference to these provisions. So long as these provisions remain on the Statute books they are matters which the Water and Soil Conservation Act Authorities must consider under the provisions of section 4(3). The position here in Auckland is strengthened further by virtue of the fact that section 63 of the North Shore Drainage Act 1963 specifically requires any Local Authority in the Auckland area to have the consent of the Harbour Board before discharging any sewage etc. into the harbour limits and likewise section 35 of the Auckland Metropolitan Drainage Act 1963 makes similar reservations.

It is our opinion that the Auckland Harbour Board's position is a little stronger than its counterpart in Wellington and that when an application to discharge waste into the Auckland Harbour is made to any Regional Water Board consideration to the policy of the Board will need to be given pursuant to the provisions of these Acts. This is of course still subject to the overriding effect of the Water and Soil Conservation Act 1967 but none-the-less it does make a significant difference in this city.

In view of the fact that section 21 remains substantially the same in the Bill as it is in the present Act we do not consider that there is any point in the Auckland Harbour Board making separate submissions on this aspect of the Bill to the Committee as the Bill is simply clarifying the position once classification has taken place.

These observations apart we do not consider that the Bill effects the Auckland Harbour Board adversely in any other way. The classification provisions are now detailed in section 26A and subsection (1) (f),(g) and sub-section (2) of that section are of particular interest in the context discussed above. The Harbour Board is certainly an Authority having an interest in the maintenance of the quality of natural water and if at any time it considered that the Regional Water Board was proceeding with a policy not in keeping with the provisions of the Municipal Corporations Act, or Counties Act or other Acts giving the Board certain powers then it could request a reference to the Authority. Classification hearings will of course be public hearings and the Board will be entitled to make representations if desired.

We trust that these comments are of assistance to you. The writer would be pleased to amplify any points upon which you require further clarification.

further clarification.

Yours faithfully,

RUSSELL MCVEACE CO Per:

Later Man

P.O. Box 1765. Wellington.

21st September 1971.

MEMORANDUM for All Members and All Members of the Executive. AUCKLAND HARBOUR BOARD

24SEP1971 REC.

Regional Water Boards - Water Pollution Control ACKP

Appended hereunder for your information is a copy of a letter dated 20th September 1971 from the Hon. Minister of Marine. I should be pleased to have your comments on this reply.

REDOWN

OFFICE OF THE MINISTER OF MARINE, Wellington.

20 September 1971

Mr. R.E. Dawson, Secretary, Harbours Association of New Zealand, G.P.O. Box 1765, Wellington.

Dear Mr. Dawson.

After giving further consideration to your letter of 6 September advising me of your Association's desire that Harbour Boards should be represented on Regional Water Boards, I feel that you may have misunderstood the advice of my colleague, Hon. P.B. Allen, which I quoted in my letter of 2 July.

The non-elected members of Regional Water Boards are usually officers designated by the positions which they hold, from the Departments of Lands and Survey, Agriculture, Forests and the Ministry of Works; for instance the Commissioner of Crown Lands and the District Commissioner of Works. Their knowledge and experience is made available in matters of concern to the Regional Water Boards, and not those of concern to the Harbour Boards as understood by you.

The responsibilities of Regional Water Boards cover a very wide field and the water regions cover an extensive area. The discharge of waters into harbours is considered by Mr. Allen to be quite a minor aspect of their total responsibilities. Regional Water Boards are charged with the responsibility of maintaining or improving harbour waters to meet the water quality criteria laid down by the Water Pollution Control Council, and it is felt that this should relieve Harbour Boards of a considerable amount of work which is not in their normal field of responsibility under

I feel that it will be difficult for me to take up this matter again with Mr. Allen unless you can provide me with some concrete examples or arguments to show that the interests of Harbour Boards, which largely coincide with the public interest in the harbour waters, will not be adequately served by the Regional Water Boards as at present established or envisaged.

Yours sincerely, 'Allan McCready' Minister of Marine and Fisheries. Auckland Harbour Board.

The on lander Sure Conservation

1 Fastaws Assoc! legal advice Conformed with my below o daled. 23 Nas. 3 Lubmissioni are pullehic. himea the bus any law, by MEMORANDUM hat seeking to have the Water local bushave board buducled julo the legional Wale Lawer On 19th No forwarded had been r When the Lepusenhabion y cads informed 1 also refe board is home particularly The Bill 1. Abol: Allo Coun bonueyed to lickertey by Poll (a) phone 8/12/41. (b) (c (d arobben. 3. The result compared with the constitution of the Waters Control Council is as follows -(a) The representation of Government Departments has been increased from four to five. (b) The representation of Industry has been increased from three to four. (c) The representation of local authorities has been decreased from four to three.

Counsel's opinion is set out hereunder for your information.

The Wellington Harbour Board, which is the only Board which to date has replied to my memorandum, has drawn attention to the fact that Harbour Boards have played a valuable part in the work of the Water Pollution Control Council and could continue to do so on the new Water Resources Council.

See allached robes

RECO. - 3DEC1971

ACKD.
ANDD.

P.O. Box 1765, Wellington.

1st Jecember 1971.

MEMORANDUM for All Members and All Members of the Executive.

Water and Soil Conservation Amendment (No. 2) Bill

On 19th November 1971 I obtained copies of the above Bill and forwarded them to some of the larger Harbour Boards. As the Bill had been referred to the Lands and Agriculture Committee and I was informed that Government hoped to have it passed this session, I also referred it urgently to Counsel for the Association.

The Bill proposes to make the following changes, inter alia ${\color{blue}-}$

- Abolish the Water Pollution Control Council and the Water Allocation Council and establish a new body, the Water Resources Council, to take over their combined functions.
- 2. In relation to the personnel constituting the present Water Pollution Control Council the following is the effect -
 - (a) The Department of Agriculture (previously represented on the Water Allocation Council) has been added.
 - (b) Federated Farmers (also previously represented on the Water Allocation Council) has been added.
 - (c) An independent Chairman (as previously with the Water Allocation Council) has been added.
 - (d) The representative of the Harbours Association has been dropped.
- 3. The result compared with the constitution of the Waters Pollution Control Council is as follows -
 - (a) The representation of Government Departments has been increased from four to five.
 - (b) The representation of Industry has been increased from three to four.
 - (c) The representation of local authorities has been decreased from four to three.

Counsel's opinion is set out hereunder for your information.

The Wellington Harbour Board, which is the only Board which to date has replied to my memorandum, has drawn attention to the fact that Harbour Boards have played a valuable part in the work of the Water Pollution Control Council and could continue to do so on the new Water Resources Council.

See akached robes

2. 71/259

It is suggested that Harbour Boards have a considerable stake in pollution control and it is submitted that it would be a serious error of judgment and contrary to experience to exclude them from the new Council.

I enclose a copy of a submission handed to the Lands and Agriculture Committee today.

Secretary.

IZARD WESTON & CO.

Barristers and Solicitors P.O. Box 1748, Wellington.

The Secretary, Harbours Association of New Zealand, P.O. Box 1765, Wellington.

29 November 1971

Dannin

Dear Sir,

Water and Soil Conservation Amendment (No. 2) Bill 1971

We acknowledge receipt of your letter of 19 November 1971 and have now given consideration to the above Bill.

In discussions with the Secretary and with Mr. Thomas of Messrs. Russell & McVeagh, the solicitors for the Auckland Harbour Board, mention was made of the rights of Harbour Boards under Section 236 of the Municipal Corporations Act 1954 and Section 263 of the Counties Act 1956 and the desirability of such rights being continued.

After giving preliminary consideration to the Bill, the current provisions of the Water and Soil Conservation Act 1967 and other relevant legislation, it seemed to us that the provisions in the Municipal Corporations Act and the Counties Act had been impliedly repealed or rendered largely ineffective by the Water and Soil Conservation Act 1967. We telephoned Mr. Thomas and discussed the position with him. He is in agreement with us that the Water and Soil Conservation Act prevails over the provisions of the Municipal Corporations Act and the Counties Act.

Section 4(3) of the Water and Soil Conservation Act 1967 provides that Harbour Boards shall in the pursuance of their functions in relation to natural water (which includes the sea in a harbour) be guided by the provisions of the Water and Soil Conservation Act and shall give effect to the policy and directions communicated to them from time to time by the National Water and Soil Conservation Authority. There is a proviso that in formulating policy and giving

3. 71/259

directions the Authority should have regard to the intent and spirit, where appropriate, of the Harbours Act 1950. There is a further proviso that:-

"Where inconsistency or conflict appears between the provisions of the enactment under which (a Harbour Board) is constituted and operates, and this Act, the provisions of this Act shall prevail."

Section 21 provides that except as expressly authorized the sole right to discharge waste into natural water (which would include a harbour) is vested in the Crown.

It is our view that the Water and Soil Conservation Act 1967 and other associated legislation now cover the discharge of waste or other substances into a harbour. The relevant provisions of the Municipal Corporations Act or the Counties Act have been impliedly repealed or, at least, rendered largely ineffective. If the appropriate authorities are obtained under the Water and Soil Conservation Act and associated legislation, we consider that a Harbour Board would not be entitled to impose additional conditions pursuant to the provisions of the Municipal Corporations Act or the Counties Act.

So far as the Bill is concerned it appears to us that, apart from removing representation by Harbour Boards on the Water Pollution Council (which is abolished and replaced by the Water Resources Council) the Bill does not adversely affect the interests of Harbour Boards. The powers of various bodies under the Water and Soil Conservation Act are extended by the Bill and the provisions of the Water Pollution Act 1953 are in general terms-re-enacted in the Bill.

It may be said that the powers given by the Bill to control the pollution and other matters relating to the waters of a harbour are some additional infringement of the powers of Harbour Boards. We do not think there is any prospect of the Government agreeing that such powers should be exercised in harbours exclusively by Harbour Boards. The best that Harbour Boards can do is to maintain communication with the authorities exercising such powers and, in the event of an adverse decision, appeal, where an appeal is given, to the Town & Country Planning Appeal Board. We also mention that, apart from the provisions of the Municipal Corporations Act, the Counties Act and Sections 242 and 243 of the Harbours Act 1950, there is little legislative authority for a Harbour Board to control pollution of the waters of a harbour.

Finally the position in some harbours may be affected by specific legislation of only local application.

In summary our view is that, except for loss of representation on the Water Pollution Council, there is nothing in the Bill which seriously adversely affects Harbour Boards and to which Harbour Boards can make an effective objection.

Yours faithfully, IZARD WESTON & CO.

'John B. Stevenson'

THE HARBOURS ASSOCIATION OF NEW ZEALAND

Mr. Chairman and Honourable Members of the Lands and Agriculture Committee

Water and Soil Conservation Amendment (No. 2) Bill 1971

It is regretted that lack of notice and pressure of other business prevents these submissions being made personally by myself or another representative of the Association. I trust that the Committee will accept these submissions with an apology for non-appearance.

In May 1971 the Association found it necessary to write to the Hon. A. McCready, Minister of Marine, expressing concern at the proposal to merge the functions of the Water Allocation Council and the Water Pollution Control Council and that such Council should consist of fourteen members without representation from the Harbours Association of New Zealand which had previously been represented on the Water Pollution Control Council. The attention of the Minister was drawn to the large water areas which are controlled by Harbour Boards and which may be subject to pollution from a multiplicity of causes and the concern of Members of the Association that proper standards should be maintained was stressed. The Association said it considered it essential that it should have direct representation on any organisation that is set up to control water pollution and sought the Minister's assistance in having the matter taken up with his colleague, the Hon. Minister of Works, to ensure that suitable representation was arranged.

The Minister replied saying that the Secretary for Marine had made strong representations at National Authority meetings that either the Harbours Association should be represented directly on the Water Resources Council or that Regional Water Boards should be required to consult individual Harbour Boards before issuing rights to discharge into harbours; he referred to Sections 263 of the Counties Act 1956 and 236 of the Municipal Corporations Act 1954 which provided that no discharge of effluent may lawfully be made into a harbour without the approval of a Harbour Board, which illustrates that Harbour Boards have a real interest in this matter. He indicated that notwithstanding his support and the strong representations of the Secretary for Marine it was likely that the Bill would be introduced without the representation of the Association desired.

being reconstituted and enlarged, Harbour Boards which have such

Water Pollution Control Council and could continue to do so on the

If it is because of a desire to keep the size of the new Council down, then surely the difference between fourteen members and fifteen members is insignificant compared with the issues involved.

If it is because it is thought that Harbour Boards have not a sufficient stake in pollution control it is submitted that this would be a serious error of judgment and contrary to experience.

a vital interest should be dropped from representation.

(b) Harbour Boards have played a valuable part in the work of the

new Water Resources Council. Why exclude them?

Auchland Harbour Board.

Mr Leagar

leafy for your

respect consideration in

relation to bhief Engineers

memo of 23-11-71.

Sell

Harboure buy helmo 23/11/32-5/11

1 th will keep, But to Shames

before and discuss with the graphy as the self of the self of

RUSSELL MCVEAGH MCKENZIE BARTLEET & CO. BARRISTERS, SOLICITORS & NOTARIES PUBLIC SOUTH BRITISH AND GUARDIAN TRUST BUILDING 3 SHORTLAND STREET AUCKLAND, 1, N.Z. TELEPHONE 34-369 NEIL LLOYD MACKY REIC LLOYD MACKY
EDGAR LLEWELLYN BARTLEET
JOHN DEVON LETHBRIDGE
JOHN WALLACE MCKENZIE
ROBERT LLOYD MACKY
EDMUND WALTER EDMUND WALTER THOMAS PETER ALAN MILLER COLIN JOHN FERNYHOUGH JOHN HARVEY MARSHALL CABLE ADDRESS "BARRISTER" JOHN COLLINGWOOD KING
JOHN COLLIVER LUSK
WARWICK MILES BROWN
DAVID ARTHUR RHOOES WILLIAMS
FREDERICK WILLIAM MONTEITH MCELREA PLEASE REPLY TO MR. B. H. Giles 13th October, 1971. The General Manager, Auckland Harbour Board, P.O. Box 1259, AUCKLAND. Dear Sir, re: Regional Water Board -Water Pollution Control We have perused the correspondence and memoranda from the Harbours Association relevant to the proposed Water and Soil Conservation Amendment Bill. We would comment on the proposal as follows: We consider that the powers at present vested in the Board which enable it to restrict and control the discharge of sewerage and storm water into the Harbour should be retained. It may be fair comment for the Minister to say (as he does in his letter to the Association dated 20th September, 1971) that the discharge of waters into harbours is a minor aspect of the responsibility to be exercised by Regional Water Boards but it is in fact a very important aspect as far as the Board is concerned. The powers vested in the Board are conferred by section 263 of the Counties Act 1956, section 236 of the Municipal Corporations Act 1954, the Auckland Metropolitan Drainage Act 1960 and the North Shore Drainage Board Act 1963. For the Board to be in a position to continue to be able to prohibit the drainage or sewerage or stormwater into the Harbours under its control these provisions need to be preserved. 3. While it may be possible to advance an argument that the Board should have actual representation on any Auckland Regional Water Board we do not feel that such arguments would be accepted by the Minister. The Regional Water Boards will not be concerned solely with harbour waters and in fact the Water and Soil Conservation Act, 1967 and the Soil Conservation and Rivers Control Act, 1941 are primarily Not 50 hand aimed at the control and conservation of natural fresh waters. Under the former Act the Water Board does have certain powers in respect of harbour waters but the Minister's observation that these are limited is not without foundation. 4. It is to be noted that the Board is not seeking the power to determine that sewerage or stormwater should be discharged into the harbour, or into the harbour at any particular point, but only to have the ultimate power to prohibit or restrict or otherwise control any discharge Copy gener & RED as bans

that might otherwise be approved by the Regional Water Board. It is a right of veto to be exercised as a last resort when consultation has failed or not taken place.

- 5. The reasons why the Board should have the ultimate say as to whether or not sewerage or stormwater is to be discharged into the Harbour will be readily apparent to you. It seems to us, in short, that the Board has the final responsibility for the overall development of the Harbour and must be in a position to regulate its policy in the planning of the Harbour, including the foreshore, in the knowledge that it can restrict or control the discharge of effluent at any particular point or into any particular area. The public will, in the last resort, look to the Board to safeguard the public interest in this respect.
- 6. Furthermore, the Board is concerned to promote the full recreational use of the Harbour and this necessitates that it have the ability to protect it from detrimental discharges which might well otherwise be acceptable to the Regional Water Board which would not know of the potential or the Board's plans for any particular area. It is, in fact, the Board which has the special knowledge and experience concerning water control in so far as harbour waters are concerned and because its officers will be aware of future development schemes it will be able to make the appropriate provision to safeguard the public interest. It would seem that in order to balance the various interests advance knowledge of policy and planning decisions would be a prerequisite to effective water control in so far as the Harbour was concerned. Indeed, it is difficult to visualise how the Regional Water Board would be in a position to effectively carry this task out without relying heavily on the Board.
- 7. Pursuant to section 4 of the Water and Soil Conservation Act 1967 the Board is required to be guided by the provisions of that Act in the performance of its functions in this respect and any conflict is to be resolved in favour of the provisions in the 1967 Act. This being the case it is particularly important that the Board should retain final control as to any discharge into the Harbour.
- 8. We would stress that it is difficult to be specific on many of the above matters. The Bill is not yet introduced into Parliament and until such time as a draft bill is in your possession the Board should reserve all rights to make such further comment and submissions as it sees fit. However, at this early stage, the Board should press for assurances that the powers referred to above will not be restricted or modified in any way by the provisions of the proposed bill.
 - 9. While our observations in this letter have been directed to the Board they will be equally applicable to any other harbour board and therefore relevant to the question raised by the Secretary of the Harbours Association in the correspondence referred to.

Yours faithfully, RUSSELF MCVEAGH MCKENZIE BARTLEET & CO.

23 November 1971

THE CHIEF ENGINEER

THE SECRETARY

WATER & SOIL CONSERVATION ACT AMENDMENT NO. 2

This new Bill has been perused and proposes considerable changes to the present Act to include, consolidate and simplify current water pollution legislation.

1. The Waters Pollution Act, its Amendments and Regulations are to be repealed. The Water Pollution Control Council (previously Pollution Advisory Council) will with the Water Allocation Council be phased out and the functions of both Councils absorbed into one new Water Resources Council.

The functions and powers of the Authority through the new Water Resources Council have been expanded with requirements to maintain and improve the quality of natural water. (Refer correspondence between Harbours Assoc. and Minister of Marine re representation for Harbour Boards on the new Water Resources Council).

- 2. The procedures to be followed for classification of natural waters is now clearly spelt out, and that the Regional Water Board will assume responsibility after final classification for all discharges to the classified waters. It will be an offence to knowingly cause or permit any chemical, metallic or organic wastes or any unsightly or odorous litter or refuse to enter any waters that have been classified. (Refuse disposal on foreshores within classified harbours will presumably come under the Water & Soil Conservation Act for approval per the Regional Water Board).
- 3. The classification requirements to be met for water quality under the Water Pollution Regulations have been reviewed and are now included by Schedule in this Act. The Amendment appears to have missed the need to differentiate between "inland" and "coastal" waters. However, as it will concern coastal or harbour waters the new Classes SA to SE are basically as expected from previous advice.
- 4. The Bill is a logical consolidation to implement the full intentions of Water and Soil Conservation and confirms the pattern for classification of harbour waters that will occur in Auckland/Manukau Harbours. Referring to Section 20 (i) of the Principal Act Functions and Powers of Regional Water Boards it still remains a mystery as to what are the functions, rights, powers and duties that remain to be undertaken, exercised and performed by a Harbour Board.

CHIEF ENGINEER TO THE BOARD

NS:GJG

Auckland Harbour Board.

lev. Teogar

Jele and W+SC. Adl. File No 3

WATER AND SOIL CONSERVATION AMENDMENT (NO. 2) BILL

EXPLANATORY NOTE

This Bill amends the Water and Soil Conservation Act 1967. The main purposes of the amendments are:

(a) To repeal the Waters Pollution Act 1953 and include its provisions

generally in the principal Act:

(b) To establish a new Water Resources Council to take over the functions of the Water Allocation Council and the Water Pollution Control Council, which will be abolished:

(c) To provide in the principal Act for the classification of natural water in order to maintain minimum standards of quality

(d) To provide for the control of water pollution by Regional Water Boards.

Clause 1 relates to the Short Title and commencement of the Bill. It will come into force on 1 April 1972.

Clause 2 amends and adds to the definitions used in the principal Act. These changes relate mainly to the establishment of the Water Resources Council, and the inclusion in the principal Act of provisions from the Waters Pollution Act 1953.

Clause 4 reduces the membership of the National Water and Soil Conservation Authority by 1 person, as a result of the replacement of the Water Allocation Council and the Water Pollution Control Council by a single new Council.

Clause 5 deals with the constitution of the Water Resources Council. It will have 14 members. One, not being a public servant, will be the Chairman. Five will be officers of Government Departments. Three will be appointed to represent local authorities. Four will be appointed to represent farming and industrial interests; and 1 will be appointed to represent all recreational interests in natural water.

Clause 7 confers additional functions and powers on the National Water and Soil Conservation Authority. These are:

(a) To advise the Minister of Works on the maintenance and improvement of the quality of natural water, and on the co-ordination of the bodies charged with such duties:

(b) To investigate causes of deterioration of natural water:

No. 127-1

Price 25c

H roled on Bell schwed



IN REPLY PLEASE QUOTE

48/737

P.O. Box 12-041, Wellington, N.Z.

8 November 1971

Telephone 46 080 Telegraphic Address: "COMWORKS"



The Chief Engineer Auckland Harbour Board P.O. Box 1259 AUCKLAND

Dear Sir,

HARBOUR WATER QUALITY AND POLLUTION

Thank you for your letter of 27 October 1971, which replied to requests for information from Water and Soil Division.

The Department is at present mounting a study of marinas and marina subdivisions with an aim to producing a small helpful publication for general distribution to interested and affected authorities. Your Board will be kept informed of progress and I in turn would be pleased to receive from you any useful information which may come to hand.

Yours faithfully

J.H. Macky Commissioner of Works

(D.S. Wilshere)

Wilshere

les, Jeogar to see phase

AUCKLAND HARBOUR BOARD

RECL 290CT1971

ACKD CONFIDENTIAL AND NOT FOR PUBLICATION

71/226

THE HARBOURS ASSOCIATION OF NEW ZEALAND

NEW ZEALAND HARBOUR BOARDS INDUSTRIAL UNION OF EMPLOYERS

MINUTES OF COMBINED SPECIAL GENERAL MEETING OF THE HARBOURS ASSOCIATION OF NEW ZEALAND AND OF THE NEW ZEALAND HARBOUR BOARDS INDUSTRIAL UNION OF EMPLOYERS HELD IN THE BOARD ROOM OF THE LYTTELTON HARBOUR BOARD, CHRISTCHURCH, ON THURSDAY 14TH OCTOBER 1971 AT 2 P.M.

71/226

7. UNDERWATER PIPELINES AND OFFSHORE CARGO HANDLING FACILITIES

The Secretary referred to circulars 71/172 of 30th August 1971, 71/179 of 6th September 1971 and 71/192 of 17th September 1971 and tabled copies of a submission he had made to the New Zealand Ports Authority. He reported that the Executive Officers had discussed the matter at their meeting on 13th October when it was learnt that some Boards had made their own submissions and some others still intended to do so. He had suggested that the Association should endeavour to present a united front on this matter.

The President commented on the suggestion that the coastline within a port's area should be brought under the control of the nearest Harbour Board and suggested that Government might say that this should only be in respect of offshore buoys and that a Government Department could be responsible for the rest of the coastline. He felt that if Boards wished control they would have to accept responsibility which would include the care of wharves in small bays along the coast.

Mr. Leslie said that some years ago the Northland Harbour Board had accepted control and responsibility for maintenance of jetties etc. over a large section of the coastline in its area and it felt that such responsibility was a small price to pay for safeguarding the Board's interest in its coastline. He suggested that all Boards and all members of the Boards should acquaint their Members of Parliament of the serious nature of the position and point out that it was not just a matter of revenue but because ships offshore could discharge dunnage and other infectious matters with a consequent risk of the introduction of foot and mouth disease and there would be no control.

Mr. Stace said that the Marlborough Harbour Board had adopted a policy of taking over large stretches of the coastline and at present had an application before the Minister of Marine for approval for the Board to take control over the whole of the shoreline down to the Conway River.

Mr. Malcolm said he appreciated the concern of Boards but in some districts there would be considerable expense in controlling seaweed and dealing with erosion problems. He wondered if some way could be found for those Boards which wished to extend their shoreline control to do so without requiring all Boards to be brought in.

The Secretary pointed out that in the submission made by the Gisborne Harbour Board it had been stated that control should be in the hands of "the local authority best able" and this did not necessarily mean an existing Harbour Board but could allow, say, a County Council operating under the Harbours Act. He felt that this could be the solution at Oamaru.

Mr. Chrisp said that he felt one of the weaknesses of the Association was that it did not always deal nationally with problems. He felt that its main object should be the national interest and that this might be spelled out in Rules. He agreed that it was right and proper for a Harbour Board to protect its local interests but the subject under discussion was too large a matter for local interests and must be considered nationally.

<u>Sir Henry Blyde</u> said that the Taranaki Harbours Board was prepared to make submissions to the Ports Authority and he agreed it should be done on the aspect of the national interest but that it must go ahead as a Harbour Board to ensure that it had some control, although he agreed also that it was not necessary that all Boards should take over all the coastline.

Mr. Stewart said that it was essential action should be taken nationally now before erosion and pollution problems became too great.

Ops Mings

Messrs. Philp and Calder supported other speakers.

Mr. Calder referred to paragraph 3 of the Association's submission and said that there should be a right of reply.

Mr. Hodder said that the Wellington Harbour Board had not been prepared to assume liability for the Porirua Basin some years ago but had not discussed the matter lately.

Messrs. Elworthy, Spriggs and Brunt supported the suggestion for a national approach and suggested that County Councils should be brought into the discussions.

 $\underline{\text{Mr. Heaphy}}$ said that the Greymouth area did not extend very far north but it did cover a considerable coastline south of the port. The Board had not yet made a decision as to a submission.

Mr. Boddy said that a notice had been circulated in newspapers asking for comments and therefore it was feasible for, say, a Board's Engineer as a citizen to make a personal submission. Mr. Boddy said that he would like to see Harbour Boards controlling up to ten miles out to sea. He had been informed that the Oil Consortium in Taranaki was considering making submissions and that the Association should be prepared to counter claims by the Oil Companies.

Mr. Lorimer commented on the absence of a marine policy of Government and said that anything done must be as an amendment to the Harbours Act or some other legislation and therefore the national interest must be paramount. Auckland's submission would be that where cargo in ships was involved the nearest Harbour Board should control the coastline involved. He wondered whether it was necessary to have control of the shoreline. He said there was nothing to stop the Minister of Marine setting up harbours such as Waverley. This type of operation was becoming more widespread and was desirable but must be controlled. He felt that a Harbour Board should control and not a County Council. He suggested that at Taharoa a port authority should be in control and not necessarily an established Harbour Board.

The Secretary said he had heard comments that neither Auckland nor Taranaki were interested in Taharoa and that it appeared there would be a port there with no Harbour Board involvement.

It was $\underline{\text{resolved}}$ on the motion of Sir Henry Blyde, seconded by Mr. Philp, that all Boards which wished to do so should make individual submissions to the New Zealand Ports Authority and refer copies thereof to the Secretary of the Association for discussion and preparation of a national submission.

Mr. Lorimer said that he would like to see a resolution that, notwithstanding a study of the policies of individual ports and the submissions they intend to separately make, the Association reiterate its previous view that it is considered to be a matter of public interest that the control of offshore moorings and installations for such around the coast of New Zealand should be vested in a port authority set up under the Harbours Act.

Mr. Leslie agreed with Mr. Lorimer and said he was concerned principally with the operation of installations for offshore loading and that the control of the coastline could be a separate matter.

CE

The Secretary referred to a letter dated 6th September 1971 from the Association's Counsel which had been set out in circular 71/196 of 28th September 1971 and which commented on the paper presented by Mr. Thomas to the Conference of the Association at Auckland. He quoted some parts of Counsel's opinion and said that he was awaiting the views of Boards.

<u>Mr. Lorimer</u> suggested that the Secretary should convene a meeting with Mr. Kemp and one or two other Counsel conversant in town planning matters and perhaps with one or two engineers, and that the question as to whether Harbour Boards should become town planning authorities could be left over, but the other two recommendations could be dealt with.

 $\underline{\text{Mr. Reeves}}$ requested that the Wellington Harbour Board be included in any committee set up.

It was <u>resolved</u> on the motion of Mr. Calder, seconded by Mr. Spriggs, that a meeting be convened with Messrs. Kemp, Thomas, Smith (Auckland Harbour Board Engineer) or his deputy, and a representative of the Wellington Harbour Board and that the Secretary should convene such meeting and coopt as considered necessary.

CE

The Secretary referred to circulars 71/194 and 71/195 of 21st September 1971, the first forwarding a letter from the Minister of Marine saying it would be difficult for him to take the question of representation up again with the Minister of Works unless the Association could provide him with some concrete examples of arguments to show that the interests of Harbour Boards, which largely coincided with the public interest in harbour waters, would not be adequately served by regional water boards as at present established or envisaged. The letter required a reply.

The Secretary said the second circular merely advised that the Associated Chambers of Commerce supported the implementation of legislation which would require all ships to carry holding tanks for the discharge of raw sewage at sea. He reminded members that a circular had been sent to all Boards requesting information regarding the arrangements that could or would be made by them to control the discharge of sewage. A large number of Boards had not replied.

The President suggested that Boards should let the Secretary have their comments in reply as soon as possible on both matters.

 $\underline{\text{Mr. Philp}}$ asked whether the matter had been discussed at the I.A.P.H. Conference.

The Secretary replied that the matter did not come from discussions at I.A.P.H. level but from I.M.C.O. In so far as New Zealand was concerned it had been raised originally by a remit to Conference from the Bay of Plenty Harbour Board.

Mr. Lorimer suggested that the Minister's letter be noted and that the Association seek an assurance that there would be no interference with Harbour Boards' powers under the Municipal Corporations Act and the Counties Act which restrict the discharge of sewage into harbours without the consent of the Harbour Board. These restrictions should be maintained. He understood that they might be taken out of Harbour Boards' hands into the hands of regional water boards. It should not be contemplated that some agency other than a Harbour Board would have the right to say what is to be discharged into the harbour.

The Secretary supported Mr. Lorimer's remarks and a resolution was accordingly carried on the motion of Mr. Savory, seconded by Mr. Hodder.

5. 71/226

Mr. Chrisp said that it did not necessarily follow that all Boards' submissions would be in the national interest and that there was a feeling in the public mind that Harbour Boards wanted to control the coast just for revenue purposes and he felt the Association must be able to show why Boards want to control.

Mr. Savory said that there was a danger that individual Boards in putting their individual schemes could result in having control placed in the hands of the Marine Department.

27 October, 1971

The Director of Water & Soil Conservation,
National Water & Soil Conservation Organisation,
Ministry of Works,
P.O. Box 12041,
WELLINGTON NORTH

Dear Sir,

HARBOUR WATER QUALITY AND POLLUTION

I refer to your letters of 23 September and 6 October requesting information on the above topic, with reference to marine residential and boatharbour or marina facilities.

There are no marine residential developments in Auckland, although as you may be aware the Auckland Harbour Board and Devonport Borough (Ngataringa Bay) Empowering Act 1970 is precedent legislation for such a development. Other than this Legislation, there has been no further consideration on specific by-laws and regulations to ensure that the tidal waterways in such a development are not subjected to pollution problems. In general I would not think there would be any particular problems from pleasure craft as while they are moored off private property, notwithstanding the mandatory requirements not to discharge sewage or other contaminants, the owners would ensure that the waterways are maintained in satisfactory order.

With present boatharbours and marinas there is a different situation. The Board's By-laws are mandatory in that no sewage shall be discharged to harbour waters inside harbour limits from any source. The difficulty is how does one adequately control this requirement for pleasure boats in boatharbours.

In the marina section of Westhaven Boatharbour where we have some 300 boats moored on floating walkways, considerable activity takes place on these boats all year round with maintenance, preparation for sailing etc. We believe that with the provision of adequate land based toilets (with a full sewerage reticulation back to the City System) the boat owners will utilise the toilets since communication is made easy.

In the swinging moorings areas it would have to be accepted that of necessity the tendency will be to take advantage of the isolation distance from the high occupancy water space and land based facilities.

For the future when the Auckland Harbour becomes classified, there may be a need for more stringent controls. I see no problem in marina type boatharbours. For all other aspects of moored boats and sailing, the need for and means of control will have to be studied having regard to the activity and the harbour, with a view to ascertaining what measures may be necessary.

...

- 2 -Boating recreation is a major activity in Auckland and is probable that it is equivalent to one half or more of the such activity in New Zealand. The demands for facilities are increasing at a very high rate, and the resultant implications on harbour water qualities is one factor that will have to be watched. I trust this information is of assistance to you. Yours faithfully, CHIEF ENGINEER TO THE BOARD. NS: JARP

I present the following comments in answer to the General Manager's query on the above subject.

This matter drew only brief comments at the Pollution - Causes and Control Seminar, where faith was placed in the now apparently accepted practice of providing holding tanks in all new ships. It was also indicated that passenger liners were now providing holding tanks for sewage. Ultimate discharge from these tanks is of course to the sea preferably in some remote area.

The main concerns over pollution are:-

- 1. The visual objection.
- 2. Objection to the media for spreading disease.
- 3. The detrimental effect on the living organic environment.

The dumping of sewage in remote areas at sea generally overcome 1. and 2. above, but there is a longer lasting effect that feared to be compounding in 3. Depositing of sewage in smaller, but more frequent lots inside a harbour and particularly about wharves creates a definite visual objection. Bacteria is normally killed in sea water to a reasonable level after a three hour submersion. The environmental change will still take place over a period and will be more accelerated in harbour confines than the ocean.

In November 1970, the Pollution Advisory Council informed all Shipping Organisations in New Zealand that the ultimate intention to classify all harbour and coastal waters would require ships to have effective means to dispose of their sewage in order to comply with the Regulations the same as any discharge from land sources. The Council sought from Shipping Companies their comments on how it was intended that they would comply with the Regulations and their programme for doing so. The present situation in this regard is not available.

We still do not understand what responsibility will be placed on the Board to control ship discharges once classification of the Auckland Harbour waters is made effective by 1974.

We have been in correspondence with the Chief Engineer Wellington Harbour Board on the situation there since that harbour has been classified. While there is no Regional Water Board constituted in his district yet, it is his opinion that the responsibility to ensure that the classification requirements are complied with by ships will rest with the Regional Water Board.

Harbour Boards are required by the Act to be guided by the Act's provisions and to co-operate in effecting the policy of the Authority. From this it is assumed that co-operation will be sought to control pollution from ships. Technically the ship's discharge should be registered and a permit obtained, but in view of the practical difficulties the problem will have to be tackled on an international basis and system of control.

The particular requirements of classified waters are:

- (i) Discharges are to be substantially free of suspended solids, grease and oil.
- (ii) No effects on normal acquatic life and to maintain the natural colour of the waters.
- (iii) Application of biological standards are applied to higher quality waters e.g. shell fish beds and bathing.

Whatever facilities ships provide to maintain the classification of waters in they will essentially be for (i) above. The extent that such facilities should be or would be improved to meet (ii) and (iii) will probable be governed by an international standard yet to be determined.

Dealing with the practicabilities of the subject I have not sufficient knowledge of a ship's sewerage system to ascertain what implications holding tanks will have on Ship Owners or Harbour Boards. Obviously the adhoc tank will be of limited capacity only and ships in port for any length of time will require servicing. This is understood to be best carried out by pumping to service trucks on shore, from where it is transported direct to treatment plants or to a night soil collection depot.

In this country the transporting of faecal and other wastes from overseas ships across land may not meet the approval of the Agricultural and/or Health Departments. The alternative would be to transport to the open sea or preferably by treatment within the ship.

...

- 3 -Treatment of ships sewage while in port would require individual studies for each vessel, but the following are possible solutions: 1. Small aeration plant (activated sludge) giving reasonable standard of effluent based on bacteria count and suspended solids. However mineral release (N2 and Ph.) is high and concentrated. The frequency of maintenance could be undesirable within a confined space of a ship. An anaerobic treatment similar to that which would take 2. place in a septic tank (or holding tank) discharging an effluent to the harbour in a sterile condition, but having a high demand on harbour water oxygen. This demand could be greatly reduced by aeration of the effluent before discharge. Servicing and maintenance should be relatively easy. This form of treatment would be most likely adapted by non-British ships where detergent use is likely to be high. 3. Sterilization by chemical means or electrolysis after mechanical disintegration is compact, but relatively expensive. However, running costs are somewhat offset by treatment matching demand only thus improving efficiency. To reduce B.O.D. on harbour waters, the solid wastes would have to be strained off and stored for discharge at sea for biological reduction. Although treatment in this form is likely to meet present requirements of the Water and Soils Conservation Act, future amendments are likely to establish controls on mineral discharges from treated wastes, which would generally prevent discharge of untreated liquids. The ultimate adoption of a sewage disposal system for ships would depend firstly on the services provided by Harbour Boards and the like on a fairly universal basis. Secondly if port servicing was not forthcoming the installation of treatment plants in ships would be a matter of individual choice to ship owners. However a selection of treatment plant could not be made until standards of discharges are instigated, preferably on an international basis. Boats of the pleasure craft calibre would require a separate study, but would most likely require a holding tank system. D. Goord 30 September, 1971.

I present the following comments in answer to the General Manager's query on the above subject.

This matter drew only brief comments at the Pollution - Causes and Control Seminar, where faith was placed in the now apparently accepted practice of providing holding tanks in all new ships. It was also indicated that passenger liners were now providing holding tanks for sewage. Ultimate discharge from these tanks is of course to the sea preferably in some remote area.

The main concerns over pollution are:-

- 1. The visual objection.
- 2. Objection to the media for spreading disease.
- 3. The detrimental effect on the living organic environment.

The dumping of sewage in remote areas at sea generally overcome 1. and 2. above, but there is a longer lasting effect that feared to be compounding in 3. Depositing of sewage in smaller, but more frequent lots inside a harbour and particularly about wharves creates a definite visual objection. Bacteria is normally killed in sea water to a reasonable level after a three hour submersion. The environmental change will still take place over a period and will be more accelerated in harbour confines than the ocean.

In November 1970, the Pollution Advisory Council informed all Shipping Organisations in New Zealand that the ultimate intention to classify all harbour and coastal waters would require ships to have effective means to dispose of their sewage in order to comply with the Regulations the same as any discharge from land sources. The Council sought from Shipping Companies their comments on how it was intended that they would comply with the Regulations and their programme for doing so. The present situation in this regard is not available.

We still do not understand what responsibility will be placed on the Board to control ship discharges once classification of the Auckland Harbour waters is made effective by 1974.

...

We have been in correspondence with the Chief Engineer Wellington Harbour Board on the situation there since that harbour has been classified. While there is no Regional Water Board constituted in his district yet, it is his opinion that the responsibility to ensure that the classification requirements are complied with by ships will rest with the Regional Water Board.

Harbour Boards are required by the Act to be guided by the Act's provisions and to co-operate in effecting the policy of the Authority. From this it is assumed that co-operation will be sought to control pollution from ships. Technically the ship's discharge should be registered and a permit obtained, but in view of the practical difficulties the problem will have to be tackled on an international basis and system of control.

The particular requirements of classified waters are:

- (i) Discharges are to be substantially free of suspended solids, grease and oil.
- (ii) No effects on normal acquatic life and to maintain the natural colour of the waters.
- (iii) Application of biological standards are applied to higher quality waters e.g. shell fish beds and bathing.

Whatever facilities ships provide to maintain the classification of waters in they will essentially be for (i) above. The extent that such facilities should be or would be improved to meet (ii) and (iii) will probable be governed by an international standard yet to be determined.

Dealing with the practicabilities of the subject I have not sufficient knowledge of a ship's sewerage system to ascertain what implications holding tanks will have on Ship Owners or Harbour Boards. Obviously the adhoc tank will be of limited capacity only and ships in port for any length of time will require servicing. This is understood to be best carried out by pumping to service trucks on shore, from where it is transported direct to treatment plants or to a night soil collection depot.

In this country the transporting of faecal and other wastes from overseas ships across land may not meet the approval of the Agricultural and/or Health Departments. The alternative would be to transport to the open sea or preferably by treatment within the ship.

...

Auckland Harbour Board

MEMORANDUM

14 October 19

FROM

SECRETARY

TO

CHIEF ENCINEER

The following is an extract from the New Zealand Gazette No. 73 Page 2055 and is forwarded for your information.

Appointing Deputies to Members of the National Water and Soil Conservation Authority

ARTHUR PORRITT, Governor-General

PURSUANT to section 10 (1) of the Water and Soil Conservation Act 1967, I, Sir Arthur Espie Porritt, Baronet, the Governor-General of New Zealand, hereby appoint:

Gerhard James Seeman, of Wellington, barrister, as deputy to Neill Thomas Gillespie; Robert Fleming Wardlaw, of Waimana, farmer, as deputy to Alick Lindsay Poole; Alan James Hanna Hutchinson, of Wellington, civil engineer, as deputy to Rodger Norman Kerr;

Alan David Talbot, of Geraldine, farmer, as deputy to Donald Stuart Gore Marchbanks; Leo John Sullivan, of Wellington, secretary, as deputy to Andrew Murray Linton; and Terence Mortimer McKewen, of Wellington, secretary, as deputy to Clutha Nantes Mackenzie

on the National Water and Soil Conservation Authority from and including the 11th day of October 1971.

As witness the hand of His Excellency the Governor-General this 15th day of September 1971.

PERCY B. ALLEN, Minister of Works.

(P.W. 74/60/1)

les, Seagar to see please for SECRETARY
The Water Sail Conservation

Auckland Harbour Board

MEMORANDUM

4 October 1971

I NEERS DEPT

FROM

SECRETARY

TO

CHIEF ENGINEER

The following is an extract from the New Zealand Gazette No. 69 Page 1918 and is forwarded for your information.

Appointing a Member of the Water Pollution Control Council

ARTHUR PORRITT, Governor-General

PURSUANT to the Water Pollution Act 1953, I, Sir Arthur Espie Porritt, Baronet, the Governor-General of New Zealand, hereby appoint Norman Colin McLeod, civil engineer, an officer of the Ministry of Works, to be a member of the Water Pollution Control Council on and after the 1st day of October 1971.

As witness the hand of His Excellency the Governor-General this 27th day of August 1971.

PERCY B. ALLEN, Minister of Works.

(P.W. 74/80/1)

TEL:RG

W+S. Consulation File

lus, Jeagar



NATIONAL WATER AND SOIL CONSERVATION ORGANISATION

WELLINGTON, NEW ZEALAND

TELEPHONE 46080

Address replies to

THE DIRECTOR

OF

WATER AND SOIL CONSERVATION

MINISTRY OF WORKS P.O. BOX 12041 WELLINGTON NORTH, N.Z.

6 October 1971

The Chief Engineer, Auckland Harbour Board, P.O. Box 1259, AUCKLAND.

Dear Sir,

I thank you for your letter of 28 September and regret that the request in my earlier letter was not clear.

We are interested in both types of developments which you mention viz marine residential developments and also marinas used solely for the mooring of pleasure craft and any assistance you may give would be appreciated.

Yours faithfully,

A.W. Gibson Director of Water and Soil Conservation

per:

(C.A. Cowie)

as

Reply Sent. 21/10/70.

B. H. Giles 13th October, 1971. The General Manager, Auckland Harbour Board, P.O. Box 1259, AUCKLAND. Dear Sir, re: Regional Water Board -Water Pollution Control We have perused the correspondence and memoranda from the Harbours Association relevant to the proposed Water and Soil Conservation Amendment Bill. We would comment on the proposal as follows: We consider that the powers at present vested in the Board which enable it to restrict and control the discharge of sewerage and storm water into the Harbour should be retained. It may be fair comment for the Minister to say (as he does in his letter to the Association dated 20th September, 1971) that the discharge of waters into harbours is a minor aspect of the responsibility to be exercised by Regional Water Boards but it is in fact a very important aspect as far as the Board is concerned. The powers vested in the Board are conferred by section 263 of the Counties Act 1956, section 236 of the Municipal Corporations Act 1954, the Auckland Metropolitan Drainage Act 1960 and the North Shore Drainage Board Act 1963. For the Board to be in a position to continue to be able to prohibit the drainage or sewerage or stormwater into the Harbours under its control these provisions need to be preserved. While it may be possible to advance an argument that the Board should have actual representation on any Auckland Regional Water Board we do not feel that such arguments would be accepted by the Minister. The Regional Water Boards will not be concerned solely with harbour waters and in fact the Water and Soil Conservation Act, 1967 and the Soil Conservation and Rivers Control Act, 1941 are primarily aimed at the control and conservation of natural fresh waters. Under the former Act the Water Board does have certain powers in respect of harbour waters but the Minister's observation that these are limited is not without foundation. It is to be noted that the Board is not seeking the power to determine that sewerage or stormwater should be discharged into the harbour, or into the harbour at any particular point, but only to have the ultimate power to prohibit or restrict or otherwise control any discharge

Acceived his from Showers 14/15/71 Ironaded as heste for low prior to Thurbours Assoc. Exec. heeling at Ch-Ch Loding.

page 2 Have bold homas this will lot be, was S. C. All seems Countries ALB KNSBB. ALS West Lavelabe refealed.

I suspect my holes belle Therbours Assoc Carcular provided bette Com. 11/10/11 eve lubodeid in this opinion.

nl

that might otherwise be approved by the Regional Water Board. It is a right of veto to be exercised as a last resort when consultation has failed or not taken place.

- 5. The reasons why the Board should have the ultimate say as to whether or not sewerage or stormwater is to be discharged into the Harbour will be readily apparent to you. It seems to us, in short, that the Board has the final responsibility for the overall development of the Harbour and must be in a position to regulate its policy in the planning of the Harbour, including the foreshore, in the knowledge that it can restrict or control the discharge of effluent at any particular point or into any particular area. The public will, in the last resort, look to the Board to safeguard the public interest in this respect.
- 6. Furthermore, the Board is concerned to promote the full recreational use of the Harbour and this necessitates that it have the ability to protect it from detrimental discharges which might well otherwise be acceptable to the Regional water Board which would not know of the potential or the Board's plans for any particular area. It is, in fact, the Board which has the special knowledge and experience concerning water control in so far as harbour waters are concerned and because its officers will be aware of future development schemes it will be able to make the appropriate provision to safeguard the public interest. It would seem that in order to balance the various interests advance knowledge of policy and planning decisions would be a prerequisite to effective water control in so far as the Harbour was concerned. Indeed, it is difficult to visualise how the Regional Water Board would be in a position to effectively carry this task out without relying heavily on the Board.
- 7. Pursuant to section 4 of the Water and Soil Conservation Act 1967 the Board is required to be guided by the provisions of that Act in the performance of its functions in this respect and any conflict is to be resolved in favour of the provisions in the 1967 Act. This being the case it is particularly important that the Board should retain final control as to any discharge into the Harbour.
- 8. We would stress that it is difficult to be specific on many of the above matters. The Bill is not yet introduced into Parliament and until such time as a draft bill is in your possession the Board should reserve all rights to make such further comment and submissions as it sees fit. However, at this early stage, the Board should press for assurances that the powers referred to above will not be restricted or modified in any way by the provisions of the proposed bill.
- 9. While our observations in this letter have been directed to the Board they will be equally applicable to any other harbour board and therefore relevant to the question raised by the Secretary of the Harbours Association in the correspondence referred to.



WATER & SOIL CONSERVATION ACT Regional Water Boards and Harbour Board Representation. 1. From the contents of Harbours Assoc. Circulars 27 May 1971 5 July 1971 71/96 71/96 27 May 1971 71/127 5 July 1971 71/194 21 September 1971 It is now clear that the prime purpose of Regional Water Boards and their influence upon harbours is the maintenance and improvement of water quality in harbours. This will be done by "classification" and then policed by the Water Board. This system does not require the direct association of the particular Harbour Board into the system, but there will be a basis of consultation between the Regional Water Board and the Harbour Board. The question as to whether representation of Harbour Boards should be taken further, is in the final paragraph of the Minister of Marine's letter to Harbours Association dated 20 September 1971. "Unless some positive arguments to show that the interests of Harbour Boards, which largely coincide with the public interest in harbour waters, will not be adequately served by the Regional Water Boards as at present established or envisaged" it will be difficult to pursue the matter any further. Comments as it effects this Board. When final classification of the areas of the Waitemata and Manukau Harbours is effective it would seem the following situation and procedures would pertain. (a) The Regional Water Board will require the Board to register all outfalls under the ownership of the Board and obtain permits from the Water Pollution Control Council i.e. Wharf sewage and waste discharges including any stormwater outfalls that carry pollutants. (All the Board's stormwater systems discharging to the harbour as at September 1966 have been given a dispensation to register by M. of W. as action Regional Water Board with effect from 21 January 1969). (b) The Board will be obliged to carry out improvements so that such discharges do not contravene standards for waters defined by classification. (c) The Board will cease to be concerned with formal approval of any discharges to the harbour required under present statutory procedures of the A.M.D.B. Act and N.S.D.B. Act, which will be presumably repealed. (d) The Regional Water Board will be responsible to check and ensure that water quality standards required by classification are being achieved, maintained or improved, and no doubt will become the "policeman" and "speaker" on the public interest matters regarding water quality and harbours. (e) As it concerns discharges from shipping and pleasure craft we will have to wait to see what procedures and degree of responsibility to police is required from this Board. 2. Summing up, the Board would appear to be relieved for a major portion of its present responsibilities to ensure that harbour waters are protected and pollution is controlled. This can be accepted as suitable, and so long as the responsibilities are clearly established and the public aware that the Board is no longer the "policeman". 3. On the other hand, having regard to the scale of the exercise as it concerns Regional Auckland, where the two harbours are dominant features (in area practically equivalent to the urban land areas adjoining with a total population of 650,000) it seems

that the Board has some contributing part to play within the Regional Water Board system other than being consulted. On technical issues it could well offer more than some Government Departments who will be associated as non-elected members. Conclusion I doubt if there is any strong reason why this Board should seek to retain a statutory influence within the proposed Regional Water Board for Auckland for the purposes of pollution control of the harbour waters of both the Waitemata and Manukau Harbours under its jurisdiction. In view of the particular situation in Auckland it could be better however, that the Board has some association directly with the Water Board in order that consultative situations do not develop into difficult implementation procedures and that the Harbour Board's knowledge and responsibilities can be properly used in the broader issues of water conservation of the harbours. This dissertation is general, but adequate for further discussion. Until the submissions to be prepared by the Board's Solicitors regarding Harbour Board representation on the Auckland Regional Water Board are available, specific comment is not practicable. N. Seagar 11 October 1971.

THE HARBOURS ASSOCIATION OF NEW ZEALAND

P.O. Box 1765,
Wellington.

21st September 1971.

AUCKLAND HARBOUR BOARD

MEMORANDUM for All Members and All
Members of the Executive.

REC. 24SEP1971

Regional Water Boards - Water Pollution Control
ACKP
ANSO.

Appended hereunder for your information is a copy of a letter dated 20th
September 1971 from the Hon. Minister of Marine. I should be pleased to
have your comments on this reply.

Secretary.

OFFICE OF THE MINISTER OF MARINE,
Wellington.

Mr. R.E. Dawson,
Secretary,
Harbours Association of New Zealand,
G.P.O. Box 1765,
Wellington.

Dear Mr. Dawson,

After giving further consideration to your letter of 6 September advising me of your Association's desire that Harbour Boards should be represented on Regional Water Boards, I feel that you may have misunderstood the advice of my colleague, Hon. P.B. Allen, which I quoted in my letter of 2 July.

The non-elected members of Regional Water Boards are usually officers designated by the positions which they hold, from the Departments of Lands and Survey, Agriculture, Forests and the Ministry of Works; for instance the Commissioner of Crown Lands and the District Commissioner of Works. Their knowledge and experience is made available in matters of concern to the Regional Water Boards, and not those of concern to the Harbour Boards as understood by you.

The responsibilities of Regional Water Boards cover a very wide field and the water regions cover an extensive area. The discharge of waters into harbours is considered by Mr. Allen to be quite a minor aspect of their total responsibilities. Regional Water Boards are charged with the responsibility of maintaining or improving harbour waters to meet the water quality criteria laid down by the Water Pollution Control Council, and it is felt that this should relieve Harbour Boards of a considerable amount of work which is not in their normal field of responsibility under the Harbours Act.

I feel that it will be difficult for me to take up this matter again with Mr. Allen unless you can provide me with some concrete examples or arguments to show that the interests of Harbour Boards, which largely coincide with the public interest in the harbour waters, will not be adequately served by the Regional Water Boards as at present established or envisaged.

Yours sincerely,
'Allan McCready'
Minister of Marine and Fisheries.

20 September 1971

THE CHIEF ENGINEER THE SECRETARY

WATER & SOIL CONSERVATION ACT

REFERENCE CIRCULAR 71/127 HARBOURS ASSOCIATION

The Board's Solicitors have again been requested to give urgency to the provision of the Submissions requested. It is understood that a draft has been prepared which requires further editing, and will be available as soon as practicable.

CHIEF ENGINEER TO THE BOARD.

NS:JARP

27 September, 1971
THE SECRETARY

THE CHIEF ENGINEER

WATER & SOIL CONSERVATION ACT AMENDMENT BILL

The Bill previously identified as the Amendment Act 1970, now the Amendment Act 1971 has been perused.

While there are considerable changes from Committees, there is nothing of significance to Harbour Boards or that which would conflict with my previous comments dated 2 June 1970.

CHIEF ENGINEER TO THE BOARD.

NS:JARP

28 September, 1971 Waker The Director of Works & Soil Conservation, National Water & Soil Conservation Organisation, Ministry of Works, P.O. Box 12041, WELLINGTON NORTH Dear Sir, I refer to your letter 48/737 dated 23 September 1971, subject Marine Subdivisions. In order that I may be able to provide the information needed, would you please clarify whether the subject is: (a) Marine Residential Development in harbours, with internal waterway systems, with direct access by water or impounded and water control systems. (b) Marinas, being boatharbours developed for consolidated mcoring of pleasure craft. Yours faithfully, CHIEF ENGINEER TO THE BOARD. NS: JARP





NATIONAL WATER AND SOIL CONSERVATION ORGANISATION

WELLINGTON, NEW ZEALAND

TELEPHONE 46080
Address replies to
THE DIRECTOR
OF
WATER AND SOIL CONSERVATION

MINISTRY OF WORKS P.O. BOX 12041 WELLINGTON NORTH, N.Z.

ERS DEPT

23 September, 1 971

The Chief Engineer, Auckland Harbour Board, P.O. Box 1259, AUCKLAND.

Dear Sir,

MARINA SUBDIVISIONS

The possible development of marinas in various places throughout the country has led to inquiries into the design and operation of these facilities. It is understood that your Board has already had some experience with these facilities and it would be appreciated if you could inform me of any bylaws, codes of practices or ordinances which you administer in respect of them in regard to water quality and pollution control generally.

Yours faithfully,

A. W. Gibson
Director of Water & Soil
Consepvation

Per: (C. A. Newie)

lur. Seagar alexanteaged requesting charlie deside line or harrie (Brakherbaur)

belle some Conservelor Fle

Part, hunestry of Works.

- ! Completed by 1974.
- 2. Sulluhow Combit Council recognite that the book is beyond the capacity of the butter Soil Conservation Organisation
- 3. Cos is concerns knekland, the procedure how Baulo be, that the medical Opicers of Realth are be prepared busis for accelerating the makes with a view to approaching local huborities be provide information as to their opinion of the desirable classification for waters algoring their forestones.
- autority it were wanted be approached to give its part of area.

15. 9/71.

Anchand Harbour Board.

To the Regional Dater

Board?

Pullerbo. level lates

as.

Mail could see get and

lugury from W+SC by

hele time Thomas is Supposed

por Harbaur tekoe.



All Correspondence to: The Secretary, ARA Private Bag Auckland 1, N.Z.

AUCKLAND REGIONAL AUTHORITY

Regional House, 121 Hobson St, Auckland 1, New Zealand.

Telephone: 364-420 Telegrams: Regional

Please quoti

7/2/29

in your reply

10 September, 1971

RECEIVED
15 SEP 1971
PNG. NEERS DEPT

Your ref. 48/737

The Director,
National Water and Soil Conservation Organisation,
Ministry of Works,
Box 12041,
WELLINGTON NORTH

Dear Sir,

MRE: CW

re: MARINA SUBDIVISIONS

I refer to your letter of 24 August 1971. I confirm that this Authority has undertaken some investigations in relation to recreational boating in the Auckland urban area and is at present cooperating with the Auckland Harbour Board, the Auckland University, and representatives of territorial local authorities to carry out a planning study of the Waitemata Harbour. The Authority has also been involved in the initial consideration of some marina developments about Auckland (e.g. Half Moon Bay and Ngataringa Bay).

Up to the present, however, considerations of water pollution and the protection of water quality have been principally the concern of the Auckland Harbour Board and it has not been necessary for this Authority to formulate requirements in relation to these aspects. I suggest that you contact the Chief Engineer, Auckland Harbour Board, who may be able to assist you in this matter.

Yours faithfully,

F.W.O. JONES Director of Planning

. Chief Engineer, Auckland Harbour Board, Box 1259,

M.B. Elliot

Per:

Snr. Planning Officer

ber. Seagar M

Box 1259, AUCKLAND

c.c. to Mr. N. Seagar, Asst Chief Engineer, Auckland Harbour Board. For your information. PW: JCP 10-9/5/31/25 9th September, 1971. The Secretary, A.C. Hatrick N.Z. Ltd, Patiki Street. Avondale. AUCKLAND, Dear Sir, Harbour Pollution At times the storm-water from your premises discharged into the Whau River is strongly polluted with trade wastes. I enclose the analytical results of two samples. The Biochemical Oxygen Demand of both samples is far in excess of what could be regarded as an acceptable standard for storm-water. The obvious source of pollution is the yard are where the separation of trade wastes and storm-water is inadequate. If the yard area is utilized in the manufacturing process and produces a trade waste, then this areamust be covered and the trades waste discharged to the sanitary sewer. Storm-water from the covering roof must be discharged to the storm-water drain, thus a separation of trades waste and storm-water will be effected. I trust you will give this problem your immediate attention and instruct your staff to take greater care in future and/or take remedial measures to prevent this pollution of harbour water. Further samples will be taken in future at regular intervals. Yours faithfully, G.A. Tait. Director of Works Per: Muenty (P. Welsby) Plant Chemist

Enc.



48/737

20,00

NATIONAL WATER AND SOIL CONSERVATION ORGANISATION

WELLINGTON, NEW ZEALAND

TELEPHONE 46080
Address replies to
THE DIRECTOR
OF
WATER AND SOIL CONSERVATION



MINISTRY OF WORKS P.O. BOX 12041 WELLINGTON NORTH, N.Z.

24 August 1971

The General Manager, Auckland Regional Authority, Private Bag, AUCKLAND.

ATTENTION : Planning Division

Dear Sir,

MARINA SUBDIVISIONS

Some interest is being generated in marina developments in different parts of the country, both in regard to salt water and fresh water. It is understood that your Authority has already had some experience in this type of development and it would be appreciated if you would forward copies of requirements which have been used in the Auckland area. The control of water pollution and the protection of water quality are the two principal features of interest to this Organisation.

Yours faithfully,

A.W. Gibson Director of Water & Soil Conservation

per:

(c.A. Cowie)

ENTION MR. JOHNS.

10th September 1971 The Secretary,
Auckland Regional Authority,
Private Bag,
AUCKLAND. Dear Sir, POLLUTION MANUKAU HARBOUR Thank you for letter 9-3/2/4:CCC: IM of 9th September and the copies of correspondence enclosed. The Authority's action in keeping the Board informed is appreciated. The correspondence has been referred to the Board's Chief Engineer. Yours faithfully, SECRETARY DNM/JP The Chief Engineer, Copy for your information. The please



All Correspondence to: The Secretary, ARA Private Bag Auckland 1, N.Z.

AUCKLAND REGIONAL AUTHORITY

Regional House, 121 Hobson St, Auckland I, New Zealand.

Telephone: 364-420 Telegrams: Regional

Please quote

9-3/2/4:CCC:LM

in your reply

7 September 1971

The Secretary, Auckland Harbour Board, P. O. Box 1259, AUCKLAND.

Dear Sir,

RECH - 9 SEP1971

ACKO
ANSO.

Pollution - Manukau Harbour.

For your information, I attach copy of letters received from the Director of Soil and Water Conservation and a copy of my reply.

Yours faithfully,

G. A. Tait. Director of Works.

Per:

C. C. Collom.

Chief Engineer Drainage.

Ent. copy of letter 16.8.71.

AGM



All Correspondence to: The Secretary, ARA Private Bag Auckland 1, N.Z.

AUCKLAND REGIONAL AUTHORITY

Regional House, 121 Hobson St, Auckland 1, New Zealand.

Telephone: 364-420 Telegrams: Regional

Please quote

9-3/2/4 CCC:LM

in your reply

- C O P Y -

7th September, 1971

Director of Water and Soil Conservation, Ministry of Works, P. O. Box 12041, WELLINGTON NORTH.

Dear Sir,

Pollution - Manukau Harbour.

Replying to your letter dated 24th August, reference 48/435000, asking for a report upon a number of alleged instances of pollution of the Manukau Harbour, I give below some comments upon the letter from the Nature Conservation Council, but I must emphasize that our knowledge is limited to that arising from the Authority's responsibilities under the Auckland Metropolitan Drainage Act, 1960. No doubt you could obtain additional information from the Auckland Harbour Board, the Ministry of Works (acting as the Regional Water Board), and the Health Department, all of which would be concerned with investigating aspects of alleged pollution of the Manukau Harbour.

Referring to the second paragraph, I am not aware of the high discharge of untreated sewage being discharged into these waters. There was a fire in a local authority's pumping station recently, which caused a temporary overflow, but generally this statement seems to be without foundation. The term "partially treated sewage" possibly refers to Item 4, which deals with the effluent from the Authority's oxidation ponds. Detergent cannot be completely removed by normal sewage treatment processes, so it is correct to state that some enters the harbour with the effluent. However, the quantity is very small and causes no significant pollution. The effluent contains algae, giving rise to complaints of discolouration, but this pale green vegetable matter cannot reasonably be classed as pollution. Technically, the effluent is a fully treated effluent and not a partially treated effluent.

Dealing with the other numbered paragraphs I comment as follows:-

- The temporary treatment plant for the Hamilton Estate at Waiuku was built by the Ministry of Works and taken over by the Waiuku Borough Council. The plant has given trouble but will be replaced soon by the permanent sewerage system now being provided.
- The premises of Namco, New Zealand Ltd, Papakura are connected to the sewer. It does not seem that this information can be correct, but we will investigate.

- All of Sylvia Park, Mt Wellington, is sewered and this information cannot be correct since, in any case, the area does not drain into the Manukau Harbour.
- 4. The Onehunga Rubbish Tip has caused complaints. We have no recent information so probably conditions have been improved and, in any case, the tip is nearly full.
- Clarkes Beach. It is understood that improvements are being investigated by the Franklin County Council.
- 6. Weymouth has been recently sewered and this statement is probably out-of-date. You could obtain more information from the Manukau City or the Health Department.

There is no continuous study of the ecology of the Manukau Harbour, though it is probable that this may be commenced soon. Many individual studies have been made such as studies of the conditions of the harbour water at Mangere Bridge, studies of conditions on the bathing beaches, studies of the growth of sea-weed, studies on the dispersion of the effluent from the treatment works, etc.

Whilst it is entirely proper for the Nature Conservation Council to be concerned with allegations of pollution in the harbour, it is also appropriate to note the remarkable improvement that can be observed if comparison is made with conditions twelve years ago.

Yours faithfully,

G. A. Tait. Director of Works.

Per:

C. C. Collom. Chief Engineer Drainage.

/



48/435000

NATIONAL WATER AND SOIL CONSERVATION ORGANISATION

WELLINGTON, NEW ZEALAND

TELEPHONE 46080
Address replies to
THE DIRECTOR
OF
WATER AND SOIL CONSERVATION

MINISTRY OF WORKS P.O. BOX 12041 WELLINGTON NORTH, N.Z.

24 August 1971

The Secretary,
Auckland Regional Authority,
Private Bag,
AUCKLAND 1.

4 9/3/2/4 at 10/0/25

Dear Sir,

POLIUTION - MANUKAU HARBOUR

I am enclosing a copy of a letter received from the Nature Conservation Council concerning a number of alleged instances of pollution of the Manukau Harbour.

May I have a report from you on the seven cases listed together with any comments you may have.

Yours faithfully,

A.W. Gibson
Director of Water and Soil
Conservation

Per:

B.A. Martin.

Enc.

Pecology bridges

Pecology both soil 3:18/11

Pecology of the coly

Pecology of the coly

Pecology of the the seed.

MR Just Thirt

Reflice 1/9

PHONE:

48/435000

Nature Conservation Council

BOX 5014, WELLINGTON, NEW ZEALAND

·16 August 1971

The Secretary,
Pollution Control Council,
P.O. Box 12041,
WELLINGTON NORTH.



Dear Mr Martin,

POLLUTION : MANUKAU HARBOUR

The Nature Conservation Council has had its attention drawn to the pollution occurring in the Manukau Harbour and some of the apparent effects of the pollution.

You are no doubt aware of the high discharge of untreated and partially treated sewage being discharged into these waters. For your information, list hereunder several sources which have been reported to Council that you may be interested in investigating.

1. Glenbrook Steel Mill:

Apparently serious pollution at times. Mr N. Douglas of Waiuku has made observations of this discharge to my informant. This could be from the Hamilton Estate at Waiuku, the residential block associated with the mill.

Septra guns traulte. guns to Keath sept who of w

2. Namco New Zealand Ltd: Inlet Road, Papakura:

Empty their chrome tanks into Papakura Inlet. There are also other wastes continuously flowing from this factory.

3. General Foods Limited: Sylvia Park, Mt Wellington:

And presumably other industries in this area, discharge wastes which eventually flow into the Manukau Harbour.

4. A.M.D.B. Sewage Ponds:

Newspaper reports and other reports of detergent and discoloured effluent entering the harbour.

5. Onehunga Rubbish Tip:

This is being used to reclaim mudflats. Debris and liquor is entering the harbour.

bounke

6. Clarkes Beach:

Manukau Harbour - reports of overloading of septic

M. Games

Bouly Thele

tanks in residences which seep into the harbour.

7. Weymouth : Suburb of Manurewa:

Similar to Clarkes Beach. In certain times of the year lawns have a green slime growing and on occasions raw sewage has overflowed from the tanks due to oversaturated land.

Cely of handens

In addition to the above reported cases concern is felt that older tonnage ships are not equipped to retain sewage while in port and during their stay all effluent is discharged into the local ports.

It would be appreciated if you could advise me your findings relating to the condition of the Manukau Harbour and whether any scientific studies have been undertaken over the areas of the waters.

Yours faithfully,

E.C. Rollo

Secretary

Auckland Harbour Board AUCKLAND HARBOUR BOARD RECEIVES 1 AUG 1971 MEMORANDUM 27 August 1 FROM THE HARBOURMASTER THE GENERAL MANAGER OIL POLLUTION AT SEA: W.S.L. DISPERSANT SPRAYING EQUIPM In the letter from the Marine Department copied in the attached circular letter from the Harbours Association the Secretary for Marine raises two points for discussion and decision. In order that I may formulate recommendations for consideration by the Board please let me have by 16 September 1971 your comments on -The feasibility of a national scheme for dealing with oil pollution. Note: This matter has been under consideration by the New Zealand Committee on Pollution of the Sea by Oil for some time. In September 1969 in response to a request we forwarded through the Harbours Association a list of equipment useful in dealing with oil spillage within harbour limits. However apart from this request and some earlier (May, June 1969) notes of meetings of the Committee and its Nautical SubCommittee, we have no records of the Committee's deliberations and no information as to its proposals for oil dispersal.

(b) The practicability of using the Board's tugs for oil dispersal operations off the coast. Your comments should refer to such matters as considerations affecting port operations, suitability and range of tugs, suggested operations field within such a scheme, and any other relevant matters.

(c) The suitability of the equipment described in the letter from the Secretary for Marine and of harbour tugs for oil dispersal operations within harbour limits.

I am sending a copy of this memorandum to the Chief Engineer with the request that his marine engineers liaise with you on the preparation of the comments asked for.

R.T. Lorimer
GENERAL MANAGER

C.C. THE CHIEF ENGINEER

Cock Eng. Hove discussed this matter with

Mr bruy W Claffatt of H/M cleft,

ENCL. ENCL.

THE HARBOURS ASSOCIATION OF NEW ZEALAND

P.O. Box 1765, Wellington.

13th August 1971.

MEMORANDUM for Auckland, Bay of Plenty, Lyttelton, Napier, Northland, Otago, Southland and Wellington Harbour Boards.

16 AUG 1971

Oil Pollution at Sea W.S.L. Dispersant Spraying Equipment MSD.

Appended hereunder is a copy of a letter dated 11th August 1971 received from the Secretary for Marine and a copy of the enclosed letter referred

You may care to discuss the contents of the correspondence with your Harbourmaster and let me have your views. Only one copy of the booklet referred to in the letter has been received and this has been referred to the Harbour Superintendent, Whangarei, for his persual.

Secretary.

MARINE DEPARTMENT

P.O. Box 10142, Wellington.

11 August 1971.

Mr. R.E. Dawson, Secretary, Harbours Association of New Zealand, P.O. Box 1765, Wellington.

Dear Mr. Dawson,

Oil Pollution at Sea - W.S.L. Dispersant Spraying Equipment

The Sub-Committee of the Oil Pollution Committee is at present investigating a proposal that dispersant spraying and mixing equipment for use on tugs and a supply of dispersant should be stationed in a number of places on the New Zealand coast to deal with any oil slick threatening serious pollution. system similar to that which has been introduced by the British Government and described in Board of Trade Journal Supplement of 9 September 1970 is in mind.

The W.S.L. equipment adopted by the British Government for spraying and mixing dispersant is described and specified in detail in the enclosed booklet published by the United Kingdom Department of Trade and Industry. It will be noted that the equipment is simple, cheap to make and can easily be

fitted to and removed from any suitable vessel. Booms carrying spraying nozzles are attached to the mast assembly which clips on the rail of the spraying Vessel.

The ${\rm no}_{\rm Z}$ zles spray the floating oil with low toxicity dispersant (B.P. 1100 is used in the United Kingdom). Wooden surface-breakers, which look rather like a wooden farm gate, are trailed behind the spraying nozzle to mix the treated oil into the sea so that it is broken down into small droplets which are unlikely to return to the surface.

I met the designer of the equipment, Mr. Wardley-Smith, the Director of Warren Springs Laboratory, while overseas last year. He said the equipment had proved to be very satisfactory and had been used to very good effect on the oil spillage by the "Pacific Glory" following a collision off the south coast of England in 1970. A copy of his letter to me of 4 June 1971, which answers my query regarding the amount of dispersant required in relation to the amount of oil to be dealt with, is also enclosed.

My principal concern in suggesting that New Zealand should follow the example of the British Government to establish a number of sets of spraying and mixing equipment and a supply of dispersant at our major ports is the large quantity of dispersant likely to be required for effective treatment of a really big oil slick. The Oil Pollution Committee expects to receive a report on this aspect at its next meeting on 15 October 1971.

I am writing to you at this stage to enquire if the members of your Association have any views in the matter of a national scheme for dealing with a major oil pollution problem such as could result from a grounding or collision involving a Marsden Refinery feed tanker or a coastal tanker in New Zealand waters.

The British Government's scheme, which is administered by the Marine Survey Service of the Department of Trade and Industry (previously B.O.T.) through their principal officers comprises sets of W.S.L. spraying and mixing equipment and some 10,000 gallons of dispersant held at 30 selected ports where tugs will be available for hire at short notice. Two fisheries patrol vessels have been fitted out to deal with certain isolated areas on the north coast. The system is geared to deal with the spillage of some hundreds of tons rather than the exceptional instance, such as "Torrey Canyon". It is intended for use when substantial spillage threatens serious pollution and it is designed so that a spray vessel should be able to be on its way in a matter of four to six hours. The oil refineries in Britain can supply dispersant in large quantities at short notice if required.

I am wondering if the harbour boards in New Zealand that own ocean going tugs would be interested in owning or holding on behalf of Government sets of W.S.L. spraying equipment and stocks of dispersant for use on their tugs in the event of a major oil spill threatening serious pollution occurring in coastal waters in their area. As the tugs in New Zealand are in the main owned by harbour boards and harbour boards need to be equipped to deal with oil spillage within their harbour limits in any case, it seems to me that the boards are better placed than any other authority to accept this responsibility.

An indication before the next meeting of the Oil Pollution Committee on 15 October 1971 of how the major harbour boards would view such a proposal will no doubt be of considerable assistance to the Oil Pollution Committee in formulating the recommendation to Government on the subject.

With kind regards,

Yours faithfully, 'R.N. Kerr' Secretary for Marine

POLLUTION - CAUSES AND CONTROL SEMINAR - PETONE 1971

The basic objective of the course was to increase the awareness of the causes of pollution and the methods of control being used. To do this it was thought that an education programme would best be established through local bodies on rational lines, thus avoiding the emotional approach that is likely to be created by misinformed public.

Topics covered by the course were:-

- 1. <u>Noise Pollution</u>. This treated noise in its context and gave the fundamentals of measuring frequencies and energies. The existence of noise pollution was made clear and the need for awareness of noise sensitivity present and future was demonstated.
- 2. Air Pollution. After a brief history of air pollution in New Zealand, it was fairly clear that the most effective control would be by a combination of political bodies to form regional control. Emission control of fumes is a very doubtful and risky method of control. An introduction was made here to the term "B.P.M." (Best Practical Method) as the basic requirement of pollution control.
- 3. Land Pollution. Controlled tipping for waste disposal is still likely to be the most satisfactory method of disposal for many years to come. Particular reference was made to the benefits obtained from reclamation (marine and land) by tipping. Car dumps are at present creating a dumping problem and will pose an ever increasing problem in future years if no alternative means of disposal is found. Siting of tips is deemed to be the main cause of pollution particularly to the environment.
- 4. <u>Aesthetic Pollution</u>. This dealt mainly with engineering and architectural developments. The price of creating aesthetically pleasing articles can be considerably more costly, but comparisons drew the conscientious of opinion that the extra cost is well worthwhile.
- 5. <u>Water Pollution</u>. The main cause for concern of water pollution is for the preservation ecology. Disposal of treated sewage wastes into waterways was criticised, but no economic solution was offered.

Long discussions were held on the implications of the Water and Soil Conservation Act 1967 at present being brought into force. Several inadequacies were point out in this legislation which would need to be revised to ensure the adequate control intended. Stress was placed on the need for Pollution Control Trainees to cope with future demands.

Gélalee Hile Lots Conservation:

10 August 1971

The Chief Engineer, Wellington Harbour Board, P.O. Box 893, C.P.O., WELLINGTON

Dear Karl,

WATER & SOIL CONSERVATION ACT 1967 CLASSIFICATION OF WELLINGTON HARBOUR

Thank you for your reply of 4 August 1971. The information forwarded, considerably assists towards our understanding the basics of responsibilities and procedures.

With kindest regards.

Yours sincerely,

CHIEF ENGINEER TO THE BOARD

NS:GJG

hjv:cmd BLE ADDRESS: "HARBORD WELLINGTON" DES USED: BENTLEY'S A.B.C. 5th. EDITION.



WELLINGTON HARBOUR BOARD
CHIEF ENGINEER'S OFFICE

BOX 893. C.P.O.

WELLINGTON, N.Z

4th August 1971.

The Chief Engineer, Auckland Harbour Board, C.P.O. Box 1259, AUCKLAND.

Dear Arthur,

WATER & SOIL CONSERVATION ACT 1967: CLASSIFICATION OF WELLINGTON HARBOUR.

In reply to your letter of 29th July 1971: as you are aware, the position in Auckland is complicated by the special Acts affecting the Manukeau and Waitemata Harbours, namely the Auckland Metropolitan Drainage Act 1960 and the North Shore Drainage Act 1963, which affect the powers of the Water Pollution Control Council to classify these harbours. We have no similar special Acts operative in the Wellington region.

The classification of the Wellington Harbour under the provisions of the Waters Pollution Regulations 1963 has now been made final and I enclose copy of the classification document. I also enclose copy of my report to the Board setting out the general effect of the classification.

No Regional Water Board has yet been constituted for the Wellington area but I understand that proposals are fairly well advanced. Apparently legislation is necessary before the Board as proposed can be constituted and it is hoped that this legislation will be passed this session.

I do not think that the classification of the harbour under the Waters Pollution Regulations nullifies the provisions of any of the statutes or regulations conferring powers on Harbour Boards to control pollution, but if there were any conflict between such statutes and regulations and the provisions of the Water & Soil Conservation Act 1967 and the Waters Pollution Regulations 1963, the latter two statutes would take precedence.

For example, as you are aware, several Acts make it unlawful for local bodies or persons to construct any drain which discharges polluting matter into the harbour except in such manner and on such conditions as are approved by the Harbour Board. Also the Harbours Act 1950 and other Acts and Regulations specify certain offences in relation to pollution in which case the Harbour Board may take action. I think that Harbour Boards still have these powers and responsibilities but in carrying out their functions they must be guided by the provisions of the Water & Soil Conservation Act 1967, give effect to the policy and directions (if any) communicated to them by the National Authority, and comply with any classification made by the Water Pollution Control Council.

It seems to me however that once the harbour is classified the primary responsibility for seeing that the classification is complied with rests with the Water Pollution Control Council, but of course Harbour Boards would co-operate in any way possible.

Mr. Seagar M

When the consent of the Board is sought to the discharge of waste into the harbour, or an application is made for a licence to construct outfall pipes across the foreshore, I am adopting the general policy of requiring the same conditions as those laid down in any right granted under Section 21 (3) of the Water & Soil Conservation Act 1967, where the circumstances are similar, and the same standards as required by the classification of the harbour.

Regarding pollution from ships, I understand that technically the outfalls from ships which discharge waste into the harbour should be registered and a permit obtained from the Water Pollution Control Council once the harbour is classified, but in view of the practical difficulties it is not proposed to take any action to enforce this. I believe that the problem is being tackled on the international front in an endeavour to bring in some international system of control.

However it seems to me that once the harbour is classified the hands of the Board would be strengthened in any action it might take under any of its existing powers if the ship's discharge contravened the standards laid down in the classification.

Now that Wellington Harbour has been finally classified, the Regulations require the Board to register its outfalls and obtain permits from the Water Pollution Control Council. This action is now being taken. I may say that the Board is in the process of eliminating its discharges of waste into the harbour as it becomes practicable to do so.

I trust that this information will be of some assistance to you. With kindest regards,

Yours sincerely,

K.S. RENNER Chief Engineer.

Enclosure

Copy of the Wellington Harbour classification document.

Copy of report to the Board setting out general effect of classification

WATER POLLUTION CONTROL COUNCIL FINAL CLASSIFICATION - WELLINGTON

Public Notice is hereby given, pursuant to regulation 9 of the Waters Pollution Regulations 1963, that the Water Pollution Control Council has made the following final classification of Wellington:

CLASS A WATERS

The waters enclosed by:-

- 1. The catchment boundary of the un-named stream above N164:315213. (Karori).
- 2. The catchment boundary of the Wainuiomata River above N164:532241, (Wainuiomata).
- 3. The catchment boundary of the Orongorongo River above N165:572206. (Orongorongo).

CLASS B WATERS

The waters of:-

- 4. The Opau Stream between N164:257282 and N164:258282. (Quartz Hill water supply).
- 5. The Ohariu Stream between N160:358356 and N160:359358. (Youth Camp, Ohariu Valley Rd.).
- 6. The Scholl Creek between N164:498212 and N164:499211. (Boys' Brigade Camp).
- 7. The Skerrets Creek between N164:513226 and N164:513225. (Hutt County emergency water supply).
- 8. The tributaries of Crowthers Creek between N164:522279 and N164:523280, and between N164:528284 and N164:529284. (Scout Camp).

CLASS C WATERS

The waters of:-

- 9. The Catchpool Stream between N164:458138 and N164:465135 (Wainuiomata Valley).
- 10. The Wainuiomata River between N164:494220 and N164:532241. (Wainuiomata).
- 11. The Makara Stream between N164:273240 and N164:272240.
- 12. The Ohariu Stream between N160:337326 and N160:338328.

2. CLASS D WATERS 13. The inland waters in catchments draining to the coast between N160:353417 (Te Apapaura) and N165:635101 (Whorepapa) except those waters classified A, B or C. CLASS SA WATERS The waters enclosed by:-140 N160:270304, N160:281308 and the coast between these two points. (Ohariu Bay). INVOST and 100 yards seawards of LWOST between 15. N160:270304 and N164:193205. (Ohariu Bay to Oteranga Bay). N164:193205, N164:202197 and the coast between these two points. (Oteranga Bay). 16. HWOST and 100 yards seawards of LWOST between N164:202197 and N164:208178.(Oteranga Bay to 17. Oteranga Head). N164:387164, N164:396161, N164:397171, N164:394172 and the coast between N164:387164 and N164:394172, 18. (Point Dorset). N164:391214, N164:391217, N164:384224, N164:386226, N164:393218. (Point Halswell). 19. 20. N164:374203, N164:371204, N164:369207, N164:371209, N164:374210, N164:378206, and the coast between N164:374203 and N164:378206. (Shelly Bay). 21. N164:419257; N164:422259; N164:426256; N164:424246; N164:420248; N164:417246; N164:413250; N164:415253 and the coast of Somes Island between N164:419257 and N164:415253. (Somes Island). N164:362213, N164:364215, N164:366211, N164:363206 and the coast between N164:362213 and N164:363206. (Balaena Bay). 22. 23. HWOST and 100 yards seawards of LWOST between N165:580113 and N165:635101. (Wharepapa). N164:452260, N164:451257, N164:457253, N164:456247, N164:458245 and the coast between N164:452260 and N164:458245.(Lowry Bay). 24. N164:457244, N164:455245, N164:450235, N164:445214 and the coast between N164:457244 and N164:445214. (Days Bay). 25. N164:443212, N164:424181, N164:419167 and the coast between N164:443212 and N164:419167, 26. (Eastbourne).

7. N164: 357189, N164: 358189, N164: 362193, N164: 360197 and the coast between N164: 357189 and N164: 360197. (Evans Bay).

28. N164: 415294, N164: 414291, N164: 437282, N164: 444271, N164: 448273, N164: 444281 and the coast between N164: 415294 and N164: 444281. (Petone).

29. N164:347147, N164:344150, and the coast between these two points. (Houghton and Princess Bays).

- 30. N164:330143, N164:336143, N164:336148 and the coast between N164:330143 and N164:336148. (Island Bay).
- 31. N164:353154, N164:363160 and the coast between these two points. (Lyall Bay).
- 32. N164:393175, N164:389183, N164:389193 and the coast between N164:393175 and N164:389193, (Worser Bay).
- 33. N164:391206, N164:389183, and the coast between these points. (Scorching and Karaka Bays).
- 34. N164:350214, N164:356215 and the coast between these two points. (Oriental Bay).
- 35. The Makara Stream between N164:279299 and N164:280293.
- 36. N164:362213, N164:364214, N164:364219, N164:362219 and the coast between N164:362213 and N164:362219. (Point Jerningham).
- 37. N164:363206, N164:365208, N164:366204, N164:363204 and the coach between N164:363206 and N164:363204 (Kio Bay).
- 38. HWOST and 100 yards seawards of LWOST between N164:4443212 and N164:444214.(Eastbourne).

CLASS SC WATERS

39. The coastal waters enclosed by N164:378148 (Palmer Head), N164:407142 (Inconstant Point) and the coast between these two points except those waters classified SA or SB (Wellington Harbour).

CLASS SD WATERS The coastal waters enclosed by N160:289417, N160:353417 (Te Anapaura), N165:635101 (Wharepapa), N165:635045, the coast between N160:353417 and 40. N165:635101, and the 3-mile territorial limit between N160:289417 and N165:635045, except those waters classified SA, SB or SC. All grid coordinates refer to the North Island division of the NZMS1 series - Lands and Survey Department. Territorial limit is as defined in the Territorial and Fishing Zone Act 1965. Any person notified under paragraph (a) of regulation 9 referred to above and dissatisfied with any decision of the Council relating to this classification may, within a period of three months of this notice, give notice of appeal to the Secretary of the Council. Every existing outfall from which pollutants are directly or indirectly discharged into the classified waters described above is required to be registered within three months of this notice. Applications for registration and permit are to be made to the Medical Officer of Health, on the appropriate form (P.A.C.1 for local authorities and industries or P.A.C.2 for farms and individual dwellings). These forms are obtainable from the office of the Ledical Officers of Health, Wellington and Lower Hutt. (3) Failure to register an outfall discharging pollutants into the above classified waters is an offence and any person who commits such an offence shall be liable on summary conviction to a fine not exceeding \$200 or, if the offence is a continuing one, to a further fine not exceeding \$20 for every day during which the offence has continued. (B.A. Martin) Secretary P.U. Box 12041, 3 July 1971 Wellington.

WELLINGTON HARBOUR BOARD

P.O. BOX 893 WELLINGTON, N.Z.



(Circular No. 7049) (H.O. Ref. 1/18/2) (Eng. Ref. 20/4)

CONFIDENTIAL

13th July, 1971.

The Chairman & Members, Wellington Harbour Board, WELLINGTON.

CLASSIFICATION OF WELLINGTON HARBOUR UNDER THE WATERS POLLUTION REGULATIONS 1963.

For the information of the Board I have to report that the Water Pollution Control Council has made a final classification of Wellington, including the Wellington Harbour, under the provisions of the Waters Pollution Regulations

WELLINGTON HARBOUR: 1.

The following is a summary of the classification of the Wellington Harbour: -

(a) Class SA, being waters from which edible shellfish are regularly taken for human consumption. The requirements of this classification for the maintenance of the quality of the water are that there shall be no destruction of normal aquatic life by reason of toxic substances, or of altered acidity or alkalinity, or of rise in temperature; there shall be no fouling of fishing grounds or increase in coliform bacteria content of the waters above a low figure (50 per 100 millilitres); the waters shall not have their natural colour affected to a conspicuous extent nor give off an offensive smell; and all discharges shall be substantially free from suspended solids, grease, and oil.

The following localities have been classified in this category:-

Breaker Bay and an area east of the Point Dorset Military Reserve.

Point Halswell to Kau Point: An area about 800 feet wide and about 800 ft. out from the shore opposite Kau Bay, running from Point Halswell to Kau Point.

Shelly Bay

Somes Island All the waters round Somes Island except the north-western side and a small length on the north-eastern side from the jetty northwards.

Balaena Bay and Weka Bay

Eastern Bays From Point Howard Wharf to approximately 120 chains south of the southern boundary of the Eastbourne Borough, covering all the eastern bays and coastline, except a small portion of York Bay (classified SC) and a length of approximately 14 chains

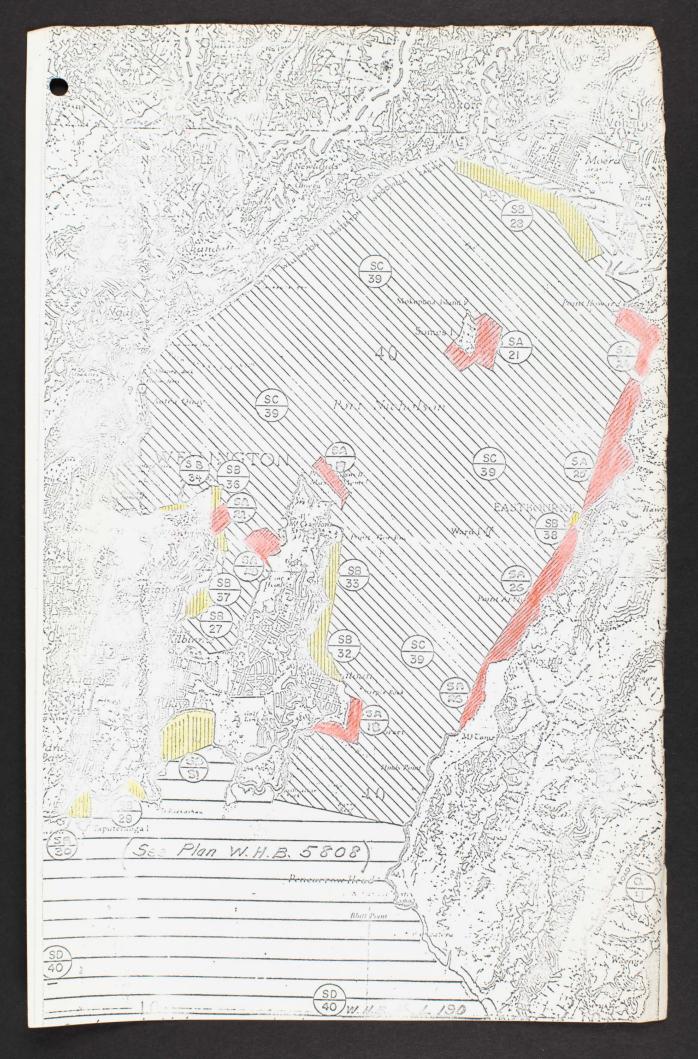
fronting the Eastbourne Township

(classified SB).

The areas classified SA are shown coloured red on the attached map, No. L190.

(b) Class SB, being waters to which the public have ready access and used regularly for bathing. The requirements of this classification for the maintenance of the quality of the water are that there shall be no substances toxic or harmful to humans; there shall be no destruction of normal aquatic life by reason of a concentration of toxic substances, or of altered acidity or alkalinity, or of rise in temperature; there shall be no fouling of fishing grounds or increase in coliform bacteria content above a figure which would constitute a danger to the health of bathers (1,000 per 100 millilitres); the waters shall not have their natural colour affected to a conspicuous extent nor give off an offensive smell; and all discharges shall be substantially free from suspended solids, grease, and oil. The following localities have been classified in this category:-Worser Bay Karaka Bay & Scorching Bay Evans Bay from the boat harbour mole to the Patent Slip; Kio Bay; and from Balaena Bay to Point Jerningham. Oriental Bay Petone Beach Eastbourne Township - a frontage of approximately 14 chains The areas classified SB are shown coloured yellow on the attached map. (c) Class SC, being tidal waters within the territorial limits of New Zealand. The requirements of this classification for the maintenance of the quality of the water are that there shall be no destruction of normal aquatic life by reason of a concentration of toxic substances, or of altered acidity or alkalinity, or of rise in temperature; there shall be no fouling of fishing grounds; the temperature and acidity or akalinity of the waters shall be kept within prescribed limits; the waters shall not have their natural colour affected to a conspicuous extent nor give off an offensive smell; and all discharges shall be substantially free from suspended solids, grease, and oil. The balance of the Wellington Harbour, after excluding the areas classified SA or SB, is classified in this category. COASTAL WATERS OUTSIDE WELLINGTON HARBOUR: 2. (a) Classified SA. Ohariu Bay Oteranga Bay The coast between Ohariu Bay and Oteranga Bay; and between Oteranga Bay and Oteranga Head. Palliser Bay - about 3 miles of coast at the mouth of the Ruamahanga River. (b) Classified SB. Island Bay Houghton & Princess Bays Lyall Bay (c) Classified SD. The balance of the coastal waters are classified SD for which the requirements are that there shall be no destruction of normal aquatic life by reason of a concentration of toxic substances, or of altered acidity or alkalinity, or of rise in temperature; there shall be no fouling of fishing grounds; and all discharges shall be substantially free from suspended solids, grease, and oil. + . . / 3

- 3 -3. GENERAL: Now that Wellington Harbour has been finally classified the Regulations require the Board to register with the Water Pollution Control Council all its outfalls discharging pollutants into the Harbour, and to obtain a permit from the Council to continue the discharges from such outfalls. Action is being taken accordingly. It is not anticipated that there will be any difficulty in obtaining a permit for those outfalls the discharge from which does not pollute the harbour in excess of the classification, but for those which do it is probable that the Council will issue only temporary permits for a period sufficient to allow the Board to take measures to see that the classification is complied with. In such cases the opportunity will be taken to investigate ways and means of eliminating as many outfalls into the harbour as can be done economically, either by means of holding tanks or connection to the city sewer system where possible. When these investigations are complete and the cost of the work known a further report will be submitted. K.S. RENNER Chief Engineer.



4 August 1971

THE CHIEF ENGINEER

THE GENERAL MANAGER

POLLUTION - CAUSES AND CONTROL

I have studied the brochure and range of subjects to be presented at the Seminar on Pollution Causes and Control to be held at the Central Institute of Technology, Petone, Wellington 23 - 26 August 1971.

It is desirable that the Board's technical staff keep abreast of current considerations and opinion on pollution and environmental matters.

Several of the lectures and discussions are pertinent to problems and matters currently related to harbour planning and the Waitemata Harbour Study in Auckland.

I would recommend that D.L. Goord, Planning Engineer be given the opportunity to attend this Seminar. Cost would be of the order of \$100.

CHIEF ENGINEER TO THE BOARD

NS:GJG

Auchland Harbour Box

Mis Looks good.

Cost world be:

Austan \$ 43

Lodging 8 wats 40.

Fee. 20.

\$ 100

The about Goods

Alegan ?

3rd. August. 1971. MECHANICAL ENGINEER'S OFFICE THE HARBOURMASTER. QIL SPILL - M.T. "SEABOARD". Investigation of an oil discharge stated to have occurred from the above vessel during Saturday the 31st. July, 1971:-Mr. Clapcott of the Harbourmaster's Department and myself proceeded to Mt.Maunganui on the 1st. August and boarded the tanker at 3.35 p.m. in company with the agents' representative Mr. I. Strachan. The Master, Captain Hak Fong was interviewed and a request was made to inspect the cargo and bunker oil tank records and also to take samples of all types of fuel oil carried on board. The Captain directed me to the Chief Engineer Mr. Wong Ming Fat who stated he was only in charge of the vessels' bunker oil and he gave me the following information:-Bunker Tank Readings in Tons: Deep TL 'X' Bunker Wing P Wing S 71.0 86.1 Arrival Whangarei 30thMay 1971 12.0 8.7 The vessel bunkered 101 tons of Whangarei fuel oil into the Groee Bunker: Specification API 17.5, SG .9495 @ 60°F Vis. 1500 sec. Redwood. The remaining tanks contained ex Persian Gulf fuel: Specification API 48.3, SG .9446 @ 60°F, SFS 46.5 sec. @ 122° F. X' Bunker Wing P Wing S Deep TK 12.0 95.6 57.5 86.1 Leaving Whangarei 28th July 1971 53.2 86.1 Auckland 31st. July " 12.0 90.2 70.4 53.2 57.5 Arrival Mt. Maunganui 1st. Aug." 12.0 I proceeded to the engine room with mr. Wong Wing Fat and with the help of the 2nd. & 3rd. Engineers, took a sample from the Starboard Wing and Gross Bunker tanks. As the vessels cargo came under the control of the Chief Officer Mr. Mak Chak Wing, I requested that he supply the loading condition of the ship leaving Auckland and arrival Mt. Maunganui. (Refer attached sheets), and an oil sample be taken from the cargo. The Chief Officer stated that they had had a problem with oil leakage from the cargo tanks and in fact on their way to Mt. Maunganui had transferred oil to prevent this, as well as other transferring which had become necessary to regain the required trim. an oil sample was taken from the cargo. ACLUSIONS: From the information available it would appear that several of this vessels' cargo tanks are leaking, and in particular both No. 3 P & S wing tanks. These tanks were pumped out during the voyage to Mt.Maunganui to prevent further oil escaping from the vessel. J.M. BRAY MECHANICAL ENGINEER'S OFFICE. Encl. Tank ullage readings. Chief Engineer for Information.

AUCKLAND

REAGENT CHEMICALS

BIOLOGICAL PHYSICS

Telegraphic Address

"TOWNMER"

LABORATORY APPARATUS

AND SCHOOL REQUISITES

MORGAN STREET, NEWMARKET, 1 HONE 34-759. BOX 9577, NEWMARKET WELLINGTON

152 HUTT ROAD, PETONE PHONE 685-136. BOX 38-175, PETONE CHRISTCHURCH

120 MADRAS STREET, CHRISTCHURCH PHONE 60-841. BOX 1254, CHRISTCHURCH

Townson & Mercer

(NEW ZEALAND)



"Service to Science

Associated Companies in

SYDNEY RRISBANE MELBOURNE ADELAIDE

PLEASE REPLY TO

TOWNSON & MERCER (NEW ZEALAND) LIMITED INTRODUCE: -

A NEW ADVANCEMENT IN THE MONITORING OF WATER POLLUTION.

A new electronic monitoring system has been developed in Australia by Townson & Mercer Pty. Limited, in co-operation with the "Water Pollution Research Laboratories" in England, to detect and record pollution levels in lakes, dams, rivers etc.

The system automatically and continually takes samples of water from a submersed collection station which is moored close to the bed of the river or dam, and automatically analyses and records relevant data for later examination.

Basic Operating Principal:

Samples of water are conveyed to the analysing station, which is usually situated in either a caravan or shed which is conveniently accessible, by small pumping unit submerged beneath the surface of either the dam or river.

Analytical Capabilities:

1. Suspended Solids.

A system using a light beam passing through a cell containing the water sample with a detector mounted at right angles to the light beam to measure the amount of light reflected or scattered from the particles in solution is linearily related to the suspended solids content of the sample.

2. Conductivity.

A system by which it is possible to determine the quantity of dissolved solids in the sample.

3. Dissolved Oxygen.

It is vital that there be sufficient oxygen dissolved in the water to support the existence of micro-organisms which break down pollutants.



This is measured at the actual sampling point as it can greatly effect the dissolved oxygen content.

Major factor effecting marine life.

6. A sixth channel is available for the inclusion of a selective Ion determination system.

> Chloride Examples: Cyanide

Fluoride

& many others.

Advantages of this system:

1. Physical Size.

The analysing station fits into an area of approximately four cubic feet.

2. Sample Taking:

The system is very simple, and being submersed is not likely to be troubled by neap tides, floods and other conditions like speed boat wakes and vandals.

3. Display Method:

The Townson unit employs both digital nixie tube and meter readout systems which may be fed into punch tape or telemetry systems.

4. Due to the compact nature of this complete unit it can easily be incorporated in a caravan which could be fitted with a power generator for remote applications.

5. Versatility:

The basic electronics are designed to permit additions and alterations dependant on the site requirement.

This is only a very brief outline of the equipment, and should you require further detailed information on this or any of the associated equipment please contact us at the following: -

Australian Hall.
 International Trade Fair Wellington.

From 18th August to 4th September qualified personnel will be available to discuss a demonstration unit which will be on display. (Complimentary passes available on request.)

2. Townson & Mercer (New Zealand) Limited.

P.O. Box 9577, P.O. Box 38-175, P.O. Box 1254, Newmarket Petone, Christchurch. Auckland Wellington

The "New South Wales Department of Health, Water Pollution Branch" have purchased one of these stations. Let us assist you to prevent the pollution of New Zealand's natural resources.

Other equipment being displayed at the Trade Fair are as follows:-

Ph Meters, Portable and Mains operation
Selective Ion Meters, Portable and Mains operation
Integrators
Gradipore Electrophoresis
Gradipore Fraction Collector
Hydrometers
Digital Concentration Meters
Ph Scanners.

