

APP.007914.10.04

RENEWAL OF DISCHARGE CONSENTS

FOR

DOUG'S OPUA BOATYARD (DOBY)

THIS IS AN 18 YEAR TERM RESOURCE CONSENT APPLICATION FOR: THE RENEWAL OF CURRENT DISCHARGE CONSENTS CON299607914 (10-15), SO THAT THEY COINCIDE WITH THE REMAINING TERM OF RESOURCE CONSENTS NLD 99714 (01-09).

ASSESSMENT OF ENVIRONMENTAL EFFECTS

1.0 APPLICANT, ADDRESS, LEGAL DESCRIPTION:

Douglas Craig Schmuck
For: Doug's Opuia Boatyard (DOBY)
1 Richardson St. Opuia, 0200
Sec 2, pt. Lot 1, Sec 3, Blk XXXII Town of Opuia
Sec 1-4, as shown on SO 68634

2.0 INTRODUCTION:

Doug's Opuia Boatyard is a long established boat maintenance facility in the Bay of Islands holding both land use and operational resource consents in the CMA with integral Discharge Consents over the whole cross boundary site.

In this event, the Council is aware, that the term of the current Discharge Consents will expire on the 30th of March this next year. Council will also be aware that the matters surrounding the Easements over public land, although they are now titled in contiguity with the land of the boatyard, remain challenged in the Appeals Court at Wellington for an unknown duration.

And although I have done extensive planning and legal groundwork to move forward on my commitments to Council to comply with the current abatement notice, I am at a bit of a legal box-canyon to execute that, which needs to be done to meet that ongoing commitment.

However, that will be then and the now is what matters! Council will therefore also know that I have redirected my discharges, heretofore from the CMA, into the SESS Opuia sewer scheme as of late 2012. This being a most successful mitigation of effects associated with the continuing operations of this facility and what I had been committed to in the processes of the approval of the current Discharge Consents in 2008. I refer the attached Containment Treatment Systems diagrams (1&2).

I have also untaken the decommissioning and removal of all the private land slipway spurs and cradles save one, on the main slipway rails into the CMA. This in effect, cutting instantly 75% of the boatyard's capacity to work and generate commercial wastes and/or discharges during cleaning and maintenance on vessels.

This in fact now controls or otherwise contains all activities of the main slipway to the area sealed with impermeable surfaces on the reserve 10 metres from the MHWS; to the concrete basin and structures of the turn table in the boatyard proper. This, then, combined with the single cradle, will allow a considerable reduction in the scale and intensity of the working areas of the site into the future whereby I can redirect all my energies into the greater development of the site as a whole.

I therefore provide the following parameters of effects for the Council's review and renewal of a set of comparable Discharge Consents that will mirror those that are currently in effect. This keeping clearly in mind, that although the physical make up of the slipway may change drastically, there will always be a need for Discharge Consents at the site.

3.0 SITE DETAILS AND IMMEDIATE ENVIRONMENT:

The site is within the port/harbour of Opuia and at the southern end of the Veronica Channel comprising all the land of a small cove and foreshore backed by Richardson St. and dense bush covered hills to the west of the Opuia wharf.

The site access is along a well sealed road with ample parking both on and off the street.

There is a small un-named stream that issues from under Richardson St that is mostly enclosed by conduits north of all slipway structures extending a sort distance into the CMA.

The CMA fronting the site is a Mooring Management 4 area that is affected by the forces of the Kawakawa River where it meets the sea. The Waikere inlet also joins Opuia to form the greater Veronica Cannel creating the estuarial environment in which the boatyard operates.

The public Opuia to Paihea walking track is along the foreshore in contiguity with the esplanade reserve over which the slipway structures operate.

The entire Opuia water front and wharf directly fronting the mooring area is well built up in every activity associated with marine recreational boating and supporting infra-structures

4.0 THE PROPOSAL:

This application is for the renewal of an existing Discharge Consents associated with all of the activities of a boat maintenance facility. The application seeks an 18 year term to coincide with the existing resource consents NLD99714 (01-09) that expire on 30 March 2036. I refer to CON20060791410 (10-15) attached.

5.0 DISCHARGES IN REGARDS TO THE RMA:

Under the Act, no discharges of any contaminant from the site are allowed to enter the CMA without a discharge permit.

In this regard, the proposed application is consistent with the provisions of the Resource Management Act to mitigate the effects on the natural and physical resources to meet the foreseeable needs of future generations. These existing boat maintenance activities are appropriate activities occurring in the coastal environment. They occur in an area where the natural resource are already compromised by the historical, and well established marine development consistent with the overall character of the port town of Opuā.

6.0 DISCHARGES TO WATER:

Treated discharges to the waters of the CMA from cleaning and scrapping hull surfaces have been redirected to the operational SWSS Opuā Sewer scheme since late 2012. Furthermore, because the working surfaces of the boatyard proper have now been decommissioned, ancillary run-off during storm events has been reduced by perhaps as much as 75%. There are still some effects associated with the general operations of slipway machinery, but those effects are likely no more than minor.

7.0 DISCHARGES TO SOIL:

Ground core sampling taken in early 2017, show concentrations of copper (Cu), zinc (Zn), and small areas of lead (Pb) in shallow surfaces soils of the yard proper. These are not considered soluble or have more than a MODERATE degree of mobility that would affect the purposes of this application. But will be dealt with in due course when the existing reconstruction and earthworks resource consents are undertaken in conjunction with a joint Council consent application. In the present event, closer maintenance and servicing of the CSW system will show even greater improvement in the monitoring results in run-off events. I refer therefore, to the 9 May 2017 NRC monitoring report that is attached.

8.0 DISCHARGES TO AIR:

Discharges to air are confined to the boundaries of the boatyard and slipway save rising air currents containing odours or noise that may effect at most one other property across Richardson St from the boatyard. These factors are born out not only in the last fifteen years in practice, but are also accurately depicted in the “Woodward Clyde Air Modelling Report 2000”. In the event of these understanding, combined with approximately a 75% reduction and/or decommissioning of yard activities, there will be an overall equal effect on the relationship of those discharges from them that have been a major consideration in the context of this application.

CONTAINMENT MANAGEMENT:

The current Combined Council Operational Management Plan is in effect until August 2018. It is hoped to complete a review of those plans in conjunction with the renewal of Discharge Consents now at hand, and once again when the remediation reconstruction of the yard proper and slipway and new proposed foreshore structures are completed. In this, I refer to the attached Combined Operational Management Plan approved 27 August 2014.

9.0 CONCLUSIONS:

The nature of the discharges from this activity will forever have some greater or lesser effects on the surrounding coastal environment that need to be mitigated, controlled and/or otherwise removed from the site. In this I have endeavoured to do just that, not only by principles of best practice (BPO), but also by reductions in scale and intensity of operations over the entire site. With that said, the proposed is therefore in keeping with the principles contained in the Act and should be granted a new term duration associated with those of resource consents that expire in March 2036, or 18 years.

With all of the above in mind, I view that this application can be non-notified.


Doug Schmuck
Owner/proprietor
For:



DOUG'S OPUA BOATYARD
1 RICHARDSON STREET
OPUA 0200
B.O.L. Ph/Fax (09) 462 7055
GST No. 52-048-097

23 September 2017

ATTACHMENTS IN EVIDENCE:

- I. DISCHARGE CONSENTS: CON20060791410(10-15).
- II. THE 13 MAY 2017 NRC MONITORING REPORT.
- III. COMBINED OPERATIONAL MANAGEMENT PLAN THAT EXPIRES 27 AUGUST 2018.
- IV. CONTAINMENT TREATMENT SYSTEM DIAGRAMS (1&2).
- V. Woodward-Clyde (NZ) Limited, Air Emissions report, 1 February 2017.



CON20060791410
(10-15)

Resource Consent

*Pursuant to the Resource Management Act 1991, the Northland Regional Council
(hereinafter called "the Council") does hereby grant a Resource Consent to:*

DOUG'S OPUA BOATYARD (D C SCHMUCK), 1 RICHARDSON STREET, OPUA 0200

To carry out the following activities associated with the operation of a boatyard at Richardson Street, Opuia:

- (10) To discharge treated wash water to the coastal marine area at or about location co-ordinates 1701520E 6091850N.
- (11) To discharge contaminants to air from marine vessel construction, sale, repair, maintenance and associated activities on Sec 2 SO 24139, Pt Sec 1 SO 16553, Sec 3 SO 46155, Sec 1 – 4 SO 63634, Blk V Russell SD, at or about location co-ordinates 1701470E 6091840N.
- (12) To discharge contaminants to air in the coastal marine area from marine vessel construction, sale, repair, maintenance and associated activities at or about location co-ordinates 1701520E 6091850N.
- (13) To discharge contaminants to ground as a result of boat maintenance activities on Sec 2 SO 24139, Pt Sec 1 SO 16553, Sec 3 SO 46155. Secs 2 and 3 SO 63634. Blk V Russell SD at or about location co-ordinates 1701470E 6091840N.
- (14) To discharge stormwater to an unnamed tributary of the Veronica Channel on Sec 3 SO 46155 Blk V Russell SD at or about location co-ordinates 1701470E 6091840N.
- (15) To discharge stormwater to the coastal marine area at or about map reference location co-ordinates 1701520E 6091850N.

Note: All location co-ordinates in this document refer to Geodetic Datum 2000, New Zealand Transverse Mercator Projection.

Subject to the following conditions:

(10) DISCHARGE OF TREATED WASH WATER TO THE COASTAL MARINE AREA

- 1 The total quantity discharged in the exercise of this consent shall not exceed one cubic metre per day.
- 2 The boat wash water containment system, and CTS treatment system shall be constructed and be fully operational in general accordance with the details provided in the application, by no later than 31 March 2009.

- 3 The wash water discharge treatment system shall:
- (a) Retain all particles larger than 60 micrometres (μm) diameter.
 - (b) Retain no less than 90% of total suspended solids.
 - (c) Retain no less than 80% total copper and zinc, and no less than 80% soluble copper and zinc.

- 4 Notwithstanding any other conditions of this consent, the discharge shall not result in any of the following effects in the receiving waters, at or beyond the edge of the mixing zone:

- (a) A reduction in the dissolved oxygen concentration to below 80% of saturation.
- (b) A change in the natural water temperature greater than three degrees Celsius.
- (c) A change in the natural pH greater than 0.2 units.
- (d) The change in water clarity as measured by the black disc method shall not be greater than 20%.
- (e) The change in hue as measured with the Maunsell Colour Chart System shall not exceed 10 units.
- (f) The production of any conspicuous oil or grease films, scums or conspicuous floating or suspended materials.
- (g) The concentration of metals shall not exceed the following:

total copper	0.0013 g/m ³
total lead	0.0044 g/m ³
total zinc	0.015 g/m ³

Guideline: ANZECC 2000: 95% specie level of protection for slightly-moderately disturbed systems.

- (h) Any emission of objectionable odour.
- (i) Any adverse effect on aquatic life.

The harbour waters within a 10 metre radius of the discharge point, shall be deemed to be the mixing zone for this discharge.

When the background water quality in the coastal waters does not meet the above standards, then the discharge shall not cause the water quality in the harbour at the edge of the mixing zone to be worse than the background water quality.

(Note: For compliance purposes, when comparing background and receiving water quality results the error of the analytical method, or measuring instrument, at the 95%ile confidence level shall be taken into account.

The Consent Holder shall provide and maintain easy access to a sampling point in the discharge pipe at the end of the jetty. This shall allow for the taking of samples, and the introduction of tracer substances as required.)

(11 & 12) DISCHARGES TO AIR

- 5 Except as required by the following conditions, no alteration shall be made to plant or processes that may significantly change the nature, effects, or quantity of contaminants discharged as described in the consent application without the prior written approval of the Council.
- 6 The exercise of this consent shall not give rise to any discharge of contaminants, which is noxious, dangerous, offensive or objectionable at or beyond the boundaries of Sec 2 SO 24139, Pt Sec 1 SO 16553, Sec 3 SO 46155, Sec 1 – 4 SO 63634, Blk V and the area within the Coastal Marine Area defined by the Offensive Odour Boundary in NRC Plan No 3231c.
- 7 Where practicable, the Consent Holder shall preferentially use surface coating materials and application methods that have a low odour and/or low emission/loss potential.
- 8 All operations shall be conducted with regard to wind direction and wind strength to prevent or minimise any adverse effects on the environment.
- 9 Notwithstanding Condition 8, the Consent Holder shall not apply antifouling paint using spray application equipment when the wind speed is below 0.5 m/s (as a 60 second average) or the wind direction (as a 60 second average) is blowing from between 45 degrees through to 170 degrees.
- 10 The discharge of contaminants into the air from the exercise of this consent shall not cause or significantly contribute to ambient concentrations of the following contaminants exceeding the following limits at or beyond the boundaries of Sec 2 SO 24139, Pt Sec 1 SO 16553, Sec 3 SO 46155, Sec 1 – 4 SO 63634, Blk V and the area within the Coastal Marine Area defined by the Offensive Odour Boundary in NRC Plan No 3231c.

Contaminant	Ambient Limit (micrograms per cubic metre)
Particulate (PM ₁₀)	50 micrograms per cubic metre (24 hour average)
Lead and lead compounds expressed as lead	0.5 micrograms per cubic metre (3 month moving average)
Copper and copper compounds expressed as copper	20 micrograms per cubic metre (8 hour average)
Zinc and zinc compounds expressed as zinc	4.8 micrograms per cubic metre (8 hour average)
Tin and tin compounds expressed as tin	2.4 micrograms per cubic metre (8 hour average)
Isocyanates, (as -NCO), including all isocyanates and pre-polymers as mists, dusts, and vapours	0.048 micrograms per cubic metre (8 hour average)

- 11 As far as is practicable, work areas and surrounding areas shall be cleared of accumulations of waste generated as a result of, and as soon as is practicable after completion of any abrasive blasting or water blasting operation. All waste material shall be disposed of at a location with the appropriate resource consents.

- 12 Dry abrasive blasting operations shall only be carried out when the object's size, shape or weight prevents it being practicably transported and blasted in an abrasive blasting booth for which appropriate resource consents are held.
- 13 All items to be dry blasted outside of a booth shall be screened by means of covers, tarpaulins, cladding, or other means, as completely as is practicable, to contain dust emissions and depositions, and to restrict the spread of all blasting debris.
- 14 All abrasive used for abrasive blasting shall contain less than 2% by dry weight free silica.

(13) DISCHARGE TO GROUND

- 15 The Consent Holder shall undertake such measures as are necessary to minimise the discharge of contaminants to ground within the boatyard site and adjacent Esplanade Reserve. Notwithstanding the generality of the foregoing, the following measures shall be carried out:

- (a) Drop sheets shall be used to collect materials that arise from boat maintenance activities within those areas of the boatyard where the yard surface is pervious (ie. metallised areas, grassed areas etc).
- (b) Maintenance activities shall not take place under conditions that would preclude the use of drop sheets from effectively containing materials that have arisen from boat maintenance activities.

Advice Note: Such conditions may include wind or rain that prevents materials from settling and/or remaining within the confines of the drop sheets.

- (c) All materials accumulating on drop sheets shall be removed daily or upon the completion of maintenance activities, whichever occurs first. The collected materials shall be disposed of at an authorised hazardous waste treatment or disposal facility.
- (d) Any materials arising from boat maintenance activities that escape from drop sheets or impervious yard surfaces shall be removed from the yard surface and collected for disposal to an authorised hazardous waste treatment or disposal facility.
- (e) Water blasting or washing of vessel hulls shall only take place over impervious yard surfaces (ie. the turntable) which are able to collect wastewater for processing via the wastewater treatment system.

All measures shall be incorporated into the Management Plan required in accordance with the requirements of Condition 21 (below).

(14) DISCHARGE OF STORMWATER TO WATER

16 The stormwater discharge treatment system shall:

- (a) Retain all particles larger than 60 micrometres (μm) diameter.
- (b) Retain no less than 90% of total suspended solids.
- (c) Retain no less than 80% total copper and zinc, and no less than 80% soluble copper and zinc.

17 Notwithstanding any other conditions of this consent, the discharge shall not result in any of the following effects in the receiving water, at or beyond the edge of the mixing zone:

- (a) A reduction in the dissolved oxygen concentration to below 80% of saturation.
- (b) A change in the natural water temperature greater than three degrees Celsius.
- (c) A change in the natural pH greater than 0.2 units.
- (d) The change in clarity as measured by the black disc method shall not be greater than 40%.
- (e) The change in hue as measured with the Maunsell Colour Chart System shall not exceed 10 units.
- (f) The production of any conspicuous oil or grease films, scums or conspicuous floating or suspended materials.
- (g) The concentration of metals shall not exceed the following:

total copper	0.0014 g/m ³
total lead	0.0034 g/m ³
total zinc	0.008 g/m ³

Guideline: ANZEEC 2000: 95% specie level of protection for slightly-moderately disturbed systems.

- (h) Any emission of objectionable odour.

The drain waters immediately upstream of the coastal walkway, shall be deemed to be the edge of the mixing zone for this discharge.

When the background water quality in the drain does not meet the above standards, then the discharge shall not cause the water quality in the drain at or beyond the edge of the mixing zone to be worse than the background water quality.

(Note: For compliance purposes, when comparing background and receiving water quality results the error of the analytical method, or measuring instrument, at the 95%ile confidence level shall be taken into account.)

18 The discharge of treated stormwater from the boatyard to the stream authorised by this consent shall be discontinued upon connection of the treated stormwater discharge into the discharge pipe to the wharf.

(15) DISCHARGE OF STORMWATER TO THE CMA

19 The stormwater discharge treatment system shall:

- (a) Retain all particles larger than 60 micrometres (μm) diameter.
- (b) Retain no less than 90% of total suspended solids.
- (c) Retain no less than 80% total copper and zinc, and no less than 80% soluble copper and zinc.

20 Notwithstanding any other conditions of this consent, the discharge shall not result in any of the following effects in the receiving water, at or beyond the edge of the mixing zone:

- (a) A reduction in the dissolved oxygen concentration to below 80% of saturation.
- (b) A change in the natural water temperature greater than three degrees Celsius.
- (c) A change in the natural pH greater than 0.2 units.
- (d) The change in water clarity as measured by the black disc method shall not be greater than 20%.
- (e) The change in hue as measured with the Maunsell Colour Chart System shall not exceed 10 units.
- (f) The production of any conspicuous oil or grease films, scums or conspicuous floating or suspended materials.
- (g) The concentration of metals shall not exceed the following:

total copper	0.0013 g/m ³
total lead	0.0044 g/m ³
total zinc	0.015 g/m ³

Guideline: ANZECC 2000: 95% specie level of protection for slightly-moderately disturbed systems.

- (h) Any emission of objectionable odour.
- (i) Any adverse effect on aquatic life.

The harbour waters within a 10 metre radius of the discharge point shall be deemed to be the mixing zone for this discharge.

When the background water quality in the coastal waters does not meet the above standards, then the discharge shall not cause the water quality in the harbour at the edge of the mixing zone to be worse than the background water quality.

(Note: For compliance purposes, when comparing background and receiving water quality results the error of the analytical method, or measuring instrument, at the 95%ile confidence level shall be taken into account.)

GENERAL CONDITIONS APPLYING TO CONSENTS (10 TO 15)

- 21 The Consent Holder shall maintain the Management Plan that has been approved by the Council (see Advice Note 1 below). The Management Plan shall cover all aspects of:
- (a) The operation and maintenance of the boat washdown area;
 - (b) The operation and maintenance of the wash water treatment system;
 - (c) The operation and maintenance of the stormwater treatment system;
 - (d) Measures to minimise the discharge of contaminants to ground. (see Note 2)
 - (e) Measures to minimise the emissions and any adverse effects on the environment from the discharges to air; and
 - (f) Contingency measures for unforeseen or emergency situations.

The operation and maintenance of the above systems, and the boatyard operations, shall be carried out in accordance with the approved Management Plan.

*Advice Note: The initial approved Management Plan shall be that **attached** to this consent.*

- 22 The Consent Holder shall review the Management Plan, in consultation with the Council, at no greater than three yearly intervals.
- 23 The Consent Holder shall maintain all facilities covered by these consents in good order and repair.
- 24 The Consent Holder shall, for the purposes of adequately monitoring the consent as required under Section 35 of the Act, maintain records of any complaints relating to the discharge of contaminants received by the Consent Holder, as detailed below:
- (a) The name and address of the complainant;
 - (b) The date and time the complaint is received;
 - (c) The duration of the event that gave rise to the complaint;
 - (d) The location from which the complaint arose;
 - (e) The weather conditions prevailing at that time;
 - (f) Any events in the management and operation of any processes that may have resulted in the increased discharge of contaminants; and
 - (g) Any actions taken by the Consent Holder, where possible, to minimise the contaminant emissions.

The Consent Holder shall notify the Council, as soon as is practicable, of any complaint received. Records of the above shall be sent to the Council upon request.

- 25 The Consent Holder shall, for the purposes of adequately monitoring the consent as required under Section 35 of the Act, on becoming aware of any contaminant associated with the Consent Holder's operations escaping otherwise than in conformity with this consent:

- (a) Immediately take such action, or execute such work as may be necessary, to stop and/or contain such escape; and
- (b) Immediately notify the Council by telephone of an escape of contaminant; and
- (c) Take all reasonable steps to remedy or mitigate any adverse effects on the environment resulting from the escape; and
- (d) Report to the Council in writing within one week on the cause of the escape of the contaminant and the steps taken or being taken to effectively control or prevent such escape.

26 The Council may, in accordance with Section 128 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions of this consent annually during the month of May. The review may be initiated for any one or more of the following purposes:

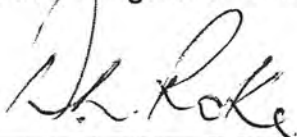
- (a) To deal with any adverse effects on the environment that may arise from the exercise of the consent and which it is appropriate to deal with at a later stage, or to deal with any such effects following assessment of the results of the monitoring of the consent and/or as a result of the Council's monitoring of the state of the environment in the area;
- (b) To require the adoption of the best practicable option to remove or reduce any adverse effect on the environment;
- (c) To provide for compliance with rules in the regional coastal plan relating to minimum standards of water quality that have been made operative since the commencement of the consent;
- (d) To deal with any material inaccuracies that may in future be found in the information made available with the application. (Notice may be served at any time for this reason).

The Consent Holder shall meet all reasonable costs of any such review.

EXPIRY DATE: 30 MARCH 2018 – for Resource Consents CON20060791410-13 and CON20060791415

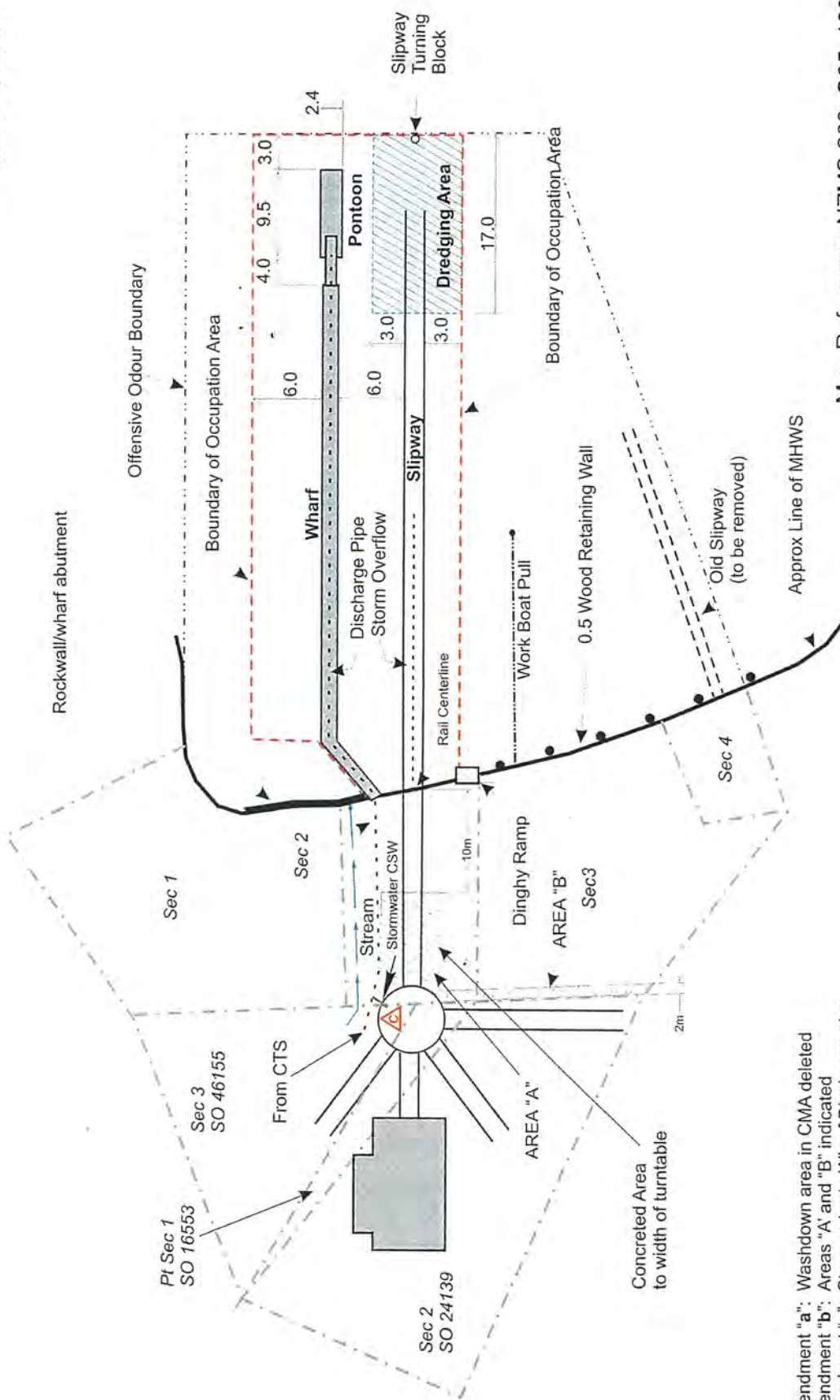
30 MARCH 2009 – for Resource Consent CON20060791414

ISSUED at Whangarei this Twentieth Day of May 2008



**DL Roke
Consents Manager**

Note: Dimensions in Metres



Amendment "a": Washdown area in CMA deleted
 Amendment "b": Areas "A" and "B" indicated
 Amendment "c": Stormwater to Wharf Discharge pipe

Map Reference: NZMS 260: Q05: 123-537

RESOURCE CONSENT NLD 99 7914 for Doug's Opua Boat Yard Boat Maintenance Facilities - Opua		NORTHLAND REGIONAL COUNCIL	
Dwn. App'd C N Anderson <i>[Signature]</i>	Date 04/08	Scale N.T.S.	Plan No. 3231c
No. a C N Anderson b C N Anderson c C N Anderson	Date 03/01 12/01 01/08		

Please Quote File: REG.007914.10, ACT.115041
APHI:SQUA

Te Kaunihera a rohe o Te Tai Tokerau

9 May 2017

Private Bag 9021
36 Water Street
WHANGĀREI 0148
New Zealand

Douglas Craig Schmuck
1 Richardson Street
Opua 0200

Phone: 09 470 1200
Freephone: 0800 002 004
Environmental Hotline:
0800 504 639
Fax: 09 470 1202
Email: mailroom@nrc.govt.nz

Dear Sir

www.nrc.govt.nz

**MONITORING REPORT FOR RESOURCE CONSENT: DISCHARGE OF TREATED BOAT
WASHDOWN WATER - RICHARDSON ST, OPUA. DISCHARGE OF STORMWATER TO
THE CMA**

A council officer inspected the stormwater system on 5 April 2017. This letter constitutes the report for that inspection.

Visual Inspection Results

Stormwater was flowing from an overnight rain event.

Sampling Results

Please find **enclosed** the test results for samples taken.

Consent Compliance

All conditions of the resource consent were complied with at the time of inspection.

An invoice which covers council's travel, fieldwork and administration costs for the inspection will follow shortly.

Please contact me if you have any queries.

Yours faithfully



Adam Phillips
Environmental Monitoring Officer - Opua

A944886

Discharge and Receiving Water Quality Testing Results: 20170056

Sampling date: 5 April 2017

Determinands	Site 107319 Doug's Opua Boatyard at end of pontoon off the end of Doug's Jetty	Site 107733 Opua Stream at just above CMA.	Site 107734 Stormwater discharge at point of discharge to stream (prior to mixing)	Site 310388 Doug's Opua Boatyard at Point of Discharge	Site 310389 Doug's Opua Boatyard at Upstream of discharge
Copper Total (g/m3)	<0.002	0.0047	0.0024	0.46	0.015
Lead Total (g/m3)	<0.001	0.0011	0.0011	0.024	0.0018
Total Suspended Solids (g/m3)	39	9	10	5	62
Zinc Total (g/m3)	<0.01	0.015	0.011	0.62	0.016

COMBINED COUNCIL

OPERATIONAL MANAGEMENT PLAN REVIEW FOR: DOUG'S OPUA BOATYARD

1. **The scope of this plan review is to update operational management parameters of a boat maintenance facility as agreed to with each of the representative Councils in conjunction with resource consents CON NLD 997914 (1-4 & 6-9), CON2006 0791410 (10-15) AND CON201207914 (16-18), AND RC 2000812:**

In principle, the purpose of this plan, is to continue a sustainable system of operational management and maintenance in conjunction with conditions of consent regarding discharge to the air, ground, and water from the processes of maintenance, repair, and construction of vessels whilst at or on the site associated with the above land use consents. This plan further speaks to conditions of consent (RC 2000812) #'s 3,5,6, & 7, dealing with car parking, safety/security lighting, and signage to effect public knowledge, both general and boating, about the yard operational parameters associated with these consents.

The goals of this plan are therefore, to affect at all practicable times and in the best practice method, a system of adherence to the above principles of consent in achieving conditional criteria related to discharges/environmental effects from those activities and their compatibility between land use and occupation of public and private land, for better understanding within the community in which they must coexist.

This plan review acknowledges treated discharge water access to the new Opuā Sanitary Works Scheme (SWSS), Building Consent Number BC-2012-965/1, whilst also providing sufficient capability for emergency procedures and back up in the event of a required discharge into the CMA pursuant to the existing discharge consents.

There are also provisions in this plan to provide operational notice to the FNDC as to the use of the public space for the maintenance, repair, and haulage of vessels onto the site where they overhang (Areas "A"); over and above any normal cleaning, scrapping, and/or wet sanding that any particular vessel may incur; and over area of public space designated for both public and commercial use of that area designated for mast, sails, and rigging.

The implementation of the plan rests with one person; the owner of Doug's Opuā Boatyard and/or his assignees and/or agents.

2. **Environmental policies and objectives:**

This boat maintenance facility is an integral planning unit utilizing private land, public land, and seabed within the CMA. There are a considerable number of interrelated activities that take place on each that create a cumulative effect on the overall surrounding marine and coastal residential environment.

Management policies will depend largely on the scope of each and every individual job, scale of works undertaken, and most practical solution to control discharges and/or effects from those works.

Management objectives will largely focus on the ability to contain and/or dispose of any discharge from the work processes to a controlled site or to discharge as a treated by product as per consent parameters into the surrounding environment.

3. Factors of operational management:

There are nine factors of management with regard to boatyard/slipway operations within: (The hours of operation for all outdoor activities associated with the boatyard, with the exception of haulage, shall be limited to 0700 – 2000 hours Monday to Friday and 0800 – 2000 hours Saturday, Sunday and public holidays).

They are therefore in the following order:

- (a) The slipway operations and maintenance of the boat wash-down area "A" including notice of any repair or maintenance work on vessels in or over-hanging that area, but above 10 meters of the MHWS/CMA; that is unable to be moved entirely within the consent holders site, by virtue of their length or configuration; to the FNDC, which will therefore set the parameters of use prescribed in conditions of consent (RC 2000812) #'s 4 & 8 & 13; and notice in regards to conditions of consent (RC2000812) #15(b).
- (b) The best practice operations and maintenance of the wash-water Containment Treatment System (CTS) as prescribed in the discharge consents [CON20060791410 (10)]; (as shown on the survey plans #8095);
- (c) The best practice operations and maintenance of the storm-water treatment (CSW) as prescribed in the discharge consents [CON20060791410 (14&15)]; (as shown on survey plans #8095);
- (d) Measures to minimise the discharge of contaminants to ground pursuant to condition of consent [CON20060791410 (13)] #15 and/or for earth works in reconstruction pursuant to condition of consent (RC 2000812) #11;
- (e) Measures to minimise the emissions and any adverse effects on the surrounding environment from discharges to air, and/or any noise limits prescribed by condition of consent (RC2000812) #14 and discharge consents [CON20060791410 (11&12)].

- (f) Measures to minimise the effects on the public use of the coastal walking track and local purpose esplanade reserve; i.e., signage, security lighting, and emergency safety barriers when required prescribed by conditions of consent (RC2000812) #'s 7 & 9.
- (g) Measures to minimise the effects of wharf and slipway structures operations and maintenance within the CMA as prescribed by discharge consents [CON20060791410 (12)].
- (h) Measures to mitigate the effects of maintenance dredging;
- (i) Contingency measures for any unforeseen and/or emergency situation;

4. Procedures for factors of operational management:

a) Factor 3a; wash-down area "A" (as shown on the attached survey plans #8095) will be cleaned from the previous operational day and left broom clean, as far as practical, of any excessive debris for the next operational event contained by 2 metre high screening along the boundary of area "A" depending on wind strength and direction, where either applies. These operations may include washing, scrapping, chipping, both wet and /or dry sanding, chemical removal, and water and/or controlled sand blasting of any part of the hull and deck, or equipment attached to the hull and deck, in the preparation of a vessel for maintenance or repair prior to being relocated into the boatyard proper, behind the demarcation line of area "B" (as shown on the attached survey plans # 8095). Notice by e-mail will be provided to the FNDC, at the end of each working day, as to the proposed duration of any maintenance, repair, and/or haulage, and any equipment and/or materials to effect those works, on any given vessel standing on its cradle within or overhanging area "A" **that cannot be moved by virtue of its length and configuration entirely within the boatyard site, and/or ancillary maintenance activities on the reserve.** (as shown on the attached survey plans # 8095 & attachment "A").

b) Factor 3b; the (CTS) will stand charged in a full state at all times. Visual and/or mechanical inspections of operational parameters are on going during and directly after wash-down operations. Equilibrium is usually reached 15 or 20 minutes after all input ceases. Since the (CTS), is a unidirectional system when not discharging, mechanical or line maintenance is generally conducted on periodic system pump outs. Ref: attached diagram "A1". In turn, all systems can be site inspected by manhole cover removal. Operational effectiveness parameters can then be assessed and most if not all maintenance or alterations affected at that time. Any necessary contract removal of containment debris will be certified carrier. (Also refer to clause 6 below).

c) Factor 3c; (CSW) can be checked for any flow blockage at any time. The pre-sump or initial trap will collect the lions share of any granular sediments prior to storm-water moving through the main (CSW) weir. The primary function, of the (CSW), is to contain any heavy metal particles from migrating into the CMA. Ref: attached diagram "A2". Any contract removal of containment debris will be by certified carrier.

d) Factor 3d; At all practical times where any excessive grinding, scrapping, and/or sanding discharges can be collected by drop cloth or pans, canisters and/or packaged, they will be disposed of at a proper land fill or controlled site. Any earthwork materials, surplus to land development requirements, will be secured on section 2 & 3 of SO 68634 or removed from the site, so that siltation and/or erosion does not occur;

e) Factor 3e; screens and containers will be used to filter emissions at all practical times to one area demarked as the paint cleaning station. Screening will also be erected, when necessarily, to contain any over-spray and/or dust, into areas "A" and/or "B" during any form of blasting operations. To a large degree, the effects of these operations, is self managing due to the on-shore wind-funnelling effect at this particular site in relationship to the landforms of the slipway. They are therefore, totally confined to operational containment areas of this boat maintenance facility as delineated on survey plans #8095. (Also refer to factor a) above). All facility machinery is now electrified to bring any noise level emissions even lower since the grant of consent in 2002. In keeping with the discharge parameters of consent and District Plan rules regarding set-backs, there is unlikely to be any adverse effects on the adjoining public land that have not already existed for 38 years operationally, in its current form.

f) Factor 3f; the boatyard has always undertaken to keep the walking track and public land access safe and open at all practical times during the daily operations of the slipway. (Screening and/or impermeable surfaces can be implemented) when needed to control any over-spray to the public land adjacent to the slipway corridor associated with washing down and/or otherwise in contrary wind conditions or in other circumstances that would restrict access to and along the CMA. The boatyard has always secured all un- occupied machinery and/or un-used equipment from any unauthorized movements during the hours of darkness. If in the case of any reason for personal safety, protection of property, and/or for the integrity of equipment itself, to affect safe operations, trestle barriers will be placed over any obstructions or across the reserve to notify the public in the case of any emergency stopping of equipment or vessels thereon. This is in addition to security lighting and warning signs attached at the slipway crossing post at the wharf abutment and on the adjacent yard retaining wall; that sign facing the crossing. Yard dinghy storage spaces/racks on the slipway are for authorized yard dinghies only and are not for general

public use. They also help demark the operational boundary of the slipway corridor of section 2 with those areas of the open space on the adjoining reserve as delineated on survey plans #8095.

g) Factor 3g; operational parameters of the wharf and slipway in effect are issues of discharge to surrounding waters when any vessel is on or along side these structures. Washing down of vessels for inspection and/or cleaning will be by low pressure hose. Containment of sanding dust, scraping particles, or heavy fluids by drop cloth, paper barrier or vacuum removal to allow relocation of those materials to a proper waste collection site within the boatyard.

h) Factor 3h; periodic dredging will involve the removal of spoil by digger to a proper land fill or discharge at sea by a contract provider. These operations will be conducted at spring low tides when water depths are at a minimum. Duration of works is therefore considerably limited to a matter of hours over a period of approximately four or five days. All dredging will be contained within an enclosure boom.

i) Factor 3i; there is only one unforeseeable discharge emergency that would result in an excessive spill at this particular operational site. That is the rupture of or damage to one of the (CTS) containment tanks.

5. Procedures or contingency measures in emergencies:

a) Contingency measures at this particular site rest largely on the ability to control run-off into the CMA. Because of the close proximity of access to the CMA, the best option is multiple collection pits or traps for water and debris collection and/or filtration. In the past this method has proved very effective for any surface water discharge issue and can be further enhanced for increased efficiency of the (CTS) within the structure of the slipway itself, i.e. the installation of ancillary traps. Oil and fuel spills will be dealt with in the same manner after soaking up or removal of any excessive fluids for relocation to a disposal site.

b) In the event of any discharge that does not comply with discharge consent conditions, the NRC will be contacted by telephone as soon as possible after corrective action is taken, pursuant to the requirements of condition of consent [CON20060791410 (10-15) #25]. In any other emergency of the kind that might otherwise effect public access to the esplanade reserve, the FNDC will be notified of any corrective action that may require closure of the adjoining reserve.

c) All other discharges on site can otherwise be contained on site save the event of conflagration of the shed and its stores of paints and thinners there in. The effects of this event, although considerable, would still be somewhat minimal due to the limited quantities of any one product in stores. Effective quick use of multiple dry powder fire

extinguishers should see and end to the issue in relatively quick order. Barring that remedy, I can call upon about 5000 Ltrs of water to damp things down. Hopefully by then the fire brigade will be on site and in control of the situation.

6.Procedures with regard to maintenance of systems:

Due to the limited number of vessels hauled at this site, the discharge containment systems only need to be monitored at a six monthly period over the daily operational inspections. It is proposed the entire system undergo cleaning on a yearly basis as past operational parameters indicate. I believe a good operational maintenance period should be completed by spring each year and not later than the end of September prior to the next seasonal influx of haul outs. These procedures may include but are not limited to:

- a. Drainage of the system by pumping to a tanker and removal from the site.
- b. Inspection, cleaning, and replacement of all or any functional systems apparatus.
- c. Removal and replacement of filtration materials.
- d. Inspect and confirm all interconnections from pick-up to discharge points.
- e. Develop further trapping systems and infrastructures for greater discharge control to meet best practice criteria into the future (as shown on survey plans #8095).

7. Management Plan Review Criteria:

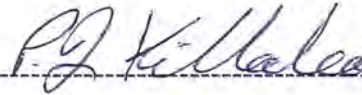
The frequency of review of this plan should be at three year intervals and/or associated with any substantial changes to operational parameters that effect any compatibility to, and/or in cooperation with any policy or rule in a (District or Coastal Plan).

The review method will be by resubmission of the plan with any proposed modifications to practice or operational changes in systems or functions. That any improvements will be undertaken at any reasonable time to affect improved containment processes for the entire site. Monitoring data, when required, should set any system criteria changes for best practice methods associated with discharge consents.

Approval of any changes herein shall be by agreement with the consent holder and the individual Council authorities pursuant to the conditions of consent by which this review is undertaken.

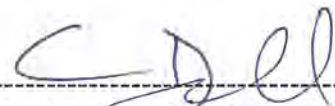
This plan is therefore reviewed in compliance to conditions of consent (RC2000812) #15: on 26th August 2014.

For: The Far North District Council



This plan is therefore reviewed in compliance to conditions of consent [CON200607914 (10-15)]# 21: on 27 August 2014.

For: The Northland Regional Council


Consents Monitoring Manager

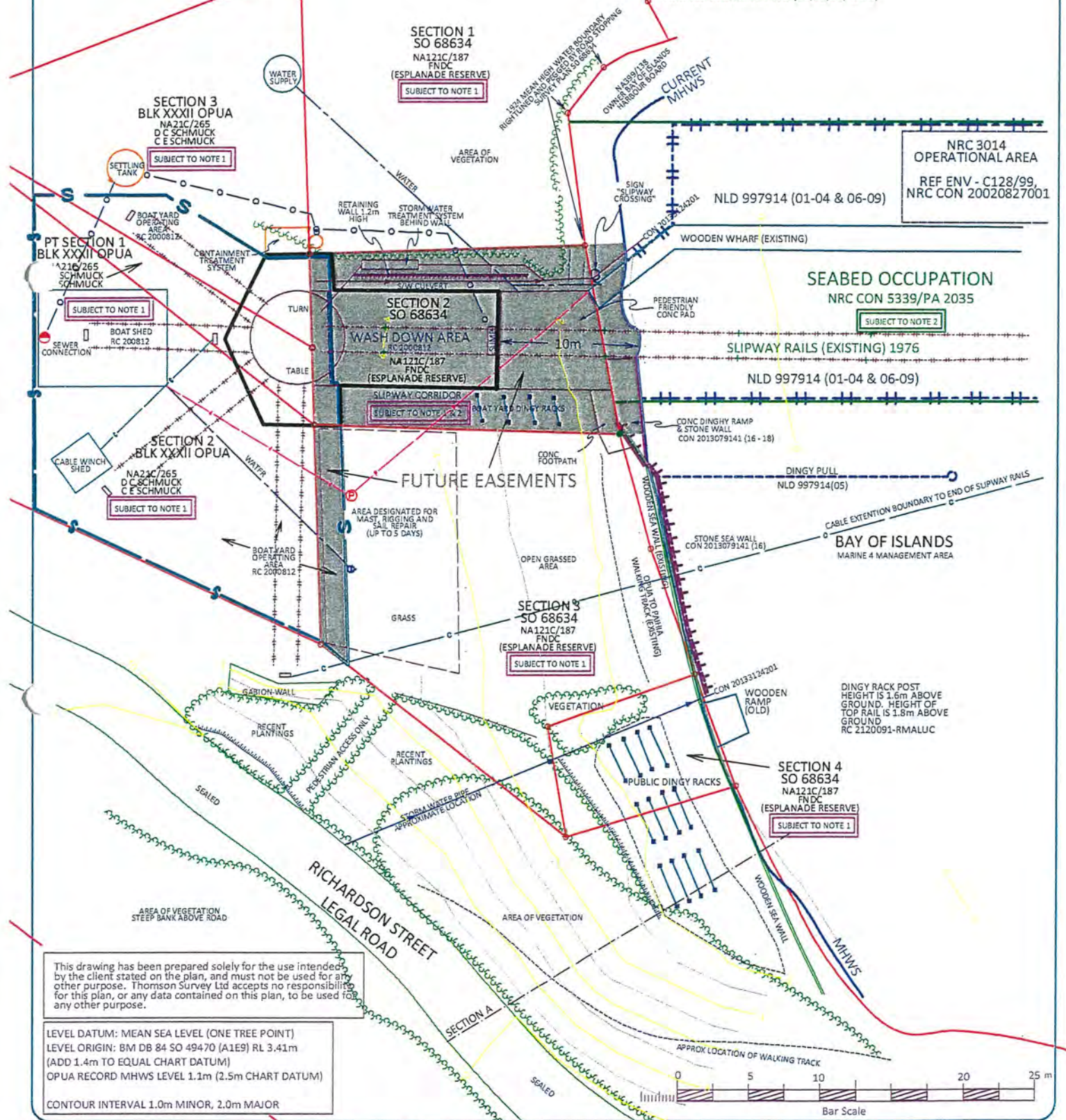
* References for this OMP, but not otherwise attached are: Resource Consents RC 2000812, NLD 99-7914, CON20060791410 along with approved revisions 1 October 2002, to this plan, CON 20120791416 and RC 2140229-RMALUC along with specific attachments: (Survey plans #8095, #8095 sheets: "A", "B", "C", & NRC discharge consents survey plan #03.11 sheets: "A", & diagrams: "A1", & "A2").

LEGEND

-  WASHDOWN CONTAINMENT AREA
-  STORMWATER CATCHMENT AREA
-  FUTURE EASEMENTS
-  CABLE DEADMAN

NOTE # 1
EXISTING CONSENTS AND USES
REFER:
CU192/1976 - ENV - A26/2000
RC 2000812
ENV-2010-AKL-000311 (WITHDRAWN 06.04.2011 BY SURVEY PLAN 8095)
NRC CON 200607914 (11 & 13)
BUILDING SETBACKS FROM CMA EXEMPT PURSUANT
TO FNDC DISTRICT PLAN RULE 12.7.6.1(ix)
* THIS PLAN INCORPORATES THE 4/4/12 SURVEY PLAN 8095
APPROVED ON 18/4/12 BY THE WHANGAROA/BOI COMMUNITY BOARD
DOCUMENT REFERENCE # A1188709

NOTE # 2
NRC CON 5339/PA2035/1989
NRC CON 20030791410 (01-03) & (05-09)
NRC CON 20060791410 (10, 12, 14, & 15)



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LEVEL DATUM: MEAN SEA LEVEL (ONE TREE POINT)
LEVEL ORIGIN: BM DB 84 SO 49470 (A1E9) RL 3.41m
(ADD 1.4m TO EQUAL CHART DATUM)
OPUA RECORD MHWS LEVEL 1.1m (2.5m CHART DATUM)
CONTOUR INTERVAL 1.0m MINOR, 2.0m MAJOR

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**JOINT NRC/FNDC RESOURCE
CONSENTS & EXISTING USES
DOUGS OPUA BOAT YARD**
NLD 997914 (01-18) / RC 2000812

Name	Date	ORIGINAL
Survey		SCALE
Design		SHEET
Drawn	SH 28-02-11	SIZE
Approved		1:250 A3
Rev	SL 1-05-13	
8095 RC SITE PLAN 2.lcd		

Surveyors
Ref. No:
8095
Series
Sheet of

LEGEND

***** AREA A

***** AREA B

SECTIONS 1 - 4 SO 68634 (ESPLANADE)
(SUBJECT TO CONSENT CONDITIONS)
PROPOSED EASEMENT AREAS &
EXISTING USES CU192/1976)

NOTE: THERE ARE EXISTING CONSENTS AND PROCEEDINGS

REFER:

- APPENDIX 1 - 1966 COUNCIL AUTHORISATION
- APPENDIX 2 - 1976 COUNCIL CONSENT CU 192
- APPENDIX 3 - 1989 MINISTER OF CONSERVATION CONSENT PA2035
- APPENDIX 4 - 2000 ENVIRONMENT COURT DECISION A26/2000 A135/99
- APPENDIX 5 - 2002 ENVIRONMENT COURT ORDER CONSENT NLD 99 7914, RC 2000812
- APPENDIX 6 - 2008 NRC CONSENT CON20060791410
- APPENDIX 7 - 2009 FNDC OPERATIVE DISTRICT PLAN 12.7.6.1.1(ix) (BUILDING SETBACK)
- APPENDIX 8 - 2011 FNDC LETTER CONFIRMING PERMISSION
- APPENDIX 9 - 2013 NRC CONSENT CON20120791416
- APPENDIX 10 - LEGAL SURVEY PLANS
- APPENDIX 11 - 2014 FNDC CONSENT DINGHY RACKS

THIS PLAN SHOWS CONSENTED ACTIVITIES OVER PRIVATE LAND, ESPALNADE RESERVE (FORMERLY LEGAL ROAD) AND THE COASTAL MARINE AREA. THESE CONSENTS ARE REFERENCED IN THE APPENDICES ATTACHED. CONSENTS ARE INCLUDED FROM THE FNDC, NRC, AND ENVIRONMENT COURT

SECTION 1
SO 68634
NA221C/187
FNUC
(ESPLANADE RESERVE)

SECTION 3
BLK XXXII OPUA
NA221C/265
D C SCHMUCK
C E SCHMUCK

SETTING POND
Appendix 5, p15, #11b.

PT SECTION 1
BLK XXXII OPUA
NA221C/265
D C SCHMUCK
C E SCHMUCK

SHED
Appendix 7, p7, #12.7.6.1.1.(ix)
Appendix 5, p15, #11a.
Appendix 5, p15, #11b.

CONTAINMENT
TREATMENT SYSTEM
Appendix 5, p15, #11b.

BOAT YARD OPERATING AREA
Appendix 5, p15, #11a.
Appendix 1, p1

TURN TABLE
Appendix 5, p15, #11a & c.
Appendix 5, p15, #11b.

SLIPWAY
Appendix 5, p15, #11a & c.
Appendix 5, p15, #11b.

WASH DOWN AREA
Appendix 5, p15, #11a & c.
Appendix 5, p15, #11b.

PROPOSED SECURITY
LAMP POLE
Appendix 5, p15, #11a & c.
Appendix 5, p15, #11b.

POWER
Appendix 5, p15, #11a & c.
Appendix 5, p15, #11b.

AREA DESIGNATED FOR
MAST, RIGGING AND
SAIL REPAIR
(UP TO 5 DAYS)
Appendix 5, p1, #3

WATER
Appendix 5, p15, #11a & c.
Appendix 5, p15, #11b.

GRASS

OPEN GRASSED AREA
Appendix 8, p2, #7
EARTHWORKS RIGHT
Appendix 5, p17, #111

WOODEN RAMP
(OLD)

SECTION 4
SO 68634
NA221C/187
FNUC
(ESPLANADE RESERVE)

VEGETATION

BOAT RACKS

WOODEN WALL

AREA OF VEGETATION
STEEP BANK ABOVE ROAD

RECENT PLANTINGS

PEDESTRIAN ACCESS ONLY

FORM WATER PIPE
APPROXIMATE LOCATION

SEALED

SEALED

SEALED

SEALED

SEALED

SEALED

SEE DIAGRAM B SHEET B

SEALED OCCUPATION RIGHT
(SLIPWAY & WHARF)
Appendix 5, p3, #109

MAINTENANCE DREDGING RIGHT
Appendix 5, p3, #108

BAY OF ISLANDS HARBOUR/RUSSELL HARBOUR
APPENDIX 10, p2
APPENDIX 10, p1

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(ADD 1.4m TO EQUAL CHART DATUM)
OPUA RECORD MHWS LEVEL 1.1m (2.5m CHART DATUM)

CONTOUR INTERVAL 1.0m MINOR, 2.0m MAJOR

DOUGS OPUA BOAT YARD CONSENTED ACTIVITIES AS OF JULY 2013 SHEET A

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Registered Land Surveyors, Planners & Land Development Consultants

Name	Date
Survey	SH 18-12-10
Design	SH 28-02-11
Drawn	SH 28-02-11
Approved	SL 23.05.14
Rev	SL 23.05.14

ORIGINAL

SCALE SHEET SIZE

1:250 A3

Surveyors

Ref. No:

8095

Series

Sheet A

DIAGRAM B

LEGEND

- AREA A
- SECTIONS 1 - 4 SO 68634 (ESPLANADE)
(SUBJECT TO CONSENT CONDITIONS)
PROPOSED EASEMENT AREAS &
EXISTING USES CU192/1976)

BOUNDARY OF OCCUPATION AREA
Appendix 3, p5

BOUNDARY OF OCCUPATION AREA
Appendix 5, p19

BAY OF ISLANDS HARBOUR/RUSSELL HARBOUR
APPENDIX 10, p2 APPENDIX 10, p1

SECTION 1
SO 68634
NA 1210/137
(ESPLANADE RESERVE)

SIGN "SLIPWAY
CROSSING"
Appendix 3, p3, #06

TREATED WASH WATER DISCHARGE
Appendix 5, p1, #10
Appendix 5, p7, #10
STORMWATER DISCHARGE
Appendix 6, p1, #15

JETTY (AVAILABLE FOR REASONABLE PUBLIC USE)
Appendix 3, p3, #1&5
Appendix 5, p3&4, #1-4

MHWS (C.M.A. BOUNDARY) FIXED
FROM FIELD MEASUREMENTS AND
OBSERVATIONS ON 02/08/2002
BY WILLIAMS & KING (SURVEYORS)

SEABED OCCUPATION RIGHT
(SLIPWAY & WHARF)
Appendix 5, p3, #09
Appendix 5, p5

MHWS FIXED 2010 FROM FIELD MEASUREMENTS
AND OBSERVATIONS ON 18/12/2010 BY
THOMSON SURVEY LTD

SLIPWAY RAILS & CABLES
Appendix 5, p3, #02

MAINTENANCE DREDGING RIGHT
Appendix 5, p3, #08
Appendix 5, p19

WOOD PEG MARKER
MHWS

CONC DINGHY RAMP
Appendix 9, p1, #17 & (18)
Appendix 8, p1, #2
Appendix 5, p3, #02

BOUNDARY OF OCCUPATION AREA
Appendix 5, p19

BOUNDARY OF OCCUPATION AREA
Appendix 3, p5

DINGHY RACKS
Appendix 11

CONC FOOTPATH
Appendix 8, p1, #1

STONE/CONC WALL
(EXISTING WOODEN
SEAWALL UPGRADED)
Appendix 9, p1&5, #16
Appendix 8, p1, #5
Appendix 5, p3, #03 & p15 #2)a.xii.

BOAT PULL & MOORING
Appendix 5, p3, #05

NOTE: THERE ARE EXISTING CONSENTS AND PROCEEDINGS

REFER:
APPENDIX 1 - 1966 COUNCIL AUTHORISATION
APPENDIX 2 - 1976 COUNCIL CONSENT CU 192
APPENDIX 3 - 1989 MINISTER OF CONSERVATION CONSENT PA2035
APPENDIX 4 - 2000 ENVIRONMENT COURT DECISION A26/2000 A135/99
APPENDIX 5 - 2002 ENVIRONMENT COURT ORDER CONSENT NLD 99 7914, RC 2000812
APPENDIX 6 - 2008 NRC CONSENT CON20060791410
APPENDIX 7 - 2009 FNDC OPERATIVE DISTRICT PLAN 12.7.6.1.(ix) (BUILDING SETBACK)
APPENDIX 8 - 2011 FNDC LETTER CONFIRMING PERMISSION
APPENDIX 9 - 2013 NRC CONSENT CON20120791416
APPENDIX 10 - LEGAL SURVEY PLANS
APPENDIX 11 - 2014 FNDC CONSENT FOR DINGHY RACKS

THIS PLAN SHOWS CONSENTED ACTIVITIES OVER
PRIVATE LAND, ESPALADE RESERVE (FORMERLY LEGAL ROAD)
AND THE COASTAL MARINE AREA. THESE CONSENTS ARE REFERENCED
IN THE APPENDICES ATTACHED
CONSENTS ARE INCLUDED FROM THE FNDC, NRC, AND ENVIRONMENT COURT

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DOUGS OPUA BOAT YARD
CONSENTED ACTIVITIES
AS OF JULY 2013
SHEET B

Name	Date	ORIGINAL	SHEET
Survey	SH	18-12-10	SIZE
Design	SH	28-02-11	
Drawn	SH		
Approved	SL	23.05.14	
Rev	SL	23.05.14	
8095 APPENDIX PLAN.lcd		1:100	A3

Surveyors
Ref. No:
8095
Series
Sheet B

FNDC CONSENT CONDITIONS - ENVIRONMENT COURT CONSENT ORDER - 2002

FOR COPY OF ORIGINAL CONSENT - REFER APPENDIX 5

A. That pursuant to section 105 and section 104 of the Resource Management Act 1991, the Far North District Council grants its consent to application number RC 2000812 by DC Schmuck for the following activities and structures on land known as Doug's Opua Boatyard (See 2 SO 24139, PtSec 1 SO 16553, Sec 3 SO 46155 Blk XXXII Town of Opua:

1) a (i)	A commercial marine slipway including a turntable and all of its integral parts, fixtures, supporting members, attachments and utilities
a (ii)	A boatyard and a paint cleaning station.
a (iii)	A boat building shed
a (iv)	An office
b (i)	A Stormwater Containment System (CSW) including all tanks, pipes, cables, traps, filters, and utilities.
b (ii)	A Discharge Containment System (CTS) including all tanks, pipes, cables, traps, filters and utilities.
c	To reconstruct and concrete the slipway and boatyard including the replacement of existing tramway rails.

B. That pursuant to section 105 and section 104 of the Resource Management Act 1991, the Far North District Council grants its consent in part to application number RC 2000812 by DC Schmuck for the following activities and structures on the Esplanade Reserve (Sec 1, Sec 2, Sec 3 & Sec 4 as shown on SO 68634):

2) a (i)	A commercial marine slipway including a turntable and all of its integral parts, fixtures, supporting members, attachments and utilities, and non-permeable surfaces
a (iv)	A concrete wash down area with an associated discharge containment system as shown on the attached plan and to be located 10 metres above m.h.w.s.
a (v)	A Stormwater and conduit drain
a (vi)	Security light pole and associated utilities for power and water.
a (vii)	Safety signage
b (x)	Wharf abutment
a (xii)	Existing wooden and stone retaining walls, where these do not otherwise lie in the Coastal Marine Area.

b To reconstruct the slipway between the boatyard property and m.h.w.s. and to concrete that part the slipway situated above a line 10 metres from m. h.w.s.

c To carry out the activity of washing down of boats prior to the boats being moved to the boatyard for repairs or maintenance or being returned to the water, provided however that repairs and maintenance may be carried out on the reserve only in accordance with condition 8.

Subject to the following conditions:

That, except as otherwise required to be changed by the conditions that follow, the application shall proceed generally in accordance with that shown on Northland Regional Council plan No 3231a.

2) That all necessary plumbing, drainage and building consents shall be obtained prior to the commencement of site works.

3) That the Discharge Containment System and the Stormwater Containment System shall be located as far as is practicable within the Consent Holder's site with these arrangements being to the satisfaction of the District Council's Resource Consent Manager.

4) Except as provided in condition 8 that no materials, tools or other items shall be placed or left on the Esplanade Reserve except as may be necessary for the passage of boats on the slipway and only whilst those activities are being carried out.

5) The Consent Holder shall provide to the Resource Consents Manager of the Council a parking plan showing 4 onsite car parking spaces which shall be in accordance with the standards specified in the District Plan. The carparking spaces shall be formed and marked in accordance with the plan, as approved by the Resource Consents Manager, no later than 3 months after the date of this consent.

6) All safety signs and security lighting shall be installed prior to the consent being given effect to. This shall be arranged to the satisfaction of the District Council Resource Consents Manager and shall include conferring with the Kawakawa Community Board to ensure the signs and lightings are appropriately located in the best interests of the public.

7) That appropriate signage shall be located at the entrance to the property indicating parking for the use of the boatyard facilities. Such signage shall be located in consultation with the District Council's Roading Asset Manager and be to the satisfaction of the District Council's Resource Consent Manager.

8) Except as provided herein any repair or maintenance work on vessels shall be undertaken within the Consent Holder's site. Vessels may be washed down within that area of the Esplanade Reserve marked "A" on the attached plan. Any vessel which by virtue of its length or configuration is unable to be moved so that it is entirely within the Consent Holder's site may be repaired or maintained on that part of the Esplanade Reserve marked "A" on the attached plan. That part of the Esplanade Reserve marked "B" on the attached plan may be used for the purposes of permitting the repair or maintenance of any vessel standing on the southern branch of the slipway marked "C" on the attached plan. Notwithstanding condition 12 the Council may review condition 8 one year after the date of this consent if requisite approvals under the Reserves Act 1977 have not been received for use of Area "A" and Area "B".

9) Except as provided in this consent no vessel shall be left on the slipway within the Esplanade Reserve. All relevant safety requirements shall be adhered to at all times. The only permitted closure of the Esplanade Reserve is for safety reasons during vessel haulage. No more of the Esplanade Reserve shall be closed than is absolutely necessary.

10) The hours of operation for all outdoor activities associated with the boatyard, with the exception of haulage, shall be limited to 0700 - 2000 hours Monday to Friday and 0800 - 2000 hours Saturday, Sunday and Public Holidays.

11) All earthworks material, which is surplus to the development requirements, shall be secured so that siltation and erosion does not occur, or removed from the site.

12) The District Council reserves the right, pursuant to Section 128 of the Act, to review the conditions herein should it decide there is evidence that the activity creates an adverse effect not currently mitigated through conditions of consent. Such a review shall occur one year after the issue of this decision and every two years thereafter.

13) During periods when that part of the slipway through the Esplanade Reserve area is being used for the washing down of boats, the Consent Holder shall erect screens or implement similar measures to effectively contain all contaminants within the washdown perimeter. Screening shall be arranged at the Consent Holder's expense and be to the satisfaction of the District Council's Resource Consent Manager.

14) All activities shall be conducted so as to ensure that noise from the site shall not exceed the following noise limits as measured at or within the boundary of any site in the zone or the residential zone, or at or within the notional boundary of any dwelling within a rural or coastal zone.

Time period Noise Limit
0700 hrs to 2200 hrs 50 dBA L10
2200 hrs to 0700 hrs the following day 45 dBA L10 and
65 dBA Lmax

Note: The notional boundary is defined in NZS 6802:1991 Assessment of Environmental Sound as a line 20m from any part of any dwelling) or the legal boundary where this is closer to the dwelling.

NOISE MEASUREMENT AND ASSESSMENT

Sound levels shall be measured in accordance with New Zealand Standard NZS 6801:1991 Measurement of Sound and assessed in accordance with NZS 6802:1991 Assessment of Environmental Sound.

15) The Consent Holder shall submit a Management Plan to the Far North District Council, for approval, within three months of the date of commencement of these consents. The Management Plan shall cover all aspects of:

a) The operation and maintenance of the boat washdown area

b) Contingency measures for unforeseen or emergency situations. The operation and maintenance of the above systems, and the boatyard operations shall be carried out in accordance with the approved Management Plan.

c) The need to minimise effects on the public use of the walking track and the Esplanade Reserve.

C) That pursuant to section 105 and section 104 of the Resource Management Act 1991, the Far North District Council refuses its consent in part to application number RC 2000812 by DC Schmuck for the following activities and structures on the Esplanade Reserve (See 1, Sec 2, See 3 & See 4 as shown on SO 68634):

2) a (ii)	A Stormwater Containment System (CSW) including all tanks, pipes, cables, traps, filters, and utilities.
a (iii)	A Discharge Containment System (CTS) including all tanks, pipes, cables, traps, filters and utilities.
a (iv)	Use of the concrete slipway for boat repair and maintenance.
a (viii)	Existing dinghy racks
(new) xiii	Existing south dinghy ramp.

The District Council will prepare a management plan for the Esplanade Reserve.



315 Kerikeri Rd
P.O. Box 372 Kerikeri
Email: kerikeri@tsurvey.co.nz
Ph: (09) 4077360 Fax (09) 4077322

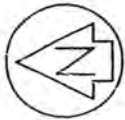
Registered Land Surveyors, Planners & Land Development Consultants

**DOUGS OPUA BOAT YARD
CONSENTED ACTIVITIES
AS OF JULY 2013
SHEET C**

Survey	Name	Date	ORIGINAL
Design			SCALE
Drawn	SH	28-02-11	SHEET SIZE
Approved			A3
Rev	TS	28.01.14	
8095 APPENDIX PLAN.lcd			

Surveyors
Ref. No:
8095

Sheet C



ATTACHMENT 'A'

Public Road

Belcher Street

(20.12)

Sec 3
SO 46155

Sec 2
SO 24139

Pt Sec 1
SO 16553

Sec 1
SO 68634

Crown Land

Fixed from field measurements and observations on 02/08/2002

APPROX MINUTE ZONE BOUNDARIES

PERMIT

KL-BACK LIAISON
UNIFIED QUALITY
TEST SITE

Sec 2
SO 68634

91044' 21.40

BLK XXXII

Town of Opua

Coastal Walkway

Harbour Endowment
DP 18044

Bay of Islands Harbour

MINUTE ZONE / ZONE
OF TIDE

APPROX. 150.43 MILE
DATEHIVE AREA

STORM WATER CONDUIT

APPROX. 150.43 MILE
DATEHIVE AREA

LAND DISTRICT: NORTH AUCKLAND
SURVEY BLK & DIST: V RUSSELL
NZMS Q 05 SHEET No. 03.11

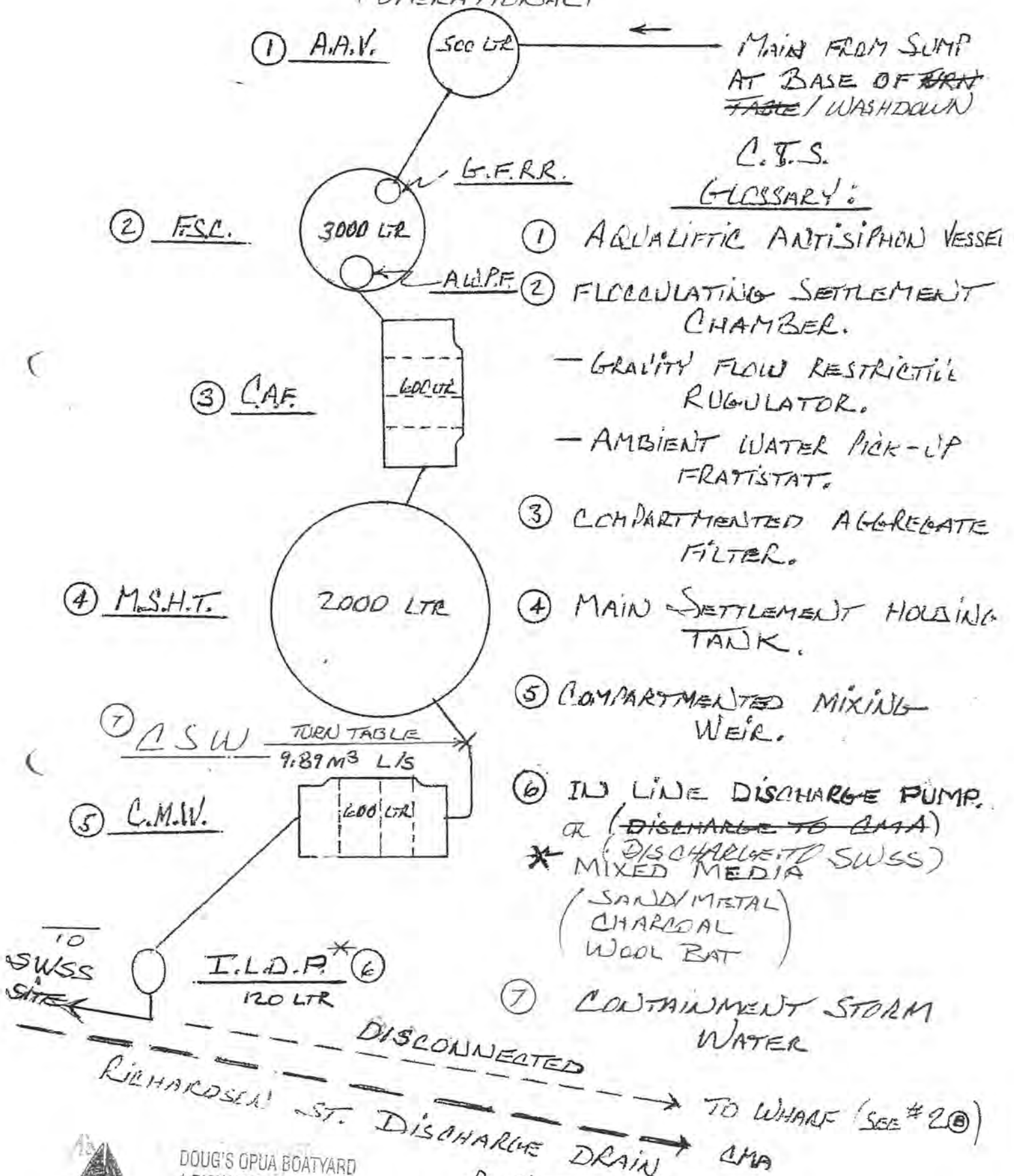
Composite Plan of Doug's Boatyard Showing 2002 CMA Boundary
in Relation to Section Boundaries and Occupation

LOCAL AUTHORITY: Far North District
Surveyed by: Williams & King, Paikia
Scale: 1 : 250 Date: Nov 2005

DOUG'S OPUA BOATYARD CONTAINMENT & TREATMENT SYSTEMS (OPERATIONAL)

ATTACHMENT "A"

①



DOUG'S OPUA BOATYARD
1 RICHARDSON STREET
OPUA 0200
B.O.I. Ph/Fax (09) 402 7055
GST No. 62-348-089

REVISED:

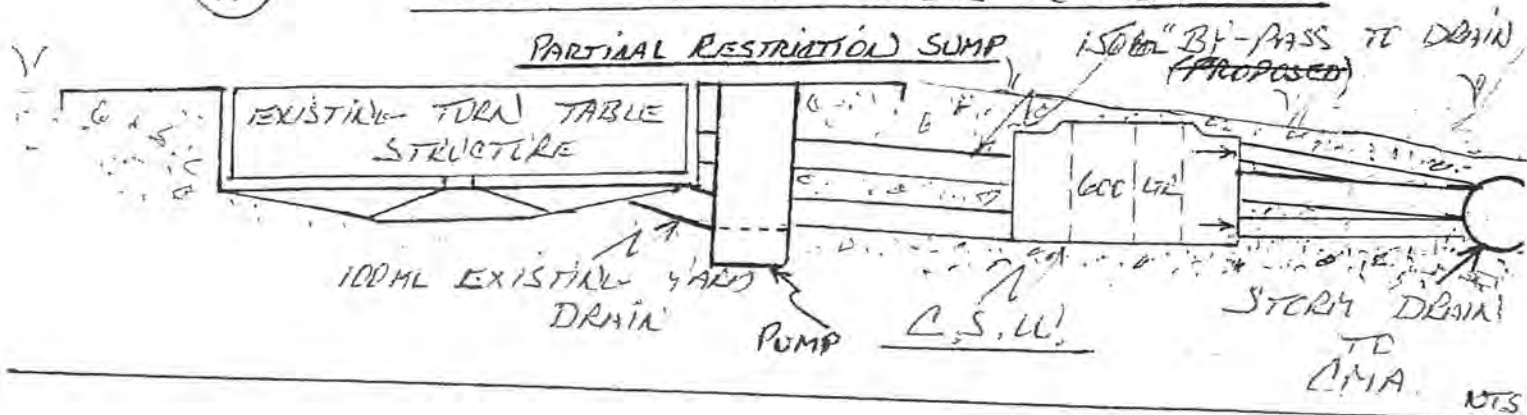
23 SEPT. 2017

NTS

EXISTING STORM WATER & BY PASS SYSTEM (PROPOSED)
(C.S.W.)

(A)

TURN-TABLE COLLECTOR WELLS / SUMP



DOUG'S OPUA BOATYARD
1 RICHARDSON STREET
OPUA 0200
B.O.I. Ph/Fax (09) 402 7055
GST No. 62-348-029

REVISED:

23 SEPT. 2017

Project No. AA399501

7 February 2000

Doug's Opua Boat Yard
C/o Post Office
Opua
Bay of Islands

Attention: Doug Schmuck
Owner

Dear Doug

Re: Boat Yard Air Emissions

1. INTRODUCTION

Woodward-Clyde was engaged by Doug's Opua Boat Yard, to consider the potential effects of air emissions from the normal activities carried out in the yard. The two activities that have the potential to generate emissions are anti-fouling boats, and spray painting boats.

This report contains our assessment of the potential effects of these activities.

2. LOCATION

The boat yard is located off Richardson Street in Opua. The site is located on a small bay, between 10 and 20 meters below the ridge containing Richardson Street. The ridge extends around to the north of the boat yard. The bay faces east.

3. POTENTIAL EMISSIONS

The work carried out in the boat yard is general boat maintenance and includes the application of antifouling paint and painting of boats. Both of these activities have the potential to generate emissions. These are discussed below.

3.1 ANTI FOULING PAINT

Antifouling paint is generally brush painted onto the boats. The amount used varies with the size of the boat, but in general will be between 8 and 12 litres per boat. Based on a maximum of 35 boats per year, this equates to approximately 420 litres per annum maximum. The boat yard currently uses an Altex antifouling paint. This is a copper based product in a solvent base.

The estimate of emissions has been based on a couple of conservative assumptions. The first is that all of the solvent will evaporate off. The second is that maximum concentration of the solvents listed in the MSDS sheet has been used to estimate solvent concentrations. On this basis, the emissions is estimated as 0.26 and 0.7 g/s for xylene and n-butanol respectively.

3.2 OTHER PAINTING.

The largest potential for emissions from other painting activities occurs when a boat is being spray painted. The most common paint used is a linear polyurethanes. This occurs on average 10 to 12 times a year and uses approximately 4 litres of paint per boat. This is a maximum of approximately 50 litres of paint a year. These paints are two pot mixtures and require up to 20% thinning before use. The thinner most commonly used contain a mixture of solvents. Based on the maximum usage rates and concentrations from the MSDS sheets, the maximum emissions of the solvents are estimated at 0.14 g/s of ethyl acetate, 0.15 g/s of ethoxyacetate, and 0.02 g/s of toluene.

These paints also contains isocyanates. These are part of the paint, and do not evaporate, however a small quantity will be lost as over-spray. Based on discussions, the amount over-spray is minimal, and has been estimated at 2%. This will potential result in an emission of 0.004g/s of isocyanates.

4. ASSESSMENT OF EFFECTS

4.1 EFFECTS OF PAINTING ANTIFOULING PAINT

The potential effects of the emissions were assessed using the atmospheric dispersion model AUSPLUME in screening mode. This uses worst case meteorology, to estimate the concentrations of the solvents once they have been emitted. Under worst case meteorological conditions the emissions of xylene are unlikely to be detectable beyond the boundary of the site. The modelling also indicates that under worst case meteorology n-butanol may be noticeable for up to 200 m from the site. However, an examination of the meteorological conditions that generate these concentrations indicates that most of them are at times when painting would not be occurring, for example, during the night, or when it would normally be too cold to apply paint.

Using real meteorological data for a similar area, the actual concentrations of n-butanol are likely to be just noticeable beyond the boundary of the site once or twice a year. This is well below the criteria that most Councils set for nuisance effects.

4.2 ISOCYANTE PAINTS

The potential effects of emissions from spray painting were also estimated using AUSPLUME. This modelling indicated that emissions of solvent from the painting operation were unlikely to result in any health effects, and would be unnoticeable beyond the boundary of the property most of the time. On a few occasions per year odour might be noticeable, but this would be well under the odour frequency criteria used by most councils for nuisance effects.

The modelling also indicated that the emissions of isocyanates would be under the appropriate health effect criteria at the boundary, and therefore unlikely to result in any adverse health effects.

5. METEOROLOGY

We have also considered the meteorology of the area. Using information collected at the Waitangi Forest, we have produced the windrose included as Figure 1. This indicates that the predominant wind directions are south-west and north east. These account for approximately 60% of all winds. However, the boat yard is shielded from north easterly winds.

Winds from the south western quarter, which are most likely to result in emissions travelling off-site, account for only 12% of the time. Of this 12 %, a quarter is likely to be a wind speeds that are too high for painting outside, and approximately half is likely to occur at times when conditions are not suitable for painting for example late evening. This leaves approximately 3% of the time when meteorological conditions may result in emissions causing some off-site effects if painting is occurring.

6. CONCLUSIONS

Based on the information presented to us, our assessment of the potential effects is that there will be no health effects resulting from the activity. The assessment indicates that on occasions odours resulting from the painting may be observable at or slightly beyond the property boundary, but that the frequency is such that it will be less than the Council's nuisance assessment criteria as presented in the Northland Regional Air Plan.

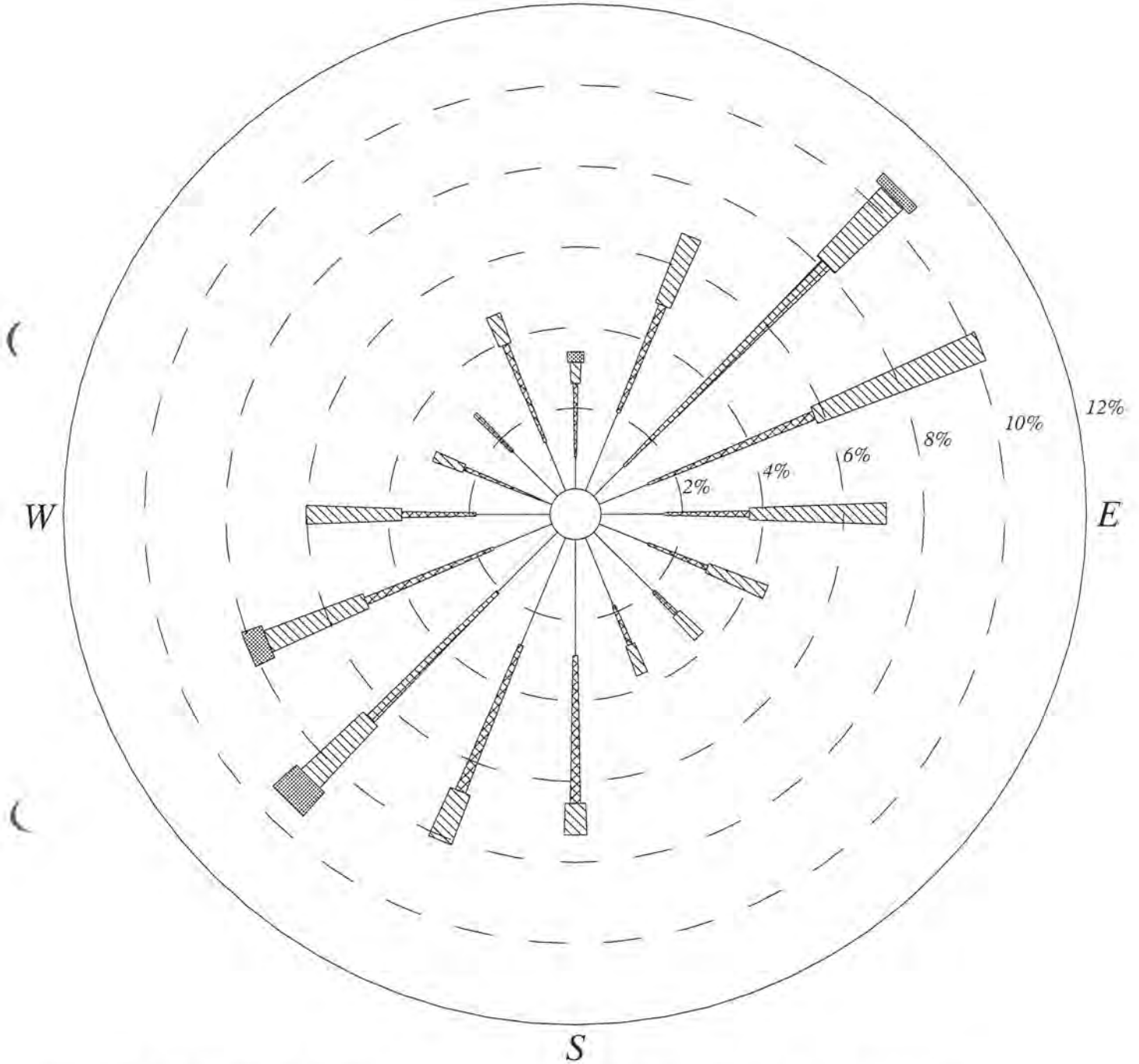
Yours sincerely
WOODWARD-CLYDE (NZ) LIMITED

Andrew Curtis
Senior Environmental Engineer

Whitangi 1999

January 1-December 31; Midnight-11 PM

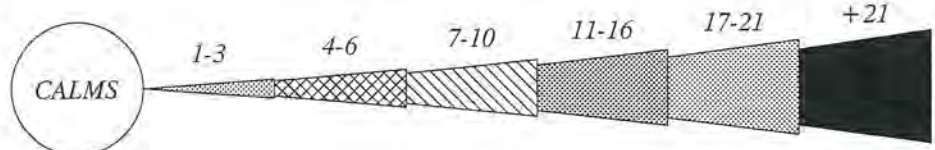
N



CALM WINDS 0.26%

WIND SPEED (KNOTS)

NOTE: Frequencies indicate direction from which the wind is blowing.





Client:

Project:

Description:

Doug

1/6/00

Attached are the calculations to work out the emissions, plus examples for baton of the modelling input files.

All of the rest are the same apart from the emission rates. I didn't think it was worth while printing all of them as well.

Hopefully this answers the Council's questions.

Regards

MB I have sent 2 copies so you can pass one on to the NRC.

Computed by:

Date:

Checked by:

Date:



Client: Doug's Opua Boat Yard

Project: Emission Calculation

Description:

2. Emissions from Painting polyurethanes

Assumptions

1. Paint is thinned by 20%
2. Use approximately 4L of paint per boat
3. Painting takes approximately 1 hour

Source
Doug

Total emission of paint

4 litres of paint + 10% thinner is ≈ 4.8 L

Painting takes place over 1 hour

$$\therefore \text{emission} = 4.8 / 3600$$

$$= 0.00133 \text{ L/s}$$

Composition of Thinner

Ethyl acetate	30-60%
ethoxyacetate	30-60%
toluene	1-10%

Allex

As Thinner is 20% of emission The maximum mass emission of the thinner will be 0.000125 L/s

Based on Maximum potential concentrations

and densities of 900 g/L ; 980 g/L ; 870 g/L respectively of the 3 components, The mass emission will be

$$\text{Ethyl acetate} = 0.14 \text{ g/s}$$

$$\text{Ethoxyacetate} = 0.15 \text{ g/s}$$

$$\text{Toluene} = 0.02 \text{ g/s}$$

Computed by:

Date:

Checked by:

Date:



Client: Doug's Opua Boat Yard

Project: Emission Calculation

Description:

3. Isocyanate Emission

Isocyanate is a component in the paints.
Based on information received this will be
used at a rate not exceeding

1.25 l in 2 hours

This equates to an emission rate of

$$1.25 \text{ l} / 7200 \text{ s}$$

$$= 0.000174$$

Based on an isocyanate density of 1200 g/l
This equates to a mass emission of 0.2 g/s

Assuming overspray at 2%

$$\therefore \text{Mass emission} = 0.004 \text{ g/s}$$

Computed by:

Date:

Checked by:

Date:



Client: Doug's Opua Boat Yard

Project: Emission Calculation

Description:

1. Emissions from Antifouling

Assumptions

1. Use approximately 12 L of paint per boat
2. Apply antifouling at a rate of 8 L in 45 minutes

Source

Doug

Doug

Calculation

Therefore the total application rate of antifouling will take 60 minutes.

This indicates an application rate of:

$$\begin{aligned} & 12 \text{ L} / 3600 \text{ s} \\ & = 0.003 \text{ L/s} \end{aligned}$$

The maximum concentration of xylene in the antifouling paint is 10%

Altex

$\therefore$ maximum xylene emission rate is 0.0003 L/s

The density of xylene is 860 g/L

$\therefore$ mass emission of xylene is 0.258 g/s
 $\approx 0.26 \text{ g/s}$

Similarly for n-butanol, the maximum concentration in the paint is 30%.

Altex

$\therefore$ based on a density of 600 g/L , the maximum emission of n-butanol is 0.7 g/s

Computed by:

Date:

Checked by:

Date: