Draft Anti-fouling and In-water Cleaning Guidelines

Submissions Analysis

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NEW ZEALAND FOOD SAFETY AUTHORITY

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Introduction

In 1997, the Australian and New Zealand Environment and Conservation Council (ANZECC) published the Code of Practice for Anti-fouling and In-water Hull Cleaning and Maintenance (the ANZECC Code) to provide guidance to boat owners, industry and government in Australia and New Zealand on the appropriate application, use, removal and disposal of anti-fouling coatings, and practices for in-water cleaning and maintenance of vessels.

Since the release of the ANZECC Code, a number of significant changes have occurred within the maritime industry in relation to anti-fouling coatings and the management of biofouling on vessels to warrant a review and revision of the Code to ensure its alignment with current technologies and international conventions.

Responsibility for reviewing and revising the ANZECC Code lay with the Ministry of Agriculture and Forestry (MAF) in New Zealand; and the Department of Agriculture, Fisheries and Forestry and the Department of Sustainability, Environment, Water, Population and Communities in Australia. This was completed in June 2011, with the Anti-fouling and In-water Cleaning Guidelines (the Guidelines) drafted to replace the ANZECC Code.

On 14 October 2012, MAF Discussion Paper No: 2011/13 - *Draft Anti-fouling and In-water Cleaning Guidelines* was placed on the MAF website. A wide range of stakeholders in the marine sector (including anti-fouling coating manufacturers, aquaculture and commercial fishing, commercial shipping, iwi organisations, maintenance operations, petroleum explorers, ports, and recreational boating) were then invited by MAF to provide feedback on the draft Guidelines.

After a six -week consultation period, MAF received thirteen submissions on the draft Guidelines from the individuals and organisations listed below.

Submission Number	Name	Organisation Represented
1	Reina Solomon	Te Rūnanga o Ngāti Toa
2	Richard Brown	Self
3	Colin Johnston	Aquaculture New Zealand
4	Kate Bartram	New Zealand Seafood Industry Council
5	Carol Scott	Challenger Finfisheries Management Company Ltd
6	John Pfahlert	Petroleum Exploration and Production Association of NZ
7	Garry Maloney	Bay of Plenty Regional Council
8	Paul Bradbury	SPS Biosecurity Ltd
9	Jillian Fulcher	Self
10	Bill Trusewich	Auckland Council
11	Phil Wardale	Marina Operators Association of NZ
12	Malcolm Paterson	Ngāti Whātua o Ōrākei
13	Matt Conmee	Association of Diving Contractors New Zealand

Submissions Analysis

The analysis that follows in this document provides a summary of the submissions made on the draft Guidelines, and MAF's response to them.

It is organised according to the twelve questions posed in the Discussion Paper to help focus feedback on what MAF considered were the key aspects of the Guidelines. Submissions that were not within the scope of the questions raised in the Discussion Document are dealt with under the heading Other Comment on the Guidelines.

In the Summary of Submissions, the number in square brackets [ ] indicates the submission number of the individual and organisation whose views are summarised.

The full text of all submissions is available in Appendix 1.

MAF thanks each submitter for taking the time to make their submissions and assist in the development of new guidance on managing adverse effects on the environment from the maintenance of the submerged surfaces of vessels and movable structures.

The submissions provided useful information and advice that will inform the finalization of the text of the Guidelines.

QUESTION 1:

The Guidelines contains a suite of principles. Do these principles adequately reflect the balance that environmental managers should be seeking between managing the environmental risks of maintenance practices and operational realities of the maritime industry? If not, what changes would you recommend?

Summary of Submissions

Five submitters [3, 4, 7, 11 and 13] provided comments on the principles contained in the Guidelines, and whether these adequately reflect the balance that environmental managers should be seeking between managing the environmental risks of maintenance practices and operational realities of the maritime industry.

Of these, four submitters [4, 7, 11 and 13] considered the principles addressed or reflected the balance between managing environmental risks and the operational realities faced by owners of vessels and structures, or simply supported the principles.

Two submitters [3 and 4] queried whether the term "practicable" in Principle 5 includes economic and commercial considerations, such as the economic impact on vessel owners of dry docking or in-water cleaning. From a purely environmental perspective it may be preferable to remove vessels or structures from the water for cleaning, but from an operational perspective the costs of frequent dry docking may be prohibitive, creating a disincentive to remove biofouling.

MAF Response

Principle 5 of the draft Guidelines states: "The removal of vessels and movable structures from the water for cleaning and maintenance should, where practicable, be used in preference to in-water operations". The term "practicable" in the context of this principle is intentionally broad so as to cover a wide range of practical, commercial and economic factors that owners of vessels and structures would take into account when deciding whether to remove vessels and movable structures from the water for cleaning and maintenance.

The principle states a preference for removal of vessels or structures from the water for cleaning as the most effective means of avoiding the environmental effects of cleaning, but at the same time recognises that larger vessels for example cannot be readily removed from the water for cleaning and maintenance.

QUESTION 2:

The scope of the Guidelines is broader than the ANZECC Code of Practice, covering all vessel types and movable structures in all aquatic (marine, estuarine and freshwater) environments, regardless of whether they are coated in an anti-fouling coating. Do you agree or disagree with the proposed scope of the Guidelines, and why?

Summary of Submissions

Ten submitters [2, 3, 4, 5, 6, 7, 10, 11, 12 and 13] provided comments on the proposed scope of the Guidelines.

Of these, five submitters [4, 5, 7, 11 and 13] agreed with the proposed scope of the Guidelines to include all vessel types and structures, and all aquatic environments. Two submitters [3 and 12] strongly supported the application of the guidelines to recreational vessels.

One submitter [2] sought reconsideration of the guidelines as they apply to "local" boats, arguing that neither locally grown fouling nor the in-water cleaning process poses any real problem.

Another submitter [6] was generally supportive of the proposed guidelines for commercial and other vessels that can be periodically dry-docked for maintenance purposes, but considered the cleaning of off-shore drilling rigs, and Floating Production, Storage and Offloading vessels (FPSOs) to be problematic. On the other hand, submitter 5 particularly welcomed the inclusion of large structures such as floating drilling platforms into the proposed scope of the Guidelines.

One submitter [3] considered the scope of the Guidelines had been broadened to include aquaculture without clearly defining aquaculture installations or considering the operational practicalities of aquaculture. Another submitter [10] welcomed the inclusion of aquaculture structures within the scope. They noted that most aquaculture structures in Auckland are semi-permanent and are unlikely to be removed for out of water cleaning. In other areas, some cage structures used for finfish farming use copper antifouling paint on predator-proof netting, which may be cleaned of biofouling in-water.

The same submitter [10] considered the guidelines fall short of becoming an effective biosecurity tool as they neglect vectors such as marinas. They acknowledge that pontoons in marinas are covered by the definition of 'moveable structure', but consider no practicable advice relevant to them is provided. They argue that the definition of 'movable structure' needs further consideration to be certain that anything included in the category has been discussed in terms of proposed defouling treatment.

Submitter 10 also noted that paragraph 4 of the Scope section of the Guidelines states: "the Guidelines are consistent with both countries' developing national biofouling management approaches", and suggested a reference to the NZ document be inserted.

MAF Response

Although the cleaning of off-shore drilling rigs and FPSOs is problematic, in-water cleaning is technically possible, albeit with risks for divers and those required to operate in the water. Measures to prevent the introduction and spread of unwanted organisms associated with the biofouling on off-shore drilling rigs and FPSOs prior to the movement of these structures will inevitably mean that some form of in-water cleaning may be necessary. In which case, it is appropriate that submersibles, floating craft, floating platforms, FSUs and FPSOs associated with oil and mineral exploration and exploitation be covered by the guidelines.

The proposed scope of the Guidelines was deliberately broadened to include "local" boats, including recreational craft, as shore-based and in-water maintenance of these types of vessels can pose biosecurity and contamination risks in certain circumstances. The framework for decision-making on in-water cleaning recognises that biofouling of regional (i.e. local) origin is a lower biosecurity risk, while the contamination risk will depend on the type of cleaning method used.

The Guidelines are intended to apply to movable structures, which are defined as a structure or installation deployed in aquatic environments that can be moved between locations. Implicit in this definition, any movement of aquaculture installations between locations would need to occur in-water to fall within scope of the guidelines. This rules out semi-permanent structures such as oyster racks and structures that are dismantled and/or removed from the water prior to movement.

The cleaning and movement of aquaculture stock falls outside of the scope of these Guidelines and should be covered in industry codes of practice or similar documents. This will be clarified in the Guidelines

MAF considers the guidance on in-water cleaning is sufficiently flexible to be compatible with the operational practicalities of aquaculture, but improvements to the Decision Support Tool to reflect this may be necessary (see Question 20).

The Guidelines are consistent with "both countries' developing national biofouling management approaches", but as these approaches are still in development references cannot be inserted into the Guidelines.

QUESTION 3:

Part 1 is organised under the following headings:

- Anti-fouling Coating Types.
- Choosing the Correct Anti-fouling Coating.
- Requirements for Shore-based Maintenance Facilities.
- Application of Anti-fouling Coatings.
- Maintenance and Removal of Anti-fouling Coatings.
- Disposal of Residues and Wastes.
- Emergency Response.

Is the guidance under each of these headings accurate, complete, effective, practical, and easy to understand? If you consider the guidance could be improved, please explain how.

Summary of Submissions

Six submitters [5, 6, 7, 10, 11 and 12] commented on the guidance in Part 1: Shore-based application, maintenance, removal and disposal of anti-fouling coatings.

Anti-fouling Coating Types:
Two submitters [7 and 12] proposed that the application, maintenance, and removal of antifouling coatings must only be carried out at maintenance facilities with all necessary approvals from Territorial Authorities and Regional Councils. One of these submitters [7] recommended that the guidance be improved to make it clear that it is the responsibility of the person carrying out the maintenance to check all necessary approvals are in place for the location and that they are familiar with all conditions of such approvals. Submitter 12 also considered maintenance facilities should prevent any contamination of the environment, as well as being compliant with relevant local regulations.

One submitter [11] considered this section of the guidelines is not well focused on the subtitle. The current text should be reduced to describe the two antifouling types. They consider that most vessel owners will not understand the definition of 'biocide', nor would they be able to confirm if such a chemical composition exists within their antifouling.

Another submitter [10] considered that paragraph 5 defers to relevant local regulations rather than setting measures for retaining and treating biofouling, coatings and other physical contaminants removed from vessels and structures.

Choosing the Correct Anti-fouling Coating:
One submitter [11] considered this section of the guidelines fails to assist the user of the guidelines in choosing the correct antifouling. They believe the idea of an anti-fouling record book is sensible, but is unlikely to be followed.

Another submitter [10] queried how the use of Biofouling Record Books or Biofouling Management Plans will be implemented, and suggested that an awareness raising campaign would probably be required.

One submitter [5] noted that the guidelines (on page19) make a distinction in terms of record keeping between commercial and recreational vessels. They observe that many inshore

commercial fishing vessels are of a relatively small size (almost 50% of registered commercial fishing vessels are less than 10m in length), and with this in mind it may be more helpful to have a size distinction as opposed to a purpose/use criteria for different record keeping requirements.

Requirements for Shore-based Maintenance Facilities:
One submitter [7] proposed that all maintenance should be carried out at a facility that has all the appropriate authorisations, including land use and discharge permits. Non-professional maintenance without close supervision should be discouraged. They recommend that a specification be inserted that all maintenance should be carried out at a fully equipped and authorised facility, and the existing guidance be reworded to ensure that customers only undertake their own maintenance on their vessel with appropriate supervision.

Another submitter [10] noted that Point 2 refers to all waste and contaminants being captured and retained in a manner that minimises their release, and considered that "all" should refer to "eliminates their release". They also considered the guidance in Point 3 (that "Facilities that enable customers to undertake their own maintenance on their vessel or movable structure…should ensure that sufficient information on how to prevent any discharges is provided") should provide actual standard setting guidance, and not simply loosely refer to it.

One submitter [11] supports the guidance within this section of the document.

Application of Anti-fouling Coating:
One submitter [7] proposed that the maintenance itself should be restricted to professional/registered operators or those acting under their supervision. They recommend having a registration and monitoring process for antifouling maintenance as part of a regulation to supplement these guidelines.

Submitter 7 also noted the guidance suggests that full bunding and screening of the work area may not always be appropriate, but in their view run-off and aerosol distribution prevention requires full containment. They recommend replacing the word 'may' with 'should' in bullet 1 of specific guidance for professionals.

Two submitters [7 and 12] were concerned if a lower standard of operation was allowed or implied for non-professionals. Submitter 7 proposed that the heading for 'specific guidance for non-professionals' be changed to 'additional guidance for non-professionals'.

Another submitter [10] noted that Point 1 of the Specific Guidance for Professionals uses the word "prevent", and suggested it is better to use the standard of eliminate, isolate or minimise as risk management terms.

One submitter [11] supports the application of anti-fouling by professional operators. They believe that non-professionals should be encouraged to apply anti-fouling by brush or roller, rather than spraying it on. Antifouling should only be sprayed on by professionals where possible, in a controlled environment. Submitter 10 also noted that the Specific Guidance for Non-Professionals refers to spray equipment only being operated by professionals despite the section being intended for non-professionals.

Submitter 10 considered much of the Specific Guidance for Non-Professionals is written in regulation-speak and should be written to be understood by the general public.

Maintenance and Removal of Anti-fouling Coatings:
Pressure water blasting: Submitter 10 considered that terms like "adequately isolated" and "completely protected" should be accompanied by more specific guidance on how this is done.

Pressure abrasive blasting: One submitter [7] considered that dry abrasive blasting should not be used other than in a fully enclosed designed for this purpose. They recommend the guidance in this section make it clear dry abrasive blasting is not an option when outside.

Submitter 10 proposed that the terms "vacuum blast cleaning", "abrasive blasting", "wet abrasive blasting", and "dry blasting" should be defined.

Maintenance by non-professionals: Submitter 10 considered best practice or a standard should be specified for "appropriate" screening and containment.

Disposal of Residues and Wastes:
One submitter [10] supported the advice that removed material should not enter the storm water system, but considered maintenance areas should also demonstrate appropriate containment, treatment and disposal, including a Trade Waste permit if discharging to wastewater system. This section should offer advice for unsealed yards as well.

One submitter [11] supports this section of the guidelines as they are concise and to the point.

Emergency Response:
One submitter [6] considers the recommendation that all maintenance facilities have an Emergency Response Plan is too loose and should be a requirement.

Another submitter [11] supports this section of the guidelines as they are concise and to the point.

MAF Response

Anti-fouling Coating Types:
The application, maintenance, and removal of antifouling coatings must only be carried out at maintenance facilities with all necessary approvals from Territorial Authorities and Regional Councils. MAF agrees that the guidance should be improved to make it clear that it is the responsibility of the person carrying out the maintenance to check all necessary approvals are in place for the location and that they are familiar with all conditions of such approvals.

MAF will consider whether the current text should be reduced to describe the two antifouling types, but considers the manner in which the term 'biocide' is used in this section means that its definition is self explanatory and biocide is clearly defined at the beginning of the document.

The key advice in paragraph 5 is that the application, maintenance, removal and disposal of anti-fouling coatings should only be carried out at maintenance facilities that are compliant with local authority requirements for retaining and treating biofouling, coatings and other physical contaminants removed from vessels and structures, rather than specifying these requirements.

Choosing the Correct Anti-fouling Coating:
MAF considers the guidance under this section clearly identifies for users the key factors that should be considered when choosing an anti-fouling coating system.

The guidance on Record-keeping is an area where MAF could partner with stakeholder organisations to promote best practice by operators of vessels.

The preferred form of documentation of anti-fouling coating type and age for commercial vessels contains an additional option to that for recreational vessels. Apart from this, the preferred form of documentation for commercial and recreational vessels is identical.

Requirements for Shore-based Maintenance Facilities:
MAF agrees that maintenance should only be carried out at a facility that has all the appropriate authorisations, including land use and discharge permits. Non-professional maintenance without close supervision should be discouraged. MAF agrees that the guidance should be improved to reflect these points.

MAF considers the wording of Point 2 could be improved by deleting "all" so that waste and contaminants [are] being captured and retained in a manner that minimises their release.

MAF considers that the operators of facilities are best placed to document "house rules" for preventing discharges.

Application of Anti-fouling Coating:
The recommendation for a registration and monitoring process for antifouling maintenance as part of a regulation to supplement these guidelines is beyond MAF's jurisdiction, but would require further justification before another agency might investigate the recommendation.

MAF disagrees there is a need to change the heading for 'specific guidance for non-professionals' to 'additional guidance for non-professionals'. The guidance under this heading has been drafted specifically for non-professionals and is not additional to or in any way less stringent than the guidance for professionals.

MAF agrees to the following wording improvements:

a. replacing the word 'may' with 'should' in bullet 1 of specific guidance for professionals.

b. replacing the word "prevent" with "minimise" in Point 1 of the Specific Guidance for Professionals.

MAF agrees to reconsider the Specific Guidance for Non-Professionals to clarify the application of anti-fouling by spraying and to improve its readability.

Maintenance and Removal of Anti-fouling Coatings:
Pressure water blasting: MAF will investigate whether the terms "adequately isolated" and "completely protected" can be modified to provide better guidance.

Pressure abrasive blasting: MAF will consider amending the text to state that dry abrasive blasting should not be used other than in a fully enclosed area designed for this purpose and is

not an option when outside. Defining the terms “vacuum blast cleaning”, “abrasive blasting”, “wet abrasive blasting”, and “dry blasting” should be explored.

Maintenance by non-professionals: MAF will investigate whether more specific guidance for “appropriate” screening and containment is possible without being too prescriptive, and inflexible.

Disposal of Residues and Wastes:
MAF will investigate whether additional guidance for discharging to wastewater system, and for unsealed yards is necessary.

Emergency Response:
The Guidelines are only advisory and have no legal status. They cannot impose requirements, but its recommendations may become requirements of Territorial Authorities and Regional Councils.

QUESTION 4:

Is the guidance in Part 1 likely to have a positive or negative effect on your current activities or practices? If so, please explain how.

No submissions

QUESTION 5:

Do the Guidelines provide a transparent decision framework for balancing the risks associated with biofouling management practices with the risks of failing to manage biofouling? If you consider the framework could be improved, please explain how.

Summary of Submissions

Four submitters [4, 10, 11 and 13] provided comments on whether the Guidelines provide a transparent decision framework for balancing the risks associated with biofouling management practices with the risks of failing to manage biofouling.

Of these, three submitters [4, 10 and 13] generally agreed the Guidelines provide a transparent decision framework or a risk-based approach to decision making. One submitter [4] welcomed the development of a risk-based approach to provide more flexibility around situations where in-water cleaning may be permitted. This submitter strongly supported the concept that biosecurity risk is reduced through regular hull and structure maintenance, including in-water cleaning to prevent the development of mature biofouling.

Another submitter [10] considered the guideline presents a rational, risk-based approach to decision making across the dimensions of anti-fouling coating type, biofouling origin, and biofouling type. This submitter suggested that the scale and consequences of a significant biosecurity event are higher than that of more localised contaminant threat in a non-sensitive or already affected environment. While both risks need to be managed carefully, the biosecurity risk requires a great deal more strategic planning due the complexity of scale and range of organisms involved and should be treated as the primary issue.

Submitter 11 does not support any in-water cleaning. Its position is that any biofouling should be removed at a professional facility that have staff trained in the removal and disposal of the anti-fouling and potential biofouling.

MAF Response

MAF considers the proposed decision framework provides sufficient weight to the biosecurity risk associated with biofouling management practices, in order to avoid the biosecurity risk associated with unmanaged biofouling on vessels and structures moving in New Zealand waters. Placing more emphasis on avoiding the biosecurity risk associated with in-water cleaning would be at the expense of regular hull and structure maintenance and the lower biosecurity risk this creates.

Although the Guidelines provide guidance on situations where in-water cleaning and maintenance of vessels and movable structures could be permitted, albeit within conditions to minimise environmental risk, removal of vessels or structures from the water for cleaning is the most effective means of avoiding the environmental effects of cleaning. However, a prohibition on any in-water cleaning ignores the practical needs of a broad spectrum of marine stakeholders who are either not able to "haul-out" vessels and structures on a regular basis for cleaning, or have non-biocide anti-fouling systems on their vessels that require regular removal of microfouling.

QUESTION 6:

Is the guidance in Part 2 of the Guidelines sufficiently clear about when to use in-water cleaning and when to remove vessels and movable structures from the water for cleaning and maintenance? If not, how could it be improved?

Summary of Submissions

Four submitters [3, 4, 5 and 11] commented on the clarity of the guidance on when to use in-water cleaning and when to remove vessels and movable structures from the water for cleaning and maintenance.

Of these, one submitter [3] considered the advice that out of water cleaning should be the default option wherever 'practicable' to be prescriptive in nature and overrides the intent of adopting a risk based approach, particularly when it is not clear whether economic and commercial considerations make up the definition of practicable. They argue that where structures remain in one location for an extended period (e.g. a growing cycle), it would be preferable to encourage more frequent in-water cleaning than default to an 'out of water is best' option that may simply encourage larger fouling populations.

Another submitter [4] considered the guidelines presume that dry docking and cleaning vessels out of the water is always an option, but it may not be possible either within a region and/or nationally to have access to such facilities, for example the dry docking of large ships or oil drilling platforms. In these circumstances, it would be preferable to enable in-water cleaning in order to mitigate the risks of marine pests and diseases, as the risk to the environment would be greater than the risks from not cleaning. They recommend that the guidelines and the DST be modified to include consideration of the feasibility of dry docking.

Similarly, submitter [5] considered the guidelines and the decision support tool need to take into consideration the limited capacity of shore-based maintenance facilities, particularly if the guidelines are expanded to include all vessels. From an operational and economic perspective, bottlenecks for maintenance requirements are to be avoided.

The other submitter [11] considered the guidance is not clear as a lay person is not going to be able to distinguish what type of antifouling was applied to their vessel. Accordingly, the guidance is considered confusing and unlikely to be followed.

MAF Response

The term "practicable" in the context of this advice is intentionally broad so as to cover a wide range of commercial, economic and practical factors that owners of vessels and structures would take into account when deciding whether or not to remove vessels and movable structures from the water for cleaning and maintenance. The example of aquaculture structures that remain in one location for an extended period (e.g. a growing cycle) is illustrative of practical rationale for not removing a structure from the water for cleaning, as is the feasibility of dry docking.

MAF will consider whether guidance can be provided on the factors that would fall within the term "practicable".

The draft Guidelines advise vessel operators to keep on record documentation of the antifouling coating type, date of application, and the planned in-service period of the vessel. Advice is also provided on options for keeping such records.

QUESTION 7:

Section A, provides information on the factors that determine the environmental risk of in-water cleaning. These factors are:

- Anti-fouling coating type.
- Biofouling origin.
- Biofouling type.

Does the information provided under each of these headings adequately describe the contamination and biosecurity risks associated with in-water cleaning? If you consider the guidance could be improved, please explain how.

Summary of Submissions

Four submitters [3, 9, 10 and 11] commented on the guidance describing the contamination and biosecurity risks associated with in-water cleaning.

Of these, one submitter [9] considered the advice is clearly set out and user friendly, but suggested that a best practice template or link for the biofouling record book would be more useful for vessel owners than just the current description.

The other submitter [10] considered the guidance on biofouling origin, for both Regional and Domestic (national) biofouling, relies on big assumptions regarding prior knowledge about the identity and distribution of all established invasive species.

This submitter also considered the biofouling origin criteria of Regional, Domestic and International does not work well as a standard to be applied in both Australia and NZ. NZ regions are a much smaller scale, but may have isolated east and west coast aspects which effectively have the same biosecurity implications as the Domestic category. So the Regional approach doesn't work well for some regions (regional council jurisdictions) in NZ. An approach that assesses the discreteness of areas of water within a region is considered better than applying a political boundary approach, even if the guidance does defer to the discretion of the regional authority to dictate anything in addition to the guidelines. The guideline should also address "Intra-regional biofouling" to be clear that some movements within a region may still pose a big risk.

This submitter also considered the biofouling origin criteria of "Domestic" should be re-termed "National".

Submitter 3 also addressed the defining of 'regional' and 'domestic' biofouling, stating that the characteristics of the aquatic environment do not follow regional authority boundaries. Frequently, industry operates across regional authority boundaries where the marine waters are continuous with respect to biosecurity risks.

Another submitter [11] considers that vessel owners will have no ability to correctly identify the origin of biofouling and the antifouling coating type, and accordingly this section of the guidelines further confuses vessel owners.

This submitter also reiterated its opposition to any in-water cleaning, particularly cleaning that is undertaken within a marina, because all antifouling coatings pose a contamination risk during in water cleaning. Marina operators will continue to ban in-water cleaning in their facilities should the guidelines support in water cleaning.

MAF Response

MAF will investigate whether a template or link for the biofouling record book could be incorporated into the guidelines.

MAF considers that vessel owners will be able to correctly identify the origin of biofouling and the antifouling coating type. NZ craft will only need to know whether they have travelled outside the jurisdiction of their regional council, while the keeping of records will assist vessel operators to identify the antifouling coating type applied to their craft.

When defining Regional biofouling, regional councils and unitary authorities should take into consideration the distribution of established invasive aquatic species or ongoing pest management within their jurisdiction, as well as the location of high-value environments. Many councils and authorities will have acquired knowledge of these factors to develop and implement a regional pest management strategy covering the coastal marine area.

The draft Guidelines provide councils and authorities with a broad discretion when defining Regional biofouling. This discretion is intended to enable councils and authorities to recognise the discreteness of areas of water within a region, such as isolated east and west coasts, and the status of aquatic pests in the region (i.e. intra-regional biofouling). It is also

intended that councils and authorities could take account of common vessel movements into/from adjacent regions and, if need be, define the scope of their Regional biofouling as extending beyond their jurisdictional boundary. More guidance on defining Regional biofouling may be helpful.

Consideration will be given to changing the name of "Domestic" biofouling to "National", as a term that more intuitively describes being from within the country, but beyond the region.

MAF respects the right of marina operators to ban in-water cleaning in their facilities, should application of the guidelines support in-water cleaning.

QUESTION 8:

Section B provides guidance on situations where in-water cleaning is considered acceptable and any conditions that may apply. Do you agree or disagree with this guidance, and why?

Summary of Submissions

Seven submitters [5, 7, 8, 9, 10, 11 and 13] commented on the guidance on situations where in-water cleaning may be appropriate or not and the conditions that may apply.

Of these, one submitter [13] agreed with the guidance on situations where in-water cleaning is considered acceptable and any conditions that may apply.

One submitter [5] considered the guidance under point 8 that methods should be used to capture debris greater than 50 μm in diameter when in-water cleaning involves the removal of macrofouling, to be excessive when the biofouling is only from a vessels home port.

Two submitters [7 and 11] are very concerned about the in-water cleaning of vessels or do not support in water cleaning. It is argued that the risk of contamination through the release of potentially toxic anti-fouling chemicals and the risk of invasive organisms establishing is too high. Invasive organisms can be present within micro (e.g. Didemnum vexillum) or macro fouling.

Both submitters support the work of the recreational marine industry in establishing hard stand cleaning operations that successfully manage all contaminants and bio-fouling organisms. They consider the draft Guidelines need to be consistent with industry best-practice and should ban the removal of macrofouling in the water and direct vessel owners with macrofouling to purpose built haul-out yards on land.

Alternatively, submitter 7 proposed that vessels arriving within the Bay of Plenty with risk fouling should be cleaned beyond the 12 mile limit boundary. This should be carried out by a qualified in-water cleaning contractor.

Two submitters [7 and 8] highlighted the need for pre-movement cleaning. Submitter 8 considered the guidelines do not place enough importance on pre-movement cleaning, particularly in regard to vessels operating in remote or pristine locations. This needs to be given more weight as it is a key factor in preventing the spread of marine pests regionally. Submitter 8 would like to see a recommendation in the guidelines that post movement in-water cleaning and shore based cleaning poses unacceptable risk, and that pre-movement anti-fouling is the only safe option.

One submitter [9] commented that with in-water cleaning of hard coatings on vessels there was a high level of copper 'washed' off the vessel. This is something that the guidance on situations where in-water cleaning may be appropriate doesn't really look into. It states that you still need to comply with local government's rules but gives the impression all is OK.

The final submitter [10] commented on a number of points in the guidance on situations where in-water cleaning may be appropriate or not and the conditions that may apply. Firstly, the word "only" should be deleted from Point 4.

Secondly, the phrase "unacceptable amounts" used in Point 8 is subjective.

Thirdly, the credibility of the most technically specific operational guidance in the Guidelines – the suggested standard of 50 microns for the lower size limit to capture debris of macrofouling organisms – is seriously undermined by Appendix B when it says the technology to achieve the suggested standard is not commercially available yet. The guidelines must only include technically credible and operationally achievable treatment standard or it will have limited value and may be ignored.

Fourthly, Point 9 states "If suspected invasive or non-indigenous aquatic species are encountered during in-water cleaning or other vessel maintenance activities, the relevant authority should immediately be notified and the cleaning or maintenance activity ceased". Submitter 10 argues that this is unlikely to occur due to visibility issues and will be severely limited by the ability of the cleaner to identify invasive organisms, especially new ones. For this to be effective, MAF should certify operators doing in-water cleaning services as to their ability to identify non-indigenous species.

MAF Response

It is acknowledged that in-water cleaning is not without risk, but those seeking to prohibit or severely restrict this activity need to acknowledge the risks of failing to manage biofouling. A prohibition on in-water cleaning is too blunt an instrument for managing the risks associated with this activity as it overlooks the possibility that the contaminant and biosecurity risks can be broken down into their components to enable effective risk management. For example, not all biofouling presents a biosecurity risk, so the risks associated with biofouling can be effectively managed by having regard to its type and origin.

For recreational craft, the sponging off of a slime layer in-water is an effective means of preventing the accumulation of biofouling between haul outs. Ideally, vessels with macrofouling should be cleaned out of the water and this may be practicable for smaller craft but not for all vessel types.

For craft such as fishing vessels that operate out of a "home port", the guidance on in-water cleaning seeks to encourage regular biofouling management by vessel operators as an effective means of limiting the development of biofouling on their craft to microfouling. Under these circumstances, the accumulation of macrofouling on a craft may indicate that its antifouling system has expired and that out of water maintenance and antifouling reapplication is required. Nevertheless, the recommendations for decision-making on in-water cleaning provide that macrofouling of regional origin may be removed without the need for full containment of biofouling waste.

The proposal that risk fouling should be cleaned beyond the 12 mile limit of the coastal marine area is not an effective management measure as it merely shifts the risk to another jurisdiction and in many cases is unlikely to be practicable.

Pre-movement cleaning is important for all craft, but especially for those voyaging to remote or pristine marine locations. MAF agrees that the advice to "clean before you leave" could be given more prominence, but disagrees that pre-movement cleaning is the only safe option.

The guidance on Anti-fouling coating type on page 24 of the Guidelines distinguishes between anti-fouling coatings that contain toxic biocides and those that do not, but advises that all types of anti-fouling coating pose a contamination risk during in-water cleaning. To mitigate this risk, conditions relating to suitability for cleaning and discharges are recommended.

MAF agrees that the word "only" should be deleted from Point 4, and that the phrase "unacceptable amounts" used in Point 8 is subjective and should be removed.

It is acknowledged that the standard for in-water cleaning technologies to aim to capture debris greater than 50 μm in diameter is presently aspirational, but we have also been advised that it is technically feasible. The presence of a standard is necessary to provide an incentive for technology developers to develop and commercialise cleaning systems that have the capability of meeting the standard. It is expected that systems with this capability will be available within the life of the Guidelines.

MAF is aware of instances where dive contractors undertaking in-water cleaning have encountered suspected invasive or non-indigenous aquatic species. Guidance is needed for contractors in these situations.

QUESTION 9:

Section B also contains recommendations for decision-making on in-water cleaning according to biofouling type and origin. Do you agree or disagree with the recommendations, and why?

Summary of Submissions

Four submitters [3, 6, 11 and 13] commented on the recommendations for decision-making on in-water cleaning according to biofouling type and origin.

Of these, one submitter [13] agreed with the recommendations for decision-making on in-water cleaning according to biofouling type and origin.

Another submitter [3] highlighted the importance of these Guidelines being consistently and practicably applied across these regions. Different interpretations and applications across different regions may be counterproductive for the aquaculture industry, which operates in a number of regions across New Zealand and regularly moves vessels and gear between these regions.

One submitter [6] disagreed with recommendation 4 that "Macrofouling derived from international locations should only be removed using cleaning methods that are able to minimise the release of all organisms…", as it prescribes an outcome whereas the industry's normal approach is to manage identified risk. The approach taken in New Zealand to the

management of risk under health and safety legislation is to place the onus on the operator to demonstrate that they have considered the relevant risks and managed them down to a level which is as low as reasonably practicable. With respect to the assessment of biofouling risks from rigs, the presence of certain species on a rig prior to entry to NZ waters does not automatically mean that they pose a biosecurity risk. Measures might be considered to ensure that biosecurity risks from fouling on oil rigs are as low as reasonably possible.

Submitter 11 reiterated that it does not support the removal of any biofouling within the water. It considers that regional origin is unlikely to be known, so the guidelines will do nothing more than to confuse the user, while some statements within this section are regarded as nonsense – such as "Macrofouling should be removed using the manufacturers recommendations".

MAF Response

MAF agrees it is important that the Guidelines are consistently and practicably applied across regions by regional councils and unitary authorities. MAF is keen to provide guidance and support to councils and authorities to achieve these outcomes.

MAF considers that the approach of managing identified risk down to a level that is as low as reasonably practicable would not be precluded in applying the guidelines. The Guidelines contain recommendations for decision-making on in-water cleaning to avoid, remedy, or mitigate any adverse effect on the environment. The discretion of decision-makers would not be constrained by the Guidelines, and alternative or equivalent means of avoiding, remedying, or mitigating any adverse effects of in-water cleaning should be given consideration.

The recommendations for decision-making on in-water cleaning, whether for microfouling or macrofouling, stress that the cleaning method used must be consistent with the coating manufacturer's recommendations – to avoid damage to the antifouling coating. These recommendations are consistent with the advice contributed by coating manufacturers to the development of the Guidelines.

The capability of vessel owners to correctly identify the origin of biofouling was discussed under Question 7.

QUESTION 10:

The Guidelines incorporates a Decision Support Tool (DST) that allows users to determine whether in-water cleaning is likely to be acceptable and under what conditions. Will the DST assist environmental managers in making decisions about in-water cleaning practices within their jurisdictions; and/or help owners or operators of vessels and other movable structures to determine the type of evidence that may be required to obtain approval for in-water cleaning?

Summary of Submissions

Two submitters [11 and 13] commented on the value of the Decision Support Tool (DST) to environmental managers, and/or owners or operators of vessels.

Both submitters considered the DST will assist environmental managers in making decisions about in-water cleaning practices, and with adequate training would have no trouble applying the guidelines.

One submitter [11] considered that there is sufficient complexity in the decision tool that it will only confuse vessel owners and won't be used. They note that the guidelines suggest that the DST be used in conjunction with the text of the guidelines, however they consider the guidelines have not been drafted with the vessel owner in mind and are accordingly too long, and not to the point.

MAF Response

The feedback on the suitability of the DST (and the text of the guidelines) for recreational vessel owners in particular is appreciated. The primary audience for the guidelines and the DST is environmental managers, so it is important that they are drafted in a manner that is suitable for this audience. However, MAF will examine whether aspects of the guidelines could be drafted to be more user friendly for vessel owners, and consider producing guidance specifically for this audience.

QUESTION 10 (CONTD.):

If you consider the DST could be improved, please explain how.

Summary of Submissions

Five submitters [3, 4, 7, 10 and 13] suggested improvements to the DST.

Of these, two submitters [10 and 13] observed that the text in some boxes is incomplete.

One submitter [7] considered the DST could be improved by including a section for macrofouling on boats of international origin to ensure that no in-water cleaning is permitted.

One submitter [4] observed that many New Zealand ports are already compromised from a biosecurity perspective, and suggested that where this environmental change has occurred environmental managers should recognise the reduced risk to the environment from in water cleaning and allow for less strict measures. They suggested a modification to the DST may be required.

This submitter [4] also considered the DST could be expanded to firstly recognise the lower biosecurity risk of vessels in a biofouling management programme approved by MAF, and secondly to enable the measures in the vessels biofouling management plan (such as maintenance dive inspections during the life span of the anti-fouling system).

Another submitter [3] considered there should be a presumption that structures that are in-water cleaned in the area they have been installed represent a low biosecurity risk. This needs to be clearly specified in the decision support tool, separating semi-permanent installations from 'vessels'. Likewise, the decision support tool should be made clearer with respect to structures that are not anti-fouled. The submitter suggests that the draft DST would mean the salmon industry's well-regulated in-water cleaning of non anti-fouled predator nets would be 'strongly discouraged'.

MAF Response

MAF agrees that the version of the DST included in the Discussion Document contains incomplete text in some boxes. This will be rectified when the text of the DST is finalised.

The DST already includes a section for macrofouling on boats of international origin. It is then within the discretion of the decision-maker to determine whether the conditions that may apply to biofouling of this type and origin are sufficient to manage the risks and subsequently determine whether in-water cleaning is permitted or not.

While many New Zealand ports already have invasive species present, this does not imply a reduced risk to the environment of that port or indeed to New Zealand waters more generally. A new invasion could still have a serious impact.

Vessels that operate to a biofouling management plan or within a biofouling management programme approved by MAF could be expected to have the information and documentation that environmental managers will require to apply the DST to make decisions on in-water cleaning. No expansion of the DST is required.

MAF will review the application of the DST to semi-permanent installations to ensure its practicality for the aquaculture sector.

QUESTION 11:

Is the guidance in Part 2 likely to have a positive or negative effect on your current activities or practices? If so, please explain how.

Summary of Submissions

Two submitters [11 and 13] commented on the impacts of the guidance on in-water cleaning provided in Part 2 on current activities or practices.

Of these, one submitter [11] considered the guidance provided within Part 2 is likely to have a significant environmental impact on the local environment due to its enabling and apparent promotion of in-water cleaning. In-water cleaning should not be promoted or used as a broad means of biofouling management. Existing professionally managed land-based facilities should be promoted in the removal and disposal of biofouling.

Another submitter [13] predicted that some foreign vessels that usually want a fast turnaround for any cleaning, generally during unloading/loading cargo, may be lost as clients. Some may go to anchor and spend the time to get the work done, but most will shy away from the paperwork and down time.

MAF Response

The Guidelines have been drafted to keep apace with a number of significant changes that have occurred within the maritime industry in relation to anti-fouling coatings and the management of biofouling on vessels.

Some modern paint types, such as fouling-release coatings, do not contain active biocides, but require regular cleaning or grooming in-water to curtail biofouling accumulation. In-water

cleaning of surfaces that lack biocides may not have the chemical pollution risks attributed to other types of coatings.

Regular hull maintenance, including in-water cleaning to reduce the development of mature biofouling that may contain pests and diseases, is now considered a key component of managing the biosecurity risks of biofouling on vessels between dry-dockings or haul-out. Regular in-water cleaning is also practiced in aquaculture to manage biofouling on structures.

Accordingly, the Guidelines seek to provide more flexibility in the situations where in-water cleaning may be permitted. However, rather than promoting in-water cleaning, the Guidelines advise that in-water cleaning should only be undertaken when the removal of biofouling does not harm the coating and presents an acceptable biosecurity or contaminant risk.

Regular hull or structure maintenance in land-based facilities to manage biofouling is not a practicable option for many vessel types and structures, such as larger vessels that cannot be readily removed from the water for cleaning and maintenance.

It would be counter-productive if the paperwork and down time associated with obtaining approval for in-water cleaning deterred vessels from undertaking this type of maintenance. For foreign ships on a tight schedule of port visits, obtaining a permit for in-water cleaning in a NZ port may not be practical, but it would be logical for diving contractors to hold a permit to clean multiple vessels to alleviate the need for vessels to hold a permit.

OTHER COMMENT ON THE GUIDELINES:

Summary of Submissions

Nine submitters [1, 3, 4, 5, 6, 9, 10, 12 and 13] made other comments on the Guidelines that were not within the scope of the questions raised in the Discussion Document.

Of these, one submitter [1] had no concerns with the implementation of the proposed guidelines. Another submitter [10] supports the intent and direction of the draft guidelines and the risk management approach taken, and considered them to be an improvement over the existing Code of Practice.

One submitter [3] considered that guidelines aimed at minimizing the spread of marine pests around New Zealand will be ineffective without the accompanying Import Health Standard for Vessel Biofouling for arriving international vessels.

Three submitters [3, 4 and 5] noted that seafood interests were not represented in the Redrafting Correspondence Group.

One submitter [4] supported the promotion in the guidelines of the IMO template for biofouling management plans and biofouling record books, as vessels and structures operating in international waters should only be required to maintain a standard set of records. Other submitters [10 and 13] noted that MGPS (marine growth prevention systems) is not defined in the biofouling management plan template [Appendix 4].

One submitter [5] hoped that a literal application of the guidelines does not result in a requirement for multiple resource consent applications for individual vessels wanting to clean

in-water. They could not support the development of a complex and expensive permitting regime to be developed for in-water cleaning and maintenance.

One submitter [6] observed that the definition of "vessels" in these Guidelines is different to that for "ship' in the IMO Guidelines. For the purpose of ensuring that these Guidelines are intended to bring into force the IMO Guidelines, they suggest the definitions should be aligned. Another submitter [10] observed that the definition for "Contaminants" is at odds with the definition of this term in the RMA, and proposed adopting the RMA definition instead.

Submitter 9 would like to see it emphasised that a consent is required for any in-water cleaning and state which authority needs to be contacted for such an approval, as people new to New Zealand may not know which authority to speak with.

Another submitter [12] considered the ANZECC Code is not sufficient to prevent shore based maintenance activities or provide guidance for facilities to contain waste produced and minimize the release of contaminants. They consider changes have to occur in vessel maintenance practices in marinas. The guidelines must ensure, through consent conditions for marina facilities and regional coastal plans, that new facilities include design and management provisions to capture and retain all waste and to enable eventual disposal of treated waste waters, and that existing facilities upgrade disposal of treated waste waters.

Submitter 10 considered the guidelines could become a highly useful tool if they supplied information directly in the form of updateable appendices covering the range of references which the guidelines currently ask the user to seek information on from outside the document. These include who the relevant authorities are, what their functions are, and how to contact them; the range of antifouling paint suppliers and their coating brands with full specifications on suggested methods of application and removal rather than repeatedly referring the user back to the manufacturer; and finally a set of hard standards, specifications and best practice which can be used by authorities as a benchmark.

This submitter also considered the Application of the Guidelines in New Zealand chapter needed a footnote reference for the global measures adopted by the IMO, in para. 3 of the Background section.

Commenting on Appendix 3, submitter 10 considered water jet systems should not be recommended as a viable method if they are "not fully understood" and are "not able to contain all of the removed biofouling".

MAF Response

MAF does not agree that the effectiveness of the guidelines is contingent on an accompanying Import Health Standard for Vessel Biofouling for arriving international vessels, but nevertheless the said standard is to be introduced in April 2012.

Seafood interests were invited to participate in the Redrafting Correspondence Group, but either declined or did not respond to the invitation.

The biofouling management plan template in Appendix 4 will be revised to specify what MGPSs (marine growth prevention systems) are.

MAF agrees that a complex and expensive permitting regime for in-water cleaning and maintenance is not necessary, and it would be unhelpful if the application of the guidelines resulted in a requirement for multiple resource consent applications for individual vessels wanting to clean in-water.

The purpose of these Guidelines is not solely to give effect to the IMO biofouling guidelines, and accordingly the definitions in these Guidelines do not need to be strictly aligned with those in the IMO Guidelines. The definition of "vessels" in these Guidelines is not dissimilar to that for "ship' in the IMO Guidelines, but is more likely to be understood in the wider context that the guidelines will be used.

The definition for "Contaminants" is at odds with the definition of this term in the RMA because a user friendly definition is needed that can be applied in Australian and New Zealand.

The Application of the Guidelines in New Zealand chapter states: "In-water cleaning within the coastal marine area may only be carried out with approval from the relevant regional council". A more definitive statement that a consent is required would not be accurate as in-water cleaning is a Permitted Activity in at least one region.

The Requirements for Shore-based Maintenance Facilities recommend that facilities should adopt measures to ensure that all biofouling waste, coating waste and other contaminants arising during maintenance activities are captured and retained in a manner that minimises their release into the terrestrial and aquatic environment. MAF will investigate whether avoiding the release of wastes is a feasible outcome.

MAF agrees that a footnote reference for the biofouling measures adopted by the IMO is needed in the Application of the Guidelines in New Zealand chapter. A listing of relevant authorities (regional councils, unitary authorities, and Maritime New Zealand) and contact details could also be included.

An updateable appendix covering all antifouling paint suppliers in New Zealand, and their full range of coating products with full specifications on suggested methods of application and removal is not a practical suggestion for inclusion in the guidelines. Such a database could only be developed and maintained effectively by antifouling paint suppliers in New Zealand.

The Guidelines are intended for use by regional councils, unitary authorities, and Maritime New Zealand in New Zealand, and by authorities in Australia. The number and diversity of these authorities makes the setting of hard standards or specifications that are applicable in all jurisdictions an impractical suggestion. Furthermore, if the guidelines are to be relevant over an extended period of time, it is better that they describe outcomes to be achieved that will remain relevant as technologies evolve.

The purpose of Appendix 3 is to provide information on the most commonly available in-water cleaning technologies with particular emphasis on their use and limitations. The inclusion of a technology in the appendix does not mean it is recommended as a "viable method".

Appendix 1: Submissions

SUBMISSION 1 – NGATI TOA

From: Reina Solomon [reina.solomon@ngatitoa.iwi.nz]
Sent: Friday, 28 October 2011 1:45 p.m.
To: Allan Bauckham
Cc: jennie.smeaton@ngatitoa.iwi.nz
Subject: FW: Consultation on draft Anti-fouling and In-water Cleaning Guidelines [BC]

Tēnā koe Allan

Thank you for your email seeking comment on the proposed draft Anti-fouling and In-water cleaning guidelines. I have reviewed the draft document on behalf of Te Rūnanga o Ngāti Toa, and we have no concerns with the implementation of the proposed guidelines.

Please contact me if you have any queries or would like further comment.

Nāku noa, nā
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SUBMISSION 2 – RICHARD BROWN

Submission on the draft guidelines on anti fouling from Richard Brown

I have read most of the 42 pages of draft antifouling guidelines and would like to comment as follows:-

I am a yacht owner and have been involved in the "yachting industry" in one way or another for many years. As an ex employee of Yachting New Zealand I am surprised that you have not consulted with them or any other boating representative body. I am equally disappointed that Yachting New Zealand is not submitting directly, and instead encouraging their members to do so individually.

Costs
I have recently anti fouled my 32' yacht at a cost of $1000. $600 for the haulout and $400 for the materials. That represents 2% 0f the capital value of the boat so it is a significant cost for me year after year after year. I think my thoughts would be representative of most boat owners.

A question of Science
Many years ago I attended a meeting held at one of the Auckland Yacht clubs at which a scientist attempted to make the case against cleaning boats in the water. The justification, if I recall correctly was based on finding some unpleasant chemicals on the seabed outside West Park Marina and this was blamed on the anti fouling on the boats inside the marina. I am no scientist but I was unconvinced then that the problem was not much wider and could have been due to rain water run off from roads, lead in petrol, farms and industrial areas. No evidence was offered that demonstrated that this was not the case.

Historical use of Grids
For several years I cleaned my boat of that time on the grid in the corner of Westhaven marina. This was an extremely popular cleaning area and you often had to be early to get onto it along with 4 or 5 other boats. If ever an area was going to suffer from a build up of toxins from antifouling this would be it. Has any evidence been found there? My observation would be that the marine life around the grid appeared to be as good as anywhere else with growth on piles and rocks nearby and fish in the sea.

My boat is currently in Gulf Harbour marina. The ropes which hang in the water and the adjacent pontoon are festooned with marine growth. There is an amazing fish population from tiny specimens to large resident stingrays and the occasional king fish. Again the large population of boats, every one of which has anti fouling on the bottom seems to have little or no effect on marine life.

Local marine fouling
My boat does the occasional long distance cruise to say Coromandel, Great Barrier Is or the Bay of Islands, but never overseas. Of the growth which accumulates on it 99% gets there in the marina. Maybe 1% gets there up to 100 miles from there. I, like most boat owners, consider that by cleaning our boats in the water simply returns to the water that which has come from it.

Ineffective anti foul
It is also widely held that anti fouling which permits growth to grow on the boat has to be essentially worn out. It is therefore no longer harmful to marine life and so the argument goes that any spent anti fouling which ends up in the water is no more harmful that a bit of coloured dust. There is probably less of this entering the water from my boat than the dust which incessantly falls onto my boat from the air. In Westhaven it is much worse with the closeness of so much traffic.

Referring again to the grid at Westhaven and equally the grid at Weiti Boating Club there is no obvious evidence of any long term discolouration of the surrounding area which suggests that any residue is swept away by the tide.

It is hard to see why this is any more of a danger than the small quantities of antifouling which are removed through the ablative process while the boat sits at its marina.

Popular opinion
It would be safe to say therefore that the opinion of most recreational boaties is that the regulations and guidelines are not required and are "way over the top" Indeed the feeling is that because boaties were easy to pick off, someone has drawn up these regulations and they are being imposed with an iron fist by some Councils, when at the same time absolutely nothing is being done about the harder problem of growth on rocks, sea walls pontoons and bridges. Neither is it possible to prevent growth on driftwood and the like, from being transported long distances by currents.

Recreational boats are not the problem
I believe I am correct and that the first observations of Undaria were Wellington Harbour which is not a destination for overseas yachts and few visiting New Zealand yachts. More likely it was brought there by overseas shipping. Other early observations were on the marine farms off Coromandel which is more likely to have been transported there in fishing boat tackle than on the hull of a yacht.

Prolonging the life between cleans
Because of the relatively high cost of anti fouling a boat, owners do their best to prolong the period between coatings. Most owners find that this can be achieved by an 'in water' wipe when the growth starts to take hold. It is common therefore for owners to take the opportunity during a swim around the boat to do some maintenance. Most would be totally unaware that the regulations prohibit this and probably would ignore them anyway because of their lack of belief in the science as outlined above. I wish you luck in ever doing anything about this and even more trying to obtain the associated written maintenance records.

Waterblasting
At the next level many owners like to water blast off the growth and most of the now "dead" antifouling during an inter-tide lean against a wharf or piles. Certainly I have done this many times. In fact in recent times I was unable to arrange a haulout and because the bottom was dirty I did just that and just put the boat back in the water with no antifouling on it at all. I repeated this 2 more times in the next 12 months with very satisfactory and cheap results. No haulout and no anti foul.

Why regulate local boats at all?
The MAF report appears to recognise that to keep a boat's hull clean is more important than the effects of allowing some anti foul residue into the water. I would go further and say that in

most cases neither locally grown fouling nor the cleaning process in the water is any real problem. So why do we need regulations around those scenarios?

Regulate boats from overseas
Quite clearly there needs to be thorough regulation of boats arriving from overseas and how they can clean their hulls but that could be policed at the border. However the growth on ships is much harder to control and makes the heavy handed approach to local boats even less sensible.

Summary
I would like you to reconsider the guidelines as they apply to "local" boats. If you really believe that growth on these boats is a problem allow them to scrub off or water blast in the water. Free up the facilities such as the grids so that this is relatively easily achieved at low cost. Owner's natural concern about the performance of their boats will encourage them to clean frequently if its cheap enough. Even if there is a small environmental effect on the seabed in the proximity of grids it is likely to be minor and very local and perhaps a reasonable price to pay to ensure clean hulls.

Richard Brown
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November 2011

SUBMISSION 3 – AQUACULTURE NEW ZEALAND

17 November 2011

Allan Bauckham
Ministry of Agriculture and Forestry
PO Box 2526
WELLINGTON

Submission: Draft Anti-fouling and In-water Cleaning Guidelines

INTRODUCTION

1. Thank you for the opportunity to submit on the MAF Draft Anti-fouling and In-water Cleaning Guidelines (the Guidelines).

2. Aquaculture New Zealand (AQNZ) represents the interests of the aquaculture sector in New Zealand. This sector has export earnings in excess of $350m and a growth strategy with a goal of reaching $1 Billion per year in sales by 2025. The sector includes all salmon, oyster and mussel growing interests and directly employs more than 3000 people primarily in regional communities.

3. The activities of the industry take place in the coastal marine areas of most regional authorities in New Zealand and the industry's internationally recognised reputation for quality and food safety depends heavily on the purity of our growing waters. This makes preserving the environment and its biosecurity core to our business.

4. Each species has developed its own specific Environmental Code of Practice to direct best industry practices throughout growing and harvesting to minimise potential effects on the environment. These include various provisions to maintain biosecurity and minimise risks to the marine ecosystem. In addition to this AQNZ has an overarching biosecurity policy and manages a number of voluntary industry biosecurity specific codes of practice.

5. Maori investment makes up a significant proportion of the current ownership of aquaculture and their role is expected to grow with the implementation of the Maori Commercial Aquaculture Claims Settlement Act 2004.

6. AQNZ supports the submission lodged by the New Zealand Seafood Industry Council Ltd (SeaFIC)

7. AQNZ's comments on the draft Anti-fouling and In-water Cleaning Guidelines are given below.

MAIN POINTS

8. *AQNZ supports the aim of the Guidelines to balance the risks and benefits of biofouling management practices*. As outlined above the health and security of the aquatic environment is of paramount importance to the New Zealand aquaculture industry. We market our products on 'a taste of untouched waters' – that they are grown in an environmentally sustainable manner and in water that is free from undesirable contaminants. The industry shares the dual interests of the ANZECC Code of minimizing the release of toxins into the marine environment and the avoidance of the establishment and spread of marine non-indigenous species.

9. *Prompt implementation and enforcement of the upcoming Import Health Standard for Vessel Biofouling is vital.* The greatest risk to New Zealand's aquatic biosecurity is the arrival of international vessels without any clear requirements with respect to hull fouling. Guidelines aimed at minimizing the spread of marine pests around New Zealand will be ineffective without the accompanying Import Health Standard for Vessel Biofouling, which we have just been informed will not be enforced until 2016. Until that time only vessels that pose a very serious risk to NZ resources will have the standard enforced. What happens to vessels that pose a serious risk? With the increase in international recreational vessels during the rugby world cup and a further 4 years of international arrivals without enforceable standards the primary risk to New Zealand's ecosystem will continue to be from arriving vessels rather than the domestic targets of these guidelines.

10. *Recreational vessels will continue to pose a significant risk while pressures on aquaculture increase disproportionately.* While we strongly support the application of the Guidelines to recreational vessels we are unsure how the Guidelines could be equitably enforced over this sector. It is strongly likely that regional authorities will incorporate the provisions of the Guidelines into marine farm resource consents therefore making them mandatory regardless of their practicability however it is unlikely there will be a corresponding requirement for recreational vessels despite strong evidence that they can pose a significant risk of the spread of aquatic pests and diseases. This could have the effect of unfairly penalizing the aquaculture industry for risks that are outside the industry's control.

11. *The scope of the Guidelines has been broadened outside the IMO standards to include aquaculture without clear definition of aquaculture installations or the corresponding consideration of the operational practicalities of aquaculture*. The remit of the Guidelines has been broadened well beyond the scope of the International Maritime Organization Biofouling Guidelines which applies to 'ships' including floating craft, platforms etc but makes no mention of the range of 'structures' utilized in aquaculture. These Guidelines, in contrast, include 'movable structures' and 'aquaculture installations' and MAF personnel have indicated that this may apply to aquaculture equipment such as floats and ropes. The effect of this is that a set of principles that have been developed for one set of circumstances – ie 'ships' is being applied to a very different set of circumstances ie a mussel float.

    As an example the mussel industry ECOP outlines an on-site cleaning process for floats and backbone ropes during harvest to actively prevent the transfer of fouling species between different farming areas. Salmon industry members are actively working towards minimizing the use of anti-foulants on predator nets as part of their commitment to continual improvement of environmental performance. Decreased anti-foulant use is potentially accompanied by an increase of in-water net maintenance operations to ensure the highest quality growing conditions for the fish. An independent research agency has identified that in-situ net cleaning practices represent minimal biosecurity risk. However the Guidelines, as they stand, would label the salmon industry's responsible and well regulated in-water cleaning activities as 'strongly discouraged'. This is not 'risk based' by any means. Furthermore, oyster farmers clean their crop in-situ, how would the Guidelines practicably apply in this instance?

    There is no evidence of a risk-based approach in these instances and the industry would need to rely on individual councils to ensure that the Guidelines were applied in a practical and reasonable manner. There should be a presumption that structures that are in-water cleaned in the area they have been installed represent a low biosecurity risk. This needs to be clearly specified in the decision support tool, separating semi-permanent installations from 'vessels'. Likewise the decision support tool should be made clearer with respect to non anti-fouled structures.

12. *Aquaculture interests have not been involved in the Redrafting Correspondence Group*. This is particularly concerning in light of the broadened scope of the guidelines to now include moveable aquaculture structures. The

operational realities of the aquaculture industry could have been clearly identified with direct industry involvement during the redrafting process.

13. *The Guidelines will lead to different interpretations and applications across different regions which may be counterproductive.* The New Zealand aquaculture industry operates in a number of regions across New Zealand and regularly moves vessels and gear between these regions. For example a number of companies have operations in both the Tasman and Marlborough regions. It will be important that these Guidelines are consistently and practicably applied across these regions therefore AQNZ echoes the SeaFIC recommendation that 'MAF works with councils to ensure that they are implemented in a pragmatic way that is responsive to both regional and specific operational circumstances.'

    Furthermore it is not clear how 'regional' and 'domestic' would be defined when utilizing the decision tree as the very nature of the New Zealand marine environment means that the characteristics of the aquatic environment do not follow regional authority boundaries. There may be scenarios where industry operates across regional authority boundaries frequently, but where the marine waters are continuous with respect to biosecurity risks. Does MAF have clear ideas of defining regional water bodies so that they represent true measures of risk rather than on a geographical basis?

14. *The Guidelines do not adequately achieve their aim of adopting a risk-based approach*. The principle that out of water cleaning should be the default option wherever 'practicable' is prescriptive in nature and overrides the intent of adopting a risk based approach, particularly when it is not clear whether economic and commercial considerations make up the definition of practicable. For example, where structures remain in one location for an extended period (e.g. a growing cycle), it would be preferable to encourage more frequent in-water cleaning than default to an 'out of water is best' option that may simply encourage larger fouling populations.

I am happy to discuss any of the aspects raised in this submission and/or provide further information as required.

Yours sincerely

Colin Johnston
Technical Director

SUBMISSION 4 – SEAFOOD INDUSTRY COUNCIL

SEAFOOD INDUSTRY COUNCIL

The New Zealand Seafood Industry Council Ltd

Draft antifouling and in-water cleaning guidelines
MAF discussion paper No: 2011/13

Introduction

1. Thank you for the opportunity to comment on the draft antifouling and in-water cleaning guidelines. This submission is made by the New Zealand Seafood Industry Council (SeaFIC) on behalf of the seafood industry.

2. This submission is limited to an examination of the general principles and approach of the guidelines. Fishing and aquaculture companies have been encouraged to respond directly to MAF on how the guidelines deal with specific operational requirements and activities affecting vessels and structures. In general the seafood industry supports sensible measures to protect the health of the marine environment.

Purpose

3. The purpose of the guidelines is to support the management of environmental effects of the application, maintenance, removal and disposal of antifouling coatings at shore based maintenance facilities; and the in-water cleaning and maintenance of vessels and movable structures. They are to assist regional councils and territorial authorities to avoid, remedy or mitigate any adverse environmental effects arising from shore based and in-water maintenance of the submerged surfaces of vessels and moveable structures.

4. All maintenance of vessels and moveable structures that occurs on land, in fresh water or within the coastal marine area (i.e. within the Territorial Sea) must comply with the Resource Management Act 1991 and plans prepared under it. It is intended that environmental managers will take account the guidelines when carrying out their resource planning and/or consenting/permitting functions. The guidelines provide clarity on decision criteria and information requirements required for permitting of activities relating to hull and structure cleaning and maintenance.

Review

5. SeaFIC considers that it is pragmatic to review the guidelines given the time elapsed since the development of the ANZECC code of practice for anti fouling and in-water hull cleaning and maintenance (1977) and subsequent changes in international agreements and biofoul technologies.

6. SeaFIC strongly supports the greater recognition that biosecurity risk is reduced through regular hull and structure maintenance, including in water cleaning to prevent the development of marine biofouling. We consider that these activities should be enabled as a way to mitigate the risk of marine and freshwater pests becoming established. Aquatic pests pose one of the greatest threats to New Zealand's biodiversity and integrity of aquatic habitats. The development of a risk based approach to provide more flexibility around situations where in-water cleaning may be permitted is welcomed.

7. The process to review and revise the code appears sensible. We note that seafood interests were not represented in the Redrafting Correspondence Group. We therefore recommend that MAF pay particular attention to any submissions on operational matters that are raised by individual companies.

8. SeaFIC supports the widening of the scope of the guidelines to include all vessel types and structures, and all aquatic environments. The business of the seafood industry (which includes freshwater species such as eels and freshwater aquaculture) is entirely dependent on maintaining a healthy aquatic environment. We therefore welcome initiatives to strengthen controls to prevent the introduction and spread of unwanted organisms.

The principles

9. SeaFIC considers that the principles consider the balance between managing environmental risks and the operational realities faced by owners of vessels and structures. It is not clear however, whether the operational realities reflect the economic impact on owners of dry docking or in-water cleaning. From a purely environmental perspective it may be preferable to remove vessels or structures from the water for cleaning but from an operational perspective, whilst in the life time of the anti-foul coating, the costs may be prohibitive for frequent dry docking creating a disincentive to remove biofouling. It is unclear whether the term "practicable" in Principle 5 includes consideration of economic impact on operators.

Decision support tool (DST)

10. The guidelines presume that dry docking and cleaning vessels out of the water is always an option. It may not be possible either within a region and/or nationally to have access to such facilities, for example the dry docking of large ships or oil drilling platforms. In these circumstances, in order to mitigate the risks of marine pests and diseases, it would be preferable in some circumstances, to enable in-water cleaning, as the risk to the environment would be greater than the risks from not cleaning. We recommend that the guidelines and DST be modified accordingly to include consideration of the feasibility of dry docking.

11. Many New Zealand ports are already compromised from a biosecurity perspective. Where this environmental change has occurred then environmental managers should recognise the reduced risk to the environment from in water cleaning and allow for less strict measures. A modification to the DST may be required.

12. For fishing vessels that enter the EEZ industry participants are seeking the opportunity to meet the requirements of the proposed import health standard for vessel biofouling through the use of an approved biofoul management programme (see attached). The decision support tool should be expanded to first recognise the lower biosecurity risk of vessels in an approved biofoul management programme and secondly to enable the proposed measures in the plan (such as maintenance dive inspections during the life span of the antifoul system).

Record keeping

13. We support the promotion of the IMO template for a biofouling management plan and biofouling record book in the guidelines. As vessels and structures may operate in international waters it is pragmatic that vessels owners should only be required to maintain a standard set of records. The record keeping under the proposed programme would be consistent with the IMO guidelines.

Implementation

14. SeaFIC recommends that once the guidelines are finalised, MAF works with councils to ensure that they are implemented in a pragmatic way that is responsive to both regional and specific operational circumstances.

Mr Wayne McNee
Director General of MAF
Ministry of Fisheries
PO Box
Wellington

3 October, 2011

Dear Wayne

Agreement with MAF Biosecurity – Friday 23 September
Last week Peter Ballantyne (Solander), Ronni Symon (Sealord), Tom Birdsall and I (Sanford) attended a meeting with Liz Jones (Senior Adviser, Biosecurity Operations) and Paul Hallet (Manager, Biosecurity Operations). We were representing a collective of fishing companies whose vessels enter coastal water spaces[1] outside of New Zealand[2]. The purpose of the meeting was to discuss the new Import Health Standard (*IHS*) that MAF Biosecurity is preparing. The IHS will regulate vessel biofouling when vessels enter NZ waters[3]. Biosecurity New Zealand intends to issue this Standard by the end of October 2011.

The IHS Biofouling Standard is based on the IMO guidelines that were adopted by some participating States in August 2011.

We are fully supportive of keeping New Zealand waters free of invasive aquatic pests. All of us are actively managing our vessels to avoid biofouling; all apply antifouling treatments and we maintain these coatings as much as practical. Notwithstanding this, sometimes fouling occurs. The level of fouling has a direct correlation to vessel management and port visits. The IHS supporting research documents that Biosecurity have shared with us has helped us to realise that at times our vessels may have a fouling issue.

IHS thresholds – we have significant concerns
The fishing industry was consulted on the draft IHS a year ago. Since then the Standard has been substantially redrafted and now contains mandatory requirements and thresholds. We have significant concerns with these. There is no allowance (and therefore no discretion) provided for long term stays (vessels visiting NZ waters for more than 30 days) other than a slime layer and goose barnacles. For short terms vessels (here for less than 20 days) the allowable biofouling is 'less than 1% of the hull below the water line, no green algal growth of more than 50mm and no brown and red algal growth greater than 4mm, and in the hull and niche areas no algal growth of more than 4mm'. We believe that these thresholds could be triggered at times even on the best managed vessels. The consequence of failing thresholds will be severe.

Agreement from the meeting
Biosecurity NZ acknowledged that their IHS regulations are the first in the world, untested and are already causing interpretation challenges for port staff. Your staff offered to work with the industry for one year to help us, and your compliance staff, to transition into the new rules. During this education period no prosecutions / penalties will be imposed. Your staff also offered an alternative pathway through the IHS for

[1] Coastal waters of other countries excluding the high seas.
[2] Sanford, Solander, Talleys, Sea Resources, Richardson Fishing and Sealord.
[3] The industry has had a self imposed Code of Practice for avoiding vessel hull contamination since 1996, attached.

fishing vessels which regularly enter and exit New Zealand waters. This offer is appreciated and we look forward to good dialogue and a partnership approach. However should a severe case of biofouling present itself, it is our expectation that Biosecurity would intervene to ensure that our coastal waters are not exposed. Sanford, like others, has made significant financial investment in aquaculture and it is vital that this side of our seafood business is not left vulnerable.

At the meeting Biosecurity New Zealand agreed that if a fishing company had a biofoul management plan based upon the recommendations detailed in the IMO guidelines this would be an acceptable alternative pathway though IHS compliance. We discussed how this could be provided for in the Standard.

Import Health Standard for vessel biofouling – proposed new wording
We agreed to amend the IHS by including reference to an IMO based 'biofoul management programme' pathway through compliance, see underlined wording.

'The desired outcome of the standard will be to minimise the biosecurity risk organisms associated with vessel biofouling entering New Zealand's marine environment and establishing. A vessel arriving with a clean hull and niche areas is considered to meet this outcome, where 'clean' means no biofouling apart from those allowances given in the thresholds section or an approved biofoul management programme is in place'.

Memorandum of Understanding (MOU)
We agreed to negotiate a MOU between Biosecurity of New Zealand and those fishing companies who intend to use the biofoul management plan pathway. The MOU would commit our companies to a programme of biofoul self management and the maintenance of a vessel record book.

We accept that our vessels would still be inspected randomly by Biosecurity port staff but agreed that any non-compliance (which we anticipate would be minor) would be worked through. In return, Biosecurity NZ would operate the IHS principally as a desk top exercise using a risk profile based from information sourced from the vessel record book and biosecurity data base.

Fishing companies wanting to use the MOU pathway agreed to send confirmation of their participation - this letter. In return, MAF Biosecurity said that they would ask you to confirm if the MOU pathway was acceptable. Upon your acceptance we agreed to work together in good faith and accept the IHS regulation thresholds and compliance difficulties.

Vessel biofoul management plan
Details of the vessel biofouling management programme to be kept in a vessel record book based on the IMO guidelines and would contain the following:

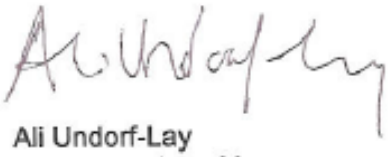
- Antifouling system selection, application including dried film thickness and the chemical composition of antifouling paint and maintenance requirements in accord with best practice[4],
- Treatments to be applied by a suitably qualified and experienced company
- After 18 months a maintenance dive inspection, repeated again at 6 month intervals during the life span of the treatment.
- Record of any damage to anti-fouling coating system and maintenance response

[4] Could be by way of paint manufacturer's letter

- Details of overseas port calls and coastal waters fished
- Details of time when the vessel was laid up/inactive for extended periods outside of New Zealand waters including location and precautions taken to prevent biofouling, and
- Details of when the vessel departed from its normal operating profile and docked at other ports and if known, details of marine pest incursions known to exist at this port.

We would appreciate your confirmation of the MOU and vessel biofoul management plan as an alternative IHS requirement.

Yours sincerely,



Ali Undorf-Lay
Industry Liaison Manager
Sanford Ltd
On behalf of Solander, Talleys, Sea Resources, Richardson Fishing and Sealord.

SUBMISSION 5 – CHALLENGER FINFISHERIES MANAGEMENT COMPANY

Allan Bauckham
Ministry of Agriculture and Forestry
PO Box 2526
WELLINGTON
Email: aquaticbiosecurity@maf.govt.nz

Draft antifouling and in-water cleaning guidelines
MAF discussion paper No: 2011/13

Introduction

Thank you for the opportunity to comment on the draft antifouling and in-water cleaning guidelines. This submission is made by the Challenger Finfisheries Management Company Ltd (Challenger). Challenger is a commercial stakeholder organisation that represents the property rights of inshore finfish quota owners in the Challenger and Egmont regions. As such we have an interest in matters that relate to fishing vessels and the health of the aquatic environment.

Challenger supports the submission of the New Zealand Seafood Industry Council. We wish to make a few additional comments.

Development of the guidelines

We note that seafood interests were not included in the Redrafting Correspondence Group. Challenger is disappointed that it was not approached by the Top of the South Biosecurity Partnership to help inform their input. We recommend that any future review of the guidelines should include seafood industry representation.

Inclusion of other structures

In 2007 we had significant concerns over the introduction of invasive South African mussels from the de fouling of the Ocean Patriot oil rig in Tasman Bay. Fortunately this pest was able to be eradicated. We therefore strongly support the widening of the scope to include all vessel types and structures, particularly the inclusion of large structures such as floating drilling platforms. The business of inshore fishing is entirely dependent on the strength of controls to prevent the introduction and spread of unwanted organisms.

Provision of facilities

The New Zealand Coastal Policy Statement (Policy 23) requires operators of ports, marinas and other relevant marine facilities to provide for the residues from vessel maintenance to be safely contained and disposed of. Almost all commercial inshore vessels use these facilities for the maintenance of their hulls in the Challenger area. Given the currentlimited capacity of these facilities the guidelines and the

decision support tool need to be considered with respect to the required infrastructure, particularly if the guidelines are expanded to include all vessels. From an operational and economic perspective, bottlenecks for maintenance requirements are to be avoided. In this respect the greater recognition of the biosecurity benefits of in-water cleaning is welcomed.

In-water cleaning

Currently fishing vessels typically use services orfacilities provided by ports and other operators for the cleaning of hulls. They do not apply for a resource consent to undertake the activity. If vessels owners wish to explore the in-water cleaning option we would hope that the literal application of the guidelines does not result in a requirement for multiple resource consent applications for individual vessels. We would expect that an area/facility would be deemed to be appropriate location for in-water cleaning of vessels that qualify, based on presentation of information to the operator of that area and the proposed checks and balances. We cannot support the development of a complex and expensive permitting regime to be developed for in-water cleaning and maintenance.

Most inshore fishing vessels operate within specific geographic regions domiciled to a home port. It is important to recognise that these home ports are generally where hull cleaning and maintenance occurs. Most ports around New Zealand are considered compromised from a biosecurity perspective. For domestic local/regional domestic vessels the aim to collect all material greater than 50um from cleaning to minimise the release of viable adult, juvenile and larval stages of macrofouling, appears excessive given that these vessels (with biofouling)are generally berthed at the ports.

Record keeping

The guidelines make a distinction in terms of record keeping (page19) between commercial and recreational vessels. The reason for the distinction from a risk based approach is not clear. Many inshore commercial fishing vessels are of a relatively small size. For example almost 50% of registered commercial fishing vessels are less than 10m in length. Several inshore fishing vessels only have seasonal use. It may be more helpful to have a size distinction as opposed to a purpose criteria for different record keeping requirements.

Contact details:

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SUBMISSION 6 – PETROLEUM EXPLORATION AND PRODUCTION ASSOCIATION

17 November 2011

Ministry of Agriculture and Forestry

PO Box 2526

Wellington

Attention: Allan Bauckham

Submission Draft Anti – Fouling and In Water Cleaning Guidelines

1. This submission is made on behalf of companies exploring for or producing petroleum products both within the Territorial Sea and wider Exclusive Economic Zone.

Introduction

2. We understand that the draft Import Health Standard for Vessel Biofouling will put in place requirements for vessels entering NZ waters. If they don't meet the IHS an inspector may take action to ensure mitigation of the risk that the vessel poses to NZ. This IHS will be renamed as a Craft Risk management Standard eventually but the amendment of the Biosecurity Act has not yet happened.
3. The requirements involve maintenance of antifouling coatings (and non-concurrence may lead to removal of biofouling) and, if this is carried out in NZ or Australia, the Guidance document which is the subject of this submission gives useful advice for doing this safely, effectively and with least possible risk to the environment (including least biosecurity risk to the marine environment).
4. The draft Anti-Fouling and In Water Cleaning Guidelines primarily gives guidance to regional councils to use in deciding whether to allow vessels to clean their hulls in-water and what conditions should be added to the consent in terms of capture of discharged matter.
5. The guidelines advise those involved in up-keep of antifouling coatings as to the appropriate product to use and how to of remove and apply antifouling safely. MAF is acting as the agent for coordinating this review of an existing Code of Practice that was agreed in 1997 by NZ and Australian Ministers and which effectively banned the practice of in-water cleaning. This ban was mainly to avoid release of TBT into the water, a risk that is now a thing of the past as TBT use in antifoulants has been banned since 2008. It was thought that with care and under set conditions a certain amount of in-water cleaning could be allowed now.
6. While the Association is generally supportive of the proposed guidelines for commercial and other vessels that can be periodically dry docked for the purposes of bio fouling maintenance, the issue of cleaning both offshore drilling rigs and floating production and storage off-take vessels is still rather problematical.
7. There are no dry dock facilities in New Zealand capable of cleaning such vessels. In water cleaning is technically possible offshore, but increases the risk to divers and those required to operate in the water. Regulatory agencies have (to date at least) been reluctant to identify suitable sites where in water cleaning can occur due to the potential for introducing

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invasive species, in particular because of the issues surrounding the cleaning of the Ocean Patriot rig in Tasman Bay recently.

Definition of Vessel – Page 17

8. This definition is different to that defined by the IMO in an MEPC Resolution. For the purposes of ensuring that the Guidelines are intended to bring into force that Resolution then the definitions should be aligned.

Emergency response – Page 23

9. This section seems a little loose. We would have thought that there was a requirement for all maintenance facilities to have in place an emergency response plan. As it stands it is just a 'recommendation" that one should be in place.

Recommendations for Decision Making on In Water Cleaning

10. On Page 27, point 4, there is a requirement that macro fouling derived from international locations should only be removed using cleaning techniques that are able to minimise the release of all organisms.
11. This requirement is similar to that proposed earlier by MAF in relation to the draft Import Health Standard, where the proposed Standard required that the hull of all vessels arriving in New Zealand waters must be "clean". That was defined as free from visible aquatic organisms, except as a slime layer.
12. The Association disagrees with the essential philosophy of this, in that it prescribes an outcome which is the opposite of the approach normally taken by participants in the oil exploration industry, which is to manage identified risk. A good example of the risk management approach was in relation to the drilling of AWE's Tuatara well last year off the coast of D'Urville Island, an approach the industry endorses.
13. We have previously proposed an alternative, or equivalent, option for oil rigs which may require separate treatment to other commercial vessels. We have previously described our preferred approach to MAF in submissions to the proposed Import Health Standard, and draw your attention to that submission, which we attach for your information.

14. We would be happy to meet with MAF to discuss this submission if you wish.

Sincerely

John Pfahlert

Executive Officer

9 June 2010

Liz Jones
MAF Biosecurity New Zealand
PO Box 2526
Wellington

Dear Liz

Draft Import Health Standard for Biofouling

Executive Summary

- The Association does not support the current draft Import Health Standard applying to oil rigs. We submit that rigs should be treated separately, since there is rarely more than 1 rig operating in New Zealand waters at any one time.
- The industry would prefer to adopt an equivalent means of meeting the Standard which is not so prescriptive. We suggest the adoption of an outcome-based risk assessment approach to managing biosecurity risks, similar to the regime already used in the management of oil spill contingency planning and health and safety management in the oil industry.
- If MAFBNZ is determined to have a regulatory response we suggest that a completely separate Standard/guideline is developed for the treatment of oil rigs which accommodates our outcome based risk assessment approach.

Submission

1. The Association represents the interests of petroleum exploration and development companies operating in New Zealand. The Companies represented by the Association include:
    - AWE
    - OMV New Zealand
    - Westech
    - Todd Petroleum Mining
    - Shell Petroleum Mining
    - Origin Energy
    - NZ Oil and Gas
    - L&M Energy
    - Exxon Mobil

2. The Association has a long history of involvement with MAFBNZ on the issue of managing biosecurity risks. We welcome the opportunity to provide comment on the draft Import Health Standard (the Standard) for Biofouling and would like to meet with officials to discuss our submission in more detail.

3. The discussion paper accompanying the Standard presents 3 options for managing biofouling on vessels arriving in New Zealand. The option of implementing mandatory requirements by way of an Import Health Standard is considered by MAFBNZ to deliver the highest overall net benefit to NZ. Industry

is invited to consider whether there are other options and whether we agree with the approach proposed by MAFBNZ.

4. In summary, the proposed Standard requires that the hull of all vessels arriving in New Zealand waters must be "clean". This is defined as free from visible aquatic organisms, except as a slime layer.

5. The Association disagrees with the essential philosophy of the proposed Standard, in that it prescribes an outcome which is the opposite of the approach normally taken by participants in the oil exploration industry to manage risk.

6. We have proposed an alternative, or equivalent, option for oil rigs which may require separate treatment to other commercial vessels.

7. The approach taken in New Zealand to the management of risk under health and safety legislation is to place the onus on the operator to demonstrate that they have considered the relevant risks and managed them down to a level which is as low as reasonably practicable. This is done by preparation of a "safety case" which is submitted for approval to the Department of Labour.

8. This approach is also taken in the preparation of plans for marine oil spill contingency planning where a marine oil spill plan is submitted to Maritime NZ for approval prior to operations commencing.

9. This approach allows commercial considerations to be evaluated, since it is rarely possible to reduce all risks to zero. The system is designed to allow important risks to be either managed or mitigated. It accepts however that some risks will remain, and that this is a part of allowing commercial activity to continue.

10. By comparison the draft Standard is prescriptive in nature, dictating a process that may be more expensive than is warranted to achieve the desired biosecurity outcome. This issue of cost raises another matter which has not been dealt with so far in the development of the Standard. That is, there is no Regulatory Impact Statement (RIS). It seems to us that if MAFBNZ is keen to pursue a regulatory response then the economic costs and benefits of doing so by way of such a prescriptive regulatory mechanism should be examined and made publicly available for comment. We note that the RIS process applies to delegated legislation of this type.

11. In our opinion, rig clearance by MAFBNZ should be considered on a case by case basis. For vessels that visit New Zealand waters infrequently, like oil drilling rigs, we submit that the Standard should be modified to adopt an "outcome-based risk assessment approach". As noted above, this approach is similar to that used by our industry in areas such as oil spill contingency planning and the management of health and safety risks. A similar approach is also used by the Australian Government to manage biosecurity risks.

12. Our proposed approach would be informed by ensuring inspection of the rig by a suitably qualified marine ecologist (acceptable to MAFBNZ) prior to the rig

entering NZ waters. They would undertake a risk assessment similar to that carried out for AWE on the Kan Tan IV by the Cawthron Institute.

13. With respect to the assessment of biofouling risks from rigs, we note that the presence of certain species on a rig prior to entry to NZ waters does not automatically mean that they pose a biosecurity risk. Risk to NZ from rig activities can only exist in a situation where they lead to the transfer of a pest species that subsequently becomes established in NZ. That requires a chain of events to occur, starting with the infection of the rig by the pest in its source region, followed by survival during transit to NZ, and finally its release into NZ waters and establishment.

14. Measures that might be reasonably considered to ensure that biosecurity risks from fouling on oil rigs are as low as reasonably possible include:

    - An inspection to determine what species are present and pose a risk to NZ. This will vary depending on where the rig has previously been operating and when it was last cleaned
    - Stripping ballast tanks of water and any sediments
    - Undertaking in water cleaning prior to loading onto a heavy lift vessel
    - Defouling of sub-surface structures using water blasting equipment while on board a heavy lift vessel
    - Defouling of sea chests
    - Application of anti-fouling paints

15. However, complete removal or treatment of biofouling may not be possible (nor considered justified) for every rig deployment to New Zealand due to several main reasons:

    - In-water methods (e.g. high pressure water blasting) are effective in removing close to 100% of biofouling, but may result in the unintentional introduction of pest species to the environment – as highlighted during the defouling of the Ocean Patriot in Tasman Bay in December 2007. There may be situations where in-water defouling is acceptable, for example if undertaken at a suitable offshore location, far from land. However, for safety reasons (for the divers) such in water cleaning work can only be undertaken in sheltered waters – which tend not to be coincident with a location remote from land. The ANZECC Code of Practice essentially opposes any in water cleaning of any vessel's hull, and port authorities generally do not permit such a practice under any circumstances. (However the rationale for opposing it is largely related to disturbing bio-toxic antifouling paint as an unintentional consequence of the defouling, whereas MODU's tend not to have such paint systems applied to them, so the objections could be challenged and the ANZECC code could usefully be amended accordingly).

    - There are limited facilities worldwide capable of dry docking a vessel the size of a typical Mobile Offshore Drilling Unit (MODU), particularly for any semi submersible MODUs. The closest suitable facility to NZ being in Singapore. Dry-docking therefore is often prohibitively expensive

(depending where the rig is coming from), given the time to tow such a rig to and from the dry dock (circa 3 weeks each way NZ-Singapore if 'dry towed' (i.e. transported on a HLV) or more than double that if wet towed). This could easily double the cost of drilling a well in NZ. Therefore complete out of water hull cleaning may not be an economically viable option for most MODU deployments to New Zealand.

- Biosecure alternatives to dry-docking are currently limited. Fouling removal while onboard a heavy-lift vessel (HLV) is possible (as in the *Kan Tan IV* example), however mobilisation of a HLV for a short tow (e.g. from SE Australia) is usually uneconomic as compared to wet towing. In any event, only part of a semisub MODU's hull can be cleaned while on a HLV (the underside where it sits on the HLV needs to be cleaned in water, and the over-hanging portions of the pontoons need to cleaned using barges while in port), so the net result is still that removed biofouling material will enter the marine environment.

- Encapsulation techniques for MODUs (as outlined in the Aquenal report to MAFBNZ in September 2009) are yet to be developed to a commercially available and reliable service. Furthermore, many technical and practical questions remain around the efficacy of this method as applied to something of the scale of a MODU.

16. In addition there are a number of other factors that will affect the ability of a pest species to establish itself. These include:
    - Where the rigs proposes to operate in NZ waters
    - How far from shore the rig will be operating
    - The time of year the rig will be operating
    - How long the rig will be working at various locations
    - The likelihood of a specific species being able to colonise the rig – this is dependent on the time of year and life cycle of the species.

    All of these matters may affect (even remove) a key limb in the risk analysis, namely release risks (e.g. spawning, detachment) and establishment risks (e.g. residence time, proximity to suitable habitat).

17. Changes to the timing of arrival and the location of drilling sites could potentially alter risk level. In summary the Association does not consider it practical or reasonable to develop one approach for all conceivable scenarios.

18. The discussion paper accompanying the draft Standard indicated that where a vessel could comply with the requirement to have a clean hull, there is the option to achieve the Standard by an equivalent method. On the one hand this is encouraging in that industry can seek approval of an equivalent way of meeting the outcome of the standard. The outcome of the standard in the guidance document is stated to be "minimising the likelihood of risk organisms being introduced into NZ territorial waters."

19. The problem with this approach is that we only get to argue this 'special pleading' after we have failed the IHS. The IHS is itself totally impractical as it proposes to:

" ….. put a duty on all vessels (and floating rigs) to have clean rigs and pontoons when arriving in NZ. Clean means no visible fouling except for slime. It applies to the niche areas as well as the open hull/pontoon areas."

20. Clearly what should change is that the IHS should itself be framed around the desired *'outcome of the standard'*. Then, as in safety management, the onus should be on the company wishing to bring a rig/vessel to NZ to demonstrate to MAFBNZ's reasonable satisfaction that the proposed deployment (after any risk mitigation measures that are to be committed to) will achieve the risk minimisation outcome.

21. This is the approach that has been successfully adopted by AWE as part of the Kan Tan IV Consortium, in bringing the Kan Tan IV to NZ, which MAFBNZ have stated represents good practice and the approach they want future operators to adopt. This is a good example where not all organisms beyond slime were needed to be removed from the hull of the KT-IV in order for it to pose no significant biosecurity threat.

22. While the KT-IV's hull was cleaned before it arrived in Australia (as it came from Trinidad on a HLV) it remained in Geelong for approximately 17 weeks for a refit. Given that certain marine pests are known to exist in Port Philip Bay, the KT-IV Consortium conducted extensive pest sampling, and diver inspections that were essential components of the Consortium's marine science based **Biofouling Management Plan and Risk Assessment** (BMPRA).

23. A subsequent ROV survey while the rig was operating in the Bass Strait, identified an array of marine life attached to the rig's hull (as expected given its time in Geelong and on location in the Bass Strait). Nevertheless it was agreed between the Consortium's marine science advisors and MAFBNZ's advisors that the particular species attached to the rig's hull would not create a significant biosecurity risk to NZ having regard to the specifics of the proposed deployment of the vessel (including to the environmentally sensitive "Tuatara-1" well location off D'Urville Island).

24. On this basis we understand MAFBNZ were comfortable in clearing the vessel for entry into NZ's Territorial Sea. The BMPRA and final ROV survey results were also crucial for the Tuatara-1 drilling operation receiving its RMA consent, with no sustained appeals, despite a major focus by various stakeholders concerned with potential biofouling risk factors.

25. A point worth acknowledging is that not every foreign species poses the same biosecurity risk to NZ. For that reason alone it's inappropriate to apply one regulatory approach to managing this risk.

26. A key point the industry would like to make is that for any rig or other construction vessel wishing to enter NZ, industry must be able to get a biofouling clearance before setting out on the mobilisation towards NZ waters (or an unambiguous signal that clearance will be forthcoming on arrival). Otherwise industry is exposed to having clearance on arrival denied and then having no option but to

tow the rig/vessel out of country to a dry dock (i.e. Singapore) or a location that allows in water cleaning.

27. One of the questions asked in the discussion paper is:

    Do the ongoing risks posed by vessel biofouling to New Zealand's economic, environmental, and social and cultural values justify MAFBNZ taking a preventative approach to controlling and managing biofouling on arriving vessels?

    We think the answer to this question must be 'yes', but the proposed means of achieving the outcome sought is not currently supported by the petroleum industry.

28. One option presented in the discussion paper is that New Zealand could wait for the IMO to develop an international response. Industry generally supports solutions proposed by the IMO. It may well be appropriate to discuss this issue further with the IMO to determine the timeframe they are working on.

29. We do not accept that NZ should proceed by itself simply to provide international leadership on this issue. The development of an earlier domestic regulatory response needs to be justified on the basis of the risks posed to NZ in waiting for the IMO to act. However if the NZ Government wishes to make progress in advance of an IMO led solution we submit that MAFBNZ agree to review their approach should the IMO come up with a different approach in the near future.

30. MAFBNZ has presented evidence that there is a non negligible biosecurity risk to NZ from 12 broad taxonomic groups of species that attach themselves to commercial and recreational vessels. However, commercial shipping represents about 3000 vessel movements per year, whereas the oil industry rarely has more than 1 rig operating in NZ waters at any one time.

31. There seems to be an inappropriate focus being devoted to our sector, when by MAFBNZ's own acknowledgement they will not be enforcing the Standard on other commercial shipping for up to 4 years. For an industry with infrequent rig clearances, we submit that there are 2 options available for the treatment of oil rigs:

    - Either that MAFBNZ continue with a case by case consideration of rigs outside this Standard – our preferred option; or
    - If MAFBNZ is determined to implement a regulatory response, that a completely separate Standard/guidelines is developed for the treatment of oil rigs which accommodates our outcome based risk assessment approach

Yours sincerely

John Pfahlert
Executive Officer

SUBMISSION 7 – BAY OF PLENTY REGIONAL COUNCIL

Bay of Plenty REGIONAL COUNCIL

Our Ref: 7.00360

24 November 2011

Ministry of Agriculture and Forestry
PO Box 2526
Wellington

Dear Mr Bauckham,

Bay of Plenty Regional Council's submission to the Draft Anti-fouling and In-water Cleaning Guidelines

Thank you for the opportunity to comment on the *Draft Anti-fouling and In-water Cleaning Guidelines*. The Bay of Plenty Regional Council does not wish to speak to our submission.

The Bay of Plenty Regional Council is responsible for the sustainable management of resources within the Bay of Plenty region. Our Council works to manage peoples' effects on freshwater, land, air and coastal water under the Resource Management Act (1991). We also have a broader responsibility working with district councils in the area, for the economic, social and cultural well-being of communities in the Bay of Plenty region.

New Zealand's largest port (by cargo export tonnage), the Port of Tauranga, is within the Bay of Plenty region. Coastal ports, mostly servicing the fishing and tourist industries, are also located within the region at Whakatāne and Ōpōtiki. The Bay of Plenty region has an extensive area of coastline and several marine reserves with exceptional ecological values. Aquaculture ventures have been consented and are underway in the eastern Bay of Plenty.

Overall we are supportive of the intent of the guidelines. We have provided comments on specific matters such as in-water cleaning and maintenance of vessels. Please find our detailed comments attached. We trust that you find them constructive.

For matters relating to this submission, please contact Kataraina Maki at kataraina.maki@boprc.govt.nz or 0800 884 881 ext. 9321.

Yours sincerely,

Garry Maloney
Acting Group Manager Strategic Development

Bay of Plenty Regional Council 5 Quay Street, P O Box 364, Whakatane, New Zealand

Working with our communities for a better environment

Reference	*Position*	*Recommendation*
Question 1	Bay of Plenty Regional Council (Council) considers that these principles adequately reflect the balance between managing the environmental risk of maintenance practices and operational realities of the maritime industry.	Maintain these principles.
Question 2	Council agrees that all vessels need to be subject to the guidelines. However, carrying out the maintenance itself should be restricted to professional/registered operators or those acting under their supervision.	Council recommends having a registration and monitoring process for antifouling maintenance as part of a regulation to supplement the guidelines.
Question 3 A Anti-fouling Coating Types	We note that the activities described here in last paragraph must only be carried out at maintenance facilities with all necessary approvals from Territorial Authorities and Regional Councils.	Council recommends improving wording to make clear that it is the responsibility of the person carrying out the maintenance has checked all necessary approvals are in place for the location and that they are familiar with all conditions of such approvals.
Question 3 C Requirements for Shore-based Maintenance Facilities	Council believes that all maintenance should be carried out at a facility that has all the appropriate authorisations, including land use and discharge permits. Non-professional maintenance without close supervision should be discouraged.	Reword to ensure that customers undertake their own maintenance on their vessel with appropriate supervision. Replace with a specification that all maintenance should be carried out at a fully equipped and authorised facility.
Question 3 D Application of Anti-fouling Coating	The guidance suggests that full bunding and screening of the work area may not always be appropriate. It is our view that run-off and aerosol distribution prevention requires full containment. We would be concerned if a lower standard of operation was allowed or implied for non-professionals.	Council recommends replace the word 'may' with 'should' in bullet 1 of specific guidance for professionals. Change the heading for 'specific guidance for non-professionals' to 'additional guidance for non-professionals'.
Question 3E Maintenance and Removal of Anti-fouling Coatings	We think that dry abrasive blasting should not be used other than in a fully enclosed designed for this purpose.	Council recommends making appropriate changes to this section to make clear dry abrasive blasting is not an option when outside.

Obj Ref A966939

Reference	*Position*	*Recommendation*
Part 2 In-water Cleaning and Maintenance	Council is very concerned about the in-water cleaning of vessels occurring within the region. The reason for this is that the risk of contamination through the release of potentially toxic anti-fouling chemicals and risk of invasive organisms establishing within the Bay of Plenty, and especially Tauranga harbour, is too high. There is likely to be a variation in the quality of anti-fouling systems. Invasive organisms can be present within micro (e.g. *Didemnum vexillum*) or macro fouling. Vessels entering the Bay of Plenty from international or regional locations must be free of all invasive organisms. Vessels e.g. barges, should not move across international boundaries unless they are free of all potentially invasive organisms. Hulls may need to be cleaned at the point of exit e.g. if a barge has been within the Port of Auckland area for some time, then it should be cleaned at that location before relocating to the Bay of Plenty as there are invasive organisms at Auckland that are not yet in the Bay of Plenty. In our experience it is impractical to allow cleaning provided contaminant discharges meet "local water quality guidelines".	The recreational marine industry has made great progress over the last 15 years in establishing hard stand cleaning operations that successfully manage all contaminants and bio-fouling organisms. The Draft Guidelines need to be consistent with these best-practice procedures. We strongly recommend that any water-borne vessel that arrives within the Bay of Plenty with risk fouling should be either cleaned off on a hard stand, or cleaned beyond the 12 mile limit boundary. This should be carried out by a qualified in-water cleaning contractor which are freely available in the region.
Question 10 Decision support tool	It is our view that this is an area that could be improved in terms of what to do with macrofouling on boats of international origin. A section should be added that for macro fouling on these boats no in water cleaning is permitted.	Revisit the decision-making tool in the guidelines so that it includes a section for macro fouling on these boats, and to ensure that no in-water cleaning is permitted.

Obj Ref A966939

SUBMISSION 8 – SPS BIOSECURITY

Draft Anti-fouling and In-water Cleaning Guidelines

MAF Discussion Paper No: 2011/13

SPS BIOSECURITY LTD – SUBMISSION

General

SPS Biosecurity Ltd has managed aspects of the field delivery of Chatham Island quarantine and biosecurity since 2007. In 2009 an action plan for marine biosecurity was also delivered to the Chatham Island Marine Biosecurity Partnership.

This submission is in the context of remote "regional" and "domestic" bio-fouling as defined in the guidelines document.

The recent re-discovery of Undaria on the Chathams (origin was most likely bio-fouling) highlights the importance of good guidelines covering remote or pristine locations.

Shore Based Cleaning and Off-Shore In-Water Maintenance

Generally SPS Biosecurity Ltd agrees with the revised guidelines as having enough scope to assist authorities and operators in regard to operating in remote locations.

However, we feel the guidelines do not emphasise enough the importance of pre-movement cleaning. Although *Part 2, B 4* does advise to clean prior to movement, we feel as this is a key factor in preventing spread of marine pests regionally it needs to be given more weight.

We would like to see a clear indication in the guidelines that shore-based cleaning for 'out of region/district' vessels is a high risk practice and should be strongly discouraged (due to the potentially fouled vessels already having sailed to local waters).

When viewing the guidelines regional authorities will look for guidance on how to prioritise risk, as often they lack in-house expertise in marine biosecurity to make decisions about vessels coming into 'their' region or district with fouled hulls. Although the guidelines clearly and pictorially show bio-fouling types and fouling sites on vessels we would like to see a decision tree which will include a risk categorisation of vessels by origin and which could potentially recommend that post movement, in-water cleaning and shore based cleaning poses unacceptable risk and pre-movement anti-fouling is the only safe option.

In the Chathams' situation, vessels that did not have adequate removal of macro fouling prior to sailing for the Chathams from other New Zealand in-shore locations were identified as the main risk pathway for marine pests. There was and still is little expertise to detect and deal with fouling risks once they arrive in Chathams' waters.

In summary

SPS Biosecurity would like to see the guidelines stress the effectiveness of 'pre-border' phytosanitary practices. (Prevention is better than attempting to deal with a cure). At a minimum we would like to see clear guidance to readers on when to use the precautionary principle and direct pre-movement treatment or at least inspection to assess risk.

Paul Bradbury (Director)

SPS Biosecurity Ltd

24-11-2011

SUBMISSION 9 – JILLIAN FULCHER

From: Jillian Fulcher [JillianF@nrc.govt.nz]
Sent: Friday, 25 November 2011 3:22 p.m.
To: Allan Bauckham; Aquatic Biosecurity
Subject: RE: Consultation on draft Anti-fouling and In-water Cleaning Guidelines [BC]

Kia ora Allan,

I wanted to provide an individual submission but noted the time had elapsed.

The guidelines are clearly set out and user friendly. Suggestions for improvement would be to consider a best practice template or link for the biofouling record book rather than just a description, this would be useful for vessel owners and aid in the collection of required data as per the new guideline.

I would like to see a point emphasising that a consent is required for any in-water cleaning and state which authority they need to contact for such approval. People new to New Zealand may not know which authority to speak with.

We have done some sampling (though only one lot) when someone was cleaning vessels inwater at Tutukaka and on the hard coats there was still very high copper 'washed' off the vessel. This is something that the guidelines don't really look into. It states that you still need to comply with local government's rules but gives the impression alls OK.

Maybe you could include this. We are looking to do more sampling but we get told about the cleanings so infrequently that it will take time to get some decent amount of data.

Regards
Jillian Fulcher | Biosecurity Coordinator
Northland Regional Council | Te Kaunihera A Rohe O Te Taitokerau
36 Water Street | Private Bag 9021 | Whangarei Mail Centre | WHANGAREI 0148
Freephone: 0800 002 004 | Mobile: 027 672 7767 | Fax: 09 438 0012 |

SUBMISSION 10 – AUCKLAND COUNCIL

Submission on the Draft Anti-Fouling and In-water Cleaning Guidelines (MAF Discussion Paper 2011/13)

Auckland Council – "Officer Only" technical comment

Thank you for the opportunity to make a submission on the Draft Anti-Fouling and In-water Cleaning Guidelines. Given the timeframe for submissions, the following reflects technical comment from officers of the Council only and has not gone through a formal review and approval by the Council's governing body. Therefore this submission does not formally represent the position of Auckland Council, but instead is an officer technical comment.

Main points are addressed in the general comment section of this submission, followed by more specific comments which follow the sections of the guidelines in the order in which they were written.

General Comment

In general, we support the intent and direction of the draft guidelines and the risk management approach taken. They seem to be an improvement over the prior version of the document and are heading in the right direction. However, we believe that there is still significant room for improvement with regard to applicability of the guidelines to our council. A key observation is that the guidelines could become a highly useful tool if it supplied information directly in the form of updateable appendices covering the range of references which the guidelines currently ask the user to seek information outside the document on and which are kept vague in the current draft.

These proposed appendices include who the relevant authorities are, what their functions are, and how to contact them; the range of antifouling paint suppliers and their coating brands with full specifications on suggested methods of application and removal rather than repeatedly referring the user back to the manufacturer; and finally a set of hard standards, specifications and best practice which can be used by authorities as a benchmark, rather than referring the user back to the policies of a wide range of unnamed authorities and their assumed policies. These three proposed appendices are individually discussed in the following paragraphs.

Relevant authority

A major issue which the document needs to clarify is the nature of what is called the "relevant authority". It is not always clear who the "relevant authority" is (i.e. that has responsibility for managing the environmental effects of activities) when it comes to marine biosecurity issues, particularly in the case of who the authority is for allowing the *removal and disposal of the actual fouling organisms* at shore based facilities and during in water cleaning. We understand the benefit of retaining brevity and flexibility and broad applicability within the guideline, but we feel that the utility of the guideline has been unnecessarily sacrificed. We consider that the guidelines should provide greater clarity to users of who the relevant authorities are in New Zealand (and Australia), what their roles are and how to contact them. This could sit outside the main body of the guideline as an appendix which could be kept updated from time to time without disturbing the main guideline document.

In the 'Recommendations for Decision-Making on In-Water Cleaning' section, Points 2 and 3 suggests that removal of macrofouling at Regional and Domestic (national) scale does not require containment. In the case of Domestic, it implies that the relevant authority makes the call, which either relies on the integrity of the operator or implies an effective monitoring and enforcement programme is in place for all in-water hull cleaning operations. It also requires a high level of knowledge about fouling organisms and/or requires costly screening for many organisms. This aspect of the guidelines is not considered practicable. This is also the case for within regional movement between a high risk location to lower risk locations.

Point 3. assumes that the "relevant authority" offers the service of risk assessment prior to any vessel conducting non-collecting in-water removal of macrofouling of domestic (national) origin. Unless this is to be provided by MAF as a comprehensive national service we consider that this is not a realistic expectation.

The efficacy of the guidelines appears to rest on unrealistic expectations of who (the undefined relevant authority) might be able to deliver what. By not identifying up front who this actually is, the guidelines leave open an expectation that someone will be found to fulfill the necessary requirement. These important functions could easily fall through the cracks. By specifying a list of relevant authorities and their functions within this system, this can be avoided.

Referral to paint manufacturer

Antifouling coating use is addressed in a straightforward manner in the document. However, throughout the document the vessel owner is referred back to the anti-fouling paint manufacturer. It may be better to take a proactive approach of having these guidelines available online with appendices which can be kept updated on a regular basis. One such appendix (as an expanded version of appendix 2) could list brands of anti-fouling paint and summarise the specifications of use directly, eliminating the onus on the part of each non-commercial and commercial boat owner to do so themselves. We feel that many non-commercial owners are unlikely to take these steps on their own.

Setting of standards or best practice

In general, the guidelines simply refer to "relevant local regulations", rather than actually setting limits and specifications for best practice. In this the guidelines offer very little actual guidance. We would prefer to see more concrete measures for issues like the treatment of removed contaminants. Another case of this is seen in Part 1 Section C Point 3, which refers to each facility "developing operational rules that must be followed". It would be preferable for these guidelines to set these rules according to international best practice. The facilities would then have a clear and consistent standard to follow. These standards could appear as an appendix.

Context of submission

Although the guideline seeks to be applicable in both Australia and New Zealand, the context of this submission focuses on New Zealand as there are significant differences to the regulatory structures and geography between the two countries. The submission therefore does not specifically seek to normalise the response to the Australian situation.

The guideline is very broad in that it addresses both marine and freshwater situations as well as extending from commercial and non-commercial vessels through to moveable structures. For Auckland Council, freshwater is somewhat set aside as not being a major feature of the region with regard to vessel use.

Biosecurity vs contaminants as a primary issue

The draft guidelines address two specific areas: anti-fouling contaminants and fouling-based biosecurity. These two issues are interrelated as a cycle of events. Antifouling paint is employed to lessen biofouling which, when cleaned off a hull or structure, may pose a biosecurity risk. The cleaning itself then poses a secondary contaminant risk. However, the two issues have a discrete sets of problems with their associated proposed treatments in the guidelines. Of the two, the scale and consequences of a significant biosecurity event are higher than that of more localised contaminant threat in a non-sensitive or already affected environment. Both need to be managed carefully, but biosecurity requires a great deal more strategic planning due the complexity of scale and range or organisms involved. The guidelines seem not to take a thorough enough view of marine biosecurity, where it should be treated as the primary issue.

In general, the guideline does present a rational, risk-based approach to decision making across the dimensions of antifouling type, knowledge of probability of biosecurity risk (regional, national, international exposure); presence absence of known biosecurity threats and in-water or dry-dock treatment.

Aquaculture Structures It is good to see the inclusion of aquaculture structures within the scope. Aquaculture structures are certainly more manageable than are pontoons however.

Most aquaculture structures in Auckland are semi-permanent and are unlikely to be removed for out of water cleaning. In the case of intertidal oyster racks, mussel longlines and the potential of future finfish faming in sea-cages, cleaning at sea is common practice. This applies to the cleaning of harvested shellfish themselves from the farms, which often have a good degree of fouling on them.

Using salmon cages in Marlborough as a comparator, these cage structures use copper antifouling paint on predator-proof netting. Copper in sediments has been measured to be in excess of ANZECC sediment quality guideline. Mechanical defouling in-water is also practiced. So as finfish farming begins to establish in Waikato, the possibility of applications in Auckland become more actual. This will have implications both for mechanical defouling and for antifouling in Auckland.

Marinas and pontoons

There is a lack of reference to marinas as a biosecurity vector. Auckland region has the highest concentration of marinas in New Zealand, around 5500 berths. These facilities themselves are not anti-fouled as such but present a high risk for biosecurity. Marinas have been the site of several recent incursion events. The guidelines fall short of becoming an effective biosecurity tool as they neglect vectors such as marinas which are critical to the issue.

Pontoons in marinas are arguably covered by the assumption that they are 'moveable structures'. However, pontoons are not antifouled and it is probably not practicable to pull them out for cleaning. The Guideline needs to be very clear what it is covering and what it is excluding. Rather than neglecting marina pontoons the problem is that they seem to have been included but, then, no practicable advice relevant to them is provided. The definition of 'movable structure' types needs consideration to be certain that anything included in the category has been discussed in terms of proposed defouling treatment.

Filtration standard

The most technically specific operational guidance in the document is the suggested standard of 50 microns (Section B, Point 8) for the lower size limit for debris capture to address biosecurity risks. However , the report appears to seriously undermine the credibility of this treatment standard. Appendix B goes on to say the technology to achieve it is not commercially available yet. The guidelines must only include technically credible and operationally achievable treatment standard or it will have limited value and may be ignored.

Specific comment on sections

The following comments follow the document in the order written so as to highlight individual cases of the main issues raised in the general comments above.

Application of the Guidelines in New Zealand (this might be better called Executive Summary)

In the Introduction it would be better to reference the guidelines as being a potential condition of a Permitted Activity, so as to give effect to the guidelines within statutory planning documents. Having said this, we do not assume that in-water cleaning is a Permitted Activity in all regions of New Zealand or states of Australia. Similarly, in the Shore-based and Near Shore In-Water Maintenance section p2, approval would not be required on a case by case basis if in-water cleaning, which conformed to the standards of the guidelines, was a Permitted Activity.

In the Background section p4 it would be good to have a footnote reference for global measures adopted by the IMO.

About the Guidelines section

Scope section p4 "the Guidelines are consistent with both countries' developing national biofouling management approaches." Can you please supply a reference here to the NZ document?

Definitions section

The definition for "Contaminants" is at odds with the definition of this term in the RMA. Consider adopting the RMA definition instead.

For the "Movable Structure" definition, most aquaculture installations are not movable. Pontoons in marinas are not anti-fouling paint treated and are not generally removed for maintenance. We propose that these examples are treated as in-water cleaning options only, not as movable structures.

Part 1.

Part 1 Please see the **Referral to paint manufacturer** section of general comments section.

A. Anti-Fouling Coating Types section

The procedure for dealing with remnant TBT undercoating could be more specific in terms of a requirement to contain and properly dispose of contaminants.

P3 states "facilities may still carry out maintenance on vessels and movable structures that have TBT-based anti-fouling coatings beneath barrier coats and compliant anti-fouling coatings, provided these facilities are able to contain waste produced during maintenance and minimize the release of contaminants"

P4 The information in MSDS of registered products should be made readily available on a website or database.

P5 seems to simply defer to relevant local regulations rather than setting the adopted measures which the paragraph refers to. In general, these guidelines often fail to give limits which can then be used by Regional Councils as best practice. Please see **Setting of standards or best practice** section in the General Comments above.

Section B.

Particularly for recreational craft we are unsure if a Biofouling Record Book or Biofouling management Plan are required through any regulation, and, if not, how will this mechanism be implemented. If it is required, who is monitoring it? Expecting each vessel to follow this on their own may not be a practical solution and at a minimum would probably require an awareness raising campaign.

Section C.

Point 2. First refers that "all" waste and contaminants are captured and then it refers to "minimising". All should refer to "eliminating" their release.

Point 3. Refers to "sufficient information". This provides very little guidance to this process. The guidelines should be providing the actual standard setting guidance, not simply loosely referring to it.

Section D.

Point 1. Refers "should be sought from the manufacturer." It would be better to have on-line reference at the MAF website to the available brands and their specifications to provide a one-stop shop for this information. It could also form an appendix of the guidelines.

Specific Guidance for Professionals section

Point 1 uses the word "prevent". Better to use the standard of eliminate, isolate or minimise as risk management terms.

Specific Guidance for Non-Professionals section

In general this section should be written to be understood by the general public. Much of it seems to be written in regulation-speak rather than common English.

Point 1 refers to spray equipment should only be operated by Professionals despite the section being intended for non-professionals.

Section E.

Pressure Water-Blasting Point 2. Terms like "adequately isolated" and "completely protected" should be accompanied by more specific guidance on how this is done.

Pressure abrasive Blasting points 2, 3 & 4. Please define "Vacuum Blast cleaning", "Abrasive blasting", "Wet abrasive blasting" and "dry blasting" and include these terms and definitions in the Definitions section.

Maintenance by Non-professionals point 1.

Define "appropriate" screening and containment. Throughout these guidelines, there seems to be a reluctance to specify best practice or a standard.

Section F.

In the disposal of residues and wastes, it is noted that removed material should not enter storm water system. This is supported, but the maintenance areas should also demonstrate appropriate containment, treatment and disposal, including a Trade Waste permit if discharging to wastewater system. This section should offer advice for unsealed yards as well.

Section F. Point 2 and Section G. Point 2.

"in line with the requirements of the relevant authority" leaves open who this authority is. Please see Relevant Authority section of the General Comments.

Part 2.

Although we know of the presence of many invasive species, we do not know the full extent of their spatial distribution. So for both Regional and Domestic (national) biofouling, the guideline inappropriately relies on big

assumptions regarding prior knowledge about the identity and distribution of all established invasive species. For international threat we can reasonably assume that the risk is greater of a new invasive via that vector.

Antifouling Coating Type and Record-Keeping sections

As in Part 1. Please see **Referral to paint manufacturer section** in the General Comments above.

Likewise as above, simply telling people to keep records will not necessarily promote this practice.

Biofouling Origin

Biofouling origin criteria of Regional, Domestic and International does not work well as a standard to be applied to both Australia and NZ. Within the Regional category Australian states can be large scale alongshore considerations. NZ regions are a much smaller scale, but may (eg Auckland, Northland and Waikato) have isolated east and west coast aspects which effectively have the same biosecurity implications as the Domestic category. So the Regional approach doesn't work well for some regions (regional council jurisdictions) in NZ. The recent NIWA Aquaculture Readiness Database project and work done in Scotland on aquaculture biosecurity zoning assesses the discreteness of areas of water within a region. This is considered better than applying a political boundary approach, even if it does defer to the discretion of the regional authority to dictate anything in addition to the guidelines. The guideline should also address "Intra-regional biofouling" to be clear that some movements within a region may still pose a big risk.

"Domestic" should be re-termed "National".

Section B. General Guidance

Point 4. Delete the word "only".

Points 5 & 7. Again supply this information in an appendix.

Point 8. The phrase "unacceptable amounts" is subjective. Please refer to **Filtration standard** section of the General Comments.

Point 9. states "If suspected invasive or non-indigenous aquatic species are encountered during in-water cleaning or other vessel maintenance activities, the relevant authority should immediately be notified and the cleaning or maintenance activity ceased". In reality this is unlikely to occur due to visibility issues and will be severely limited by the ability of the cleaner to identify invasive organisms, especially new ones. This is another reason not to encourage in-water cleaning. For this to be effective, we suggest that MAF should certify operators doing in-water cleaning services as to their ability to identify non-locally indigenous species.

Recommendations for decision-making on in-water Cleaning

Point 1. Refer to appendix on known paint brand specs.

Points 2 and 3 Please refer to Relevant Authority section in the General Comments.

The Appendix 1. The decision support tool diagramme on page 29 has typos. The lower right box needs the words Domestic and International in it in the second and third rows. The third row of this box should have an arrow going down to the Conditions Box (A-D) at the bottom. Remove the words "on target" from the Biofouling type box.

Appendix 3

Brush systems and Soft Tools – "Use of brushes on fouling-release coatings…". Rather than "fouling-release", relate back to appendix 2 Biocidal coating types which have been defined.

If Water jet systems are "not fully understood" and are "not able to contain all of the removed biofouling", it should not be recommended as a viable method.

Other Technologies – Developing Technologies – refers back to Part 2 Section B and alludes that the recommended 50 micron filter is not yet available. This is cross-referenced above in Part 2 Section B comments.

Page 34 Operation of Onboard Treatment Processes. MGPS is not defined and it is therefore unclear what it is. Again referred to on pg 36 point 2.5

Additional Information: Summary of Auckland Council current policy on antifouling and marine biosecurity

Following is a brief review of where Auckland Council's plans currently address the issues raised in the guidelines. A process is beginning which will amalgamate all existing plans (including the Coastal Plan) into a central Unitary Plan. Documents such as the draft guidelines, at their best, would inform the Unitary Plan review process. It would be best for Auckland if the guidelines were finalised prior to Auckland's Unitary planning process in the first third of 2012.

1. The Resource Management Act stipulates that the discharging of contaminants into water is prohibited, unless allowed by a resource consent or a rule in a regional plan or by regulation. Both the Auckland Regional Plan: Coastal (ARPC) and the Auckland Regional Policy Statement provide reference and/or guidance for both contaminant discharge and biosecurity.

2. The Auckland Council has obligations to manage discharges of any contaminant resulting from the cleaning, anti-fouling or painting of vessels. This is found in Chapter 20 - Discharges of Contaminants Permitted Activity rule 20.5.1 of the ARPC. The conditions of this rule state that (a) the discharge shall be collected as far as practicable and removed from the CMA, (b) the discharge, after reasonable mixing, will not give rise to oil or grease films, scums, foams, or floatable or suspended material, will not change the colour or clarity of the water, will not give rise to objectionable odour or will not adversely affect aquatic life. Chapter 20 sets Environmental Response Criteria which set amber and red levels of contamination for zinc, copper and lead.

3. However, in ARPC section 1.8.5 Administrative Framework, the Ministry of Fisheries is responsible, under the Biosecurity Act 1993, for controlling the deliberate or accidental importation of foreign organisms into New Zealand, including via the ballast water of ocean-going vessels. Chapter 18 Planting and Introduction of Plants states that the Biosecurity Act 1993 is the key method of controlling the introduction of plants through the discharge of ballast water. The unintentional or accidental introduction of exotic or introduced plants in the coastal marine area may occur through a variety of mechanisms: (a) flora which attach themselves to the underside of vessels. Therefore, for both rafted fouling organisms and organisms in ballast water, MAF has ultimate responsibility.

4. Chapter 20 Other Methods 20.6.1(d) says the Council will promote or otherwise ensure that adequate provision is made in port developments, at slipways and hardstand or haul-out areas for the collection, treatment and appropriate disposal of vessel maintenance and cleaning residues, sewage and other contaminants from vessels, and in marinas sewage and other contaminants from recreational vessels.

5. During the harvesting of a shellfish crop in bivalve aquaculture, there is an element of in-water cleaning occurring with potential for biosecurity risk. As the guidelines refer to aquaculture structures, it is worth considering that the crop itself is part of the structure as it relates to biosecurity. Although somewhat indirect, this can be viewed as cleaning the aquaculture structure itself. The ARPC original Chapter 22 – Aquaculture Introduction falls short of directly addressing biosecurity as an issue and focuses more on benthic smothering effects where it states that the washing down and cleaning of aquatic species in the coastal marine area can also result in the discharge of silt and the deposition of shell and debris. This in turn may result in the discoloration of water and the smothering of benthic organisms. As the ARPC was first written in 1995, this tends not to go further into considerations of biosecurity. Again, Chapter 22's Issue section 22.2.5 states that the washing down and cleaning of harvested aquatic species in the coastal marine area can have an adverse effect on water and sediment quality, and on the naturally occurring coastal flora and fauna.

6. The ARPC Chapter 23 - Marinas Introduction again refers to anti-fouling paints as potentially having adverse effects on water and sediment quality, and ecology.

7. The APRC Defence Chapter 33 specifies that the mooring, fuelling, cleaning and maintenance of vessels and the operation of associated plant and machinery at HMNZ Naval Base (Devonport Naval

Base) has the potential to discharge contaminants into the coastal marine area, thereby degrading water quality.

8. The Auckland Regional Policy Statement (ARPS) Water Quality section 8.1 states that the overall vision for water quality in the Auckland Region includes:

- a steady reduction of sediment, sewage overflows and other contaminants into our waterways;
- the prevention of discharges of toxic and persistent contaminants which may have an adverse effect on aquatic ecosystems.

9. The ARPS Issues section 8.2.1 Maritime Activities states that antifoulants used to protect boat hulls enter waterways over a period of time either as a result of general leaching or during boat maintenance. Research to determine the ecological effects of antifoulants is called for.

10. There are two policies within ARPS section 8.4.13 Maritime Activities:
    - Adverse effects of discharges from maritime activities shall be avoided, remedied, or mitigated.
    - The introduction of undesirable aquatic species via discharges (including ballast water) shall be avoided.

SUBMISSION 11 – MARINA OPERATORS ASSOCIATION

Thursday, 24 November 2011

Ministry of Agriculture and Forestry
PO Box 2526
WELLINGTON

Attention: Allan Bauckham BY EMAIL: aquaticbiosecurity@maf.govt.nz

Submission on Draft Anti-fouling and In-water Cleaning Guidelines

Submission by: Phil Wardale

On behalf of: Marina Operator Association of NZ (NZMOA)

NZMOA represents the 44 private and public Marinas across New Zealand.

Question 1: The Guidelines contain a suite of principles. Do these principles adequately reflect the balance that environmental managers should be seeking between managing the environmental risks of maintenance practices and operational realities of the maritime industry? If not, what should the principles be?

NZMOA supports the listed principles.

Question 2: The scope of the Guidelines is broader than the ANZECC Code of Practice, covering all vessel types and movable structures in all aquatic (marine, estuarine and freshwater) environments, regardless of whether they are coated in an anti-fouling coating. Do you agree or disagree with the proposed scope of the Guidelines, and why?

NZMOA generally supports the scope of the guidelines.

Part 1: Shore-based application, maintenance, removal and disposal of anti-fouling coatings

Question 3: Is the guidance under each of the following headings accurate, complete, effective, practical, and easy to understand? If you consider the guidance could be improved, please explain how.

Anti-fouling Coating Types- This section of the guidelines is not to point and not well focused on the subtitle, text should be to point with the current text reduced to describe the two antifouling types.

In general NZMOA considers that most vessel owners will not understand the definition 'biocide', nor would they be able to confirm if such a chemical composition exists within their antifouling.

Choosing the Correct Anti-fouling Coating-

This section of the document fails to assist the user of the guidelines in choosing the correct antifouling.

Requirements for Shore-based Maintenance Facilities-

Most NZMOA members who operate hard stand maintenance facilities are well trained to apply and remove antifouling. NZMOA's Clean Marina programme correctly outlines those industry guidelines for maintenance facilities.

NZMOA supports the policies listed within this section of the document.

Application of Anti-fouling Coatings-

NZMOA supports the application of anti foul by professionals. Those clauses relating to the application by non professionals is unlikely to be read, understood nor followed. NZMOA believes that non professionals should be encouraged to apply antifoul by brush or roller, rather than spraying it on. NZMOA considers that antifoul should only be sprayed on by professionals where possible in a controlled environment.

Maintenance and Removal of Anti-fouling Coatings-

NZMOA believes most vessel owners will not be aware of what type of antifouling was applied previously, nor its manufacturer. The idea of an anti foul record book is sensible but is unlikely to be followed.

Disposal of Residues and Wastes-
Emergency Response-

NZMOA supports these two sections of the document as they are concise and to the point.

Question 4: Is the guidance in Part 1 likely to have a positive or negative effect on your current activities or practices? If so, please explain how.

In general the first part of section 1 will not be understood as there is too much unnecessary technical detail.

Part 2: In-water Cleaning and Maintenance

Question 5: Do the Guidelines provide a transparent decision framework for balancing the risks associated with biofouling management practices with the risks of failing to manage biofouling? If you consider the framework could be improved, please explain how.

NZMOA does not support the principles of In Water Cleaning. NZMOA supports the general principle within the document that any fouling should be removed at a professional facility where staff are trained in the removal and disposal of the anti foul and potential biofoul.

Question 6: Is the guidance in Part 2 of the Guidelines sufficiently clear about when to use in-water cleaning and when to remove vessels and movable structures from the water for cleaning and maintenance? If not, how could it be improved?

No the guidance is not clear as a lay person is not going to be able to distinguish what type of antifoul was applied to their vessel. Accordingly the guidance is confusing and unlikely to be followed.

Question 7: Does the information provided in Section A under each of the following headings adequately describe the contamination and biosecurity risks associated with in-water cleaning? If you consider the guidance could be improved, please explain how.

As noted in part 2 **"All Antifouling coatings pose a contamination risk during in water cleaning"** accordingly NZMOA reiterates its opposition to any in water cleaning, particularly cleaning that will be undertaken within a Marina boundary.

Accordingly NZMOA remains of the view that in water cleaning should be banned.

NZMOA members will reiterate the ban on in water cleaning to their customers should these guidelines support in water cleaning.

NZMOA requests that the industries non support for in water cleaning be recongised and noted within the document.

Anti-fouling coating type-
Biofouling origin-
Biofouling type-

NZMOA considers that the vessel owner will have no ability to correctly identify the origin of the biofoul and the antifouling coating type. Accordingly this section of the document further confuses and should be removed.

Question 8: Section B provides guidance on situations where in-water cleaning is considered acceptable and any conditions that may apply. Do you agree or disagree with this guidance, and why?

NZMOA does not support in water cleaning.

NZMOA considers section B to be contradictory to some of the principles of the guidelines. This includes statement such as: "... removal of macro fouling is not recommended within the water", when the guidelines should ban the removal of macrofouling in the water and direct vessel owners with macro fouling to purpose built haulout yards on land.

Question 9: Section B also contains recommendations for decision-making on in-water cleaning according to biofouling type and origin. Do you agree or disagree with the recommendations, and why?

NZMOA considers that regional origin is unlikely to be known so these types of guidelines will do nothing more than to confuse the user.

Macrofouling should never be allowed to be removed within the water!

NZMOA does not support the removal of any biofoul within the water.

Some suggestions and statements within this section are nonsense – such as "Macrofouling should be removed using the manufacturers recommendations" NZMOA is not aware of any antifouling manufacturer that recommends in water removal of any macrofouling anywhere but a land based facility that is able to professionally remove and collect 100% of the fouling and any residual antifoul.

Question 10: Will the DST assist environmental managers in making decisions about in-water cleaning practices within their jurisdictions; and/or help owners or operators of vessels and other movable

structures to determine the type of evidence that may be required to obtain approval for in-water cleaning?
If you consider the DST could be improved, please explain how.

NZMOA considers the DST will assist environmental managers within their jurisdictions as they will be the only ones able to understand some of the technical terms and questions noted within the decision tool.

NZMOA considers that there is sufficient complexity to the decision tool that it will only confuse vessel owners so much so that it will be disregarded by vessel owners. This fact supports NZMOA view that all in water cleaning should not be supported, and definitely not allowed within Marinas.

The guidelines suggests that the DST be used in conjunction with the text of the guidelines. NZMOA considers that the guidelines have not been drafted with the vessel owner in mind and are accordingly too long, not to the point nor relevant to the vessel owner due to the way they have been written.

NZMOA does also not support any "in water treatments" to manage biofouling as suggested within the DST, and we note that this process is not well documented within the main document.

Question 11: Is the guidance in Part 2 likely to have a positive or negative effect on your current activities or practices? If so, please explain how.

NZMOA considers that the guidance provided within part 2 is likely to have a significant environmental impact on the local environment due to its enabling and apparent promotion of in water cleaning.

NZMOA considers that in water cleaning should not be promoted or used as a broad form means of biofoul management.

Existing professionally managed land based facilities which have been in use for decades should be promoted in the removal and disposal of biofoul.

Signed:

SUBMISSION 12 – NGĀTI WHĀTUA O ŌRĀKEI

NGATI WHATUA O ORAKEI
MAORI TRUST BOARD

Submission on MAF Discussion Paper

Draft Anti-fouling and In-water Cleaning Guidelines

Malcolm Paterson

Acting Manager

Ngāti Whātua o Ōrākei Heritage and Resource Management Unit

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Background - with particular focus on Ōkahu Bay

Ōkahumatamomoe (Ōkahu Bay) is the water body adjacent to the marae / settlement and traditional kāinga of Ngāti Whātua o Ōrākei. Although the hapū has kaitiaki and mana rights and responsibilities over a much wider area, Ōkahu is of particular interest as part of the 'home base' and also serves as a good case study within the Auckland and New Zealand contexts. The only recent development which has occurred within Ōkahu Bay, has been the 180 berth Ōkahu Bay Marina in 2005. No other substantial increase in residential development or roading construction has occurred within the catchment since then to infer other new inputs of copper into the sediment and storm water.

The Ōkahu Bay Marina only provides berths for vessels being used for personal recreational purposes; no commercial vessels are moored within the marina. Maintenance, application, removal and disposal of TBT-based anti-fouling coatings of vessels and movable structures are conducted by both professionals and non-professionals . Vessels and movable structures are variably removed from the water for cleaning and maintenance or cleaned in-water.

Even though sediments within the marina are "unpolluted" within the context of the ANZECC 2000 Interim Sediment Quality Guidelines, monitoring results from 2005, 2009 and 2011 indicate changes in sediment contamination since the marina was developed:

- Surficial sediment copper as reported in the Ōrākei Marina Ecological and Water Quality Assessment, 2003,**prior to the development of the marina, was present at a mean total concentration of 5.6mg/kg.**
- However copper concentration samples from **February 2009 had a total copper concentration of 35.5mg/kg,** indicating an increase in copper since the establishment of the marina basin.
- The **2011 mean is 24.7 mg/kg,** which is lower than the 2009 figures, suggesting that copper concentration is not trending upwards.
- In terms of the ARC's coastal environmental targets, **copper levels within the marina basin are of interest in that they appear to have increased relative to the levels** documented for the local

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surficial sediment documented **prior to the marina establishment [Poynter and Associates, 2011].**

- Ōkahu Bay ***tuangi*** **(Cockle) have elevated tissue levels** of chromium, lead (both probably automobile sources), cobalt, copper and mercury [Ngāti Whātua o Ōrākei, NIWA and the Hauraki Gulf Forum Shellfish Monitoring Programme]. The movement of heavy metals (and other contaminants) from the Marina into the bay has not been studied. Auckland Regional Council indicated that there **had been no specific environmental performance data for discharge activities** to the Coastal Marine Area from this facility or any other marina in the region.
- Stormwater readings from 2011 indicate total copper values were 14.5 and 5.6 respectively (taken from two storm water outlets at the marina) - the ANZECC 2000 95% protection trigger level for marine waters being 1.3µg/l. Similarly total zinc values were 5.8 and 2.4 respectively, the ANZECC trigger level being 15µg/l.
- The marina storm water quality indicates a source of copper and zinc from the adjacent land areas which discharge to the marina basin beneath the cantilevered parking deck.

Significance of Ecological Health to Ngāti Whātua o Ōrākei

Mauri is the essence of life force that provides life to all living things. Water has mauri, as does each living being. Mauri establishes the whakapapa (genealogy) and inter-relatedness of all living things, defining the basis for the holistic view of the environment held by tangata whenua.

Part II, Section 7 of The Resource Management Act, 1991 now includes 7(d) *Intrinsic values of ecosystems* in an attempt to address *The Mauri of ecosystems*.

Where sustainable urban water management can be defined through:

- Health and hygiene criterion - risk for infection
- Social and cultural criterion – acceptance
- Environmental criterion – eutrophication, toxic compounds to water and arable soil, life cycle assessment
- Economic criterion – total cost, cost-benefit analysis
- Functional and technical criterion – robustness in terms of functional risk analysis

The Mauri model underlies a system that outlines the interactive aspects of our ecosystem and can be evaluated in accordance with enhancing, diminishing, or neutral impact for the Mauri of the aspect being considered [Dr Kepa Morgan, Senior Lecturer, Dept Civil and Environmental Engineering, University of Auckland].

Toxins released to any body of water, declines in ecosystem health and copper uptake into shellfish tissue are all considered to be significantly diminishing to that mauri and therefore unsustainable.

The MAF Biosecurity study, Efficacy of hull cleaning operations in containing biological material, 2005 outlines that;

- Multi-chamber settlement tanks used by the facilities to remove solid particles from liquids (water blast effluent) were effective at killing and removing most biota suspended in the liquid effluent
- In-water hull cleaning without collection of fouling waste poses the highest risk to marine biosecurity

- Operations that clean vessels in shore-based facilities and discharge solid and liquid fouling waste into the sea without any treatment pose a more than minor risk to marine biosecurity
- Operations that clean vessels out of the water and employ settling tanks to separate fine particulates from liquid waste prior to discharge into the sea pose a relatively low risk to marine biosecurity, providing there is an adequate residency time of liquid waste in the tanks
- Operations that clean vessels out of the water and employ settling tanks and filters (for example, sand filters) to separate fine particulates from liquid waste prior to discharge into the sea pose negligible risk to marine biosecurity
- The residency period of water blasting effluent in settlement tanks is likely to vary between seasons because far more vessels are cleaned per day during summer months than during winter

Submission

The balance sought after by the ANZECC Code's Guidelines to offset managing environmental risks with operational realities is not achieved. Ōkahu Bay Marina provides an example of a set of practices that sit outside of the jurisdiction of the Guidelines; the Marina contains only recreational vessels and allows for non-professional maintenance of vessels.

Empirical proof of negative extrinsic environmental effects highlights changes that have occurred in relation to the vessel maintenance practices of the Marina.

The ANZECC Code is not sufficient to pre-empt shore-based maintenance activities or provide guidance for facilities to contain waste produced and minimise the release of contaminants.

Furthermore we submit that the ANZECC guidelines must be required to:

- Provide guidance on biosecurity and contamination risks posed by in-water cleaning and maintenance that must apply to both **recreational** and commercial vessels, including all vessel types and other movable structures, in all aquatic (marine, estuarine and freshwater) environments
- Application, maintenance, removal and disposal only be carried out at maintenance facilities that adopt measures to ensure that all biofouling, coatings and other physical contaminants removed from vessels and structures are retained and treated in a manner that is both compliant with relevant local regulations and **prevents any contamination of the environment.**
- Outline what alternative management is required to avoid potential sediment contamination from passive antifoulant leaching , eg. how all residues, solid coatings, liquid or any other form of waste, including removed biological material and used product containers, should be collected and stored for disposal in-line with relevant local regulations and to **prevent any contamination of the environment.**
- Inform compliance concentrations required to be met in relation to storm water outflows; the source and quality of which is therefore required to be part of marina facility accountability measures.
- Limit application, maintenance and removal of antifouling coatings to approved, licensed facilities and include non-professional with professional regulations
- Outline procedures to uniformly license such facilities

- Require restrictions on use of Tributyltin-based antifoulant on craft operating in confined waters.
- Ensure through accountability regulations for marina facilities and Regional/District/Coastal Plans, that new facilities include design and management provisions to capture and retain all waste and to enable eventual disposal of treated waste waters in-line with relevant local regulations and to **prevent any contamination of the environment.**
- Ensure through accountability regulations for marina facilities and Regional/District/Coastal Plans, that existing facilities upgrade disposal of waste waters in-line with relevant local regulations and to **prevent any contamination of the environment.**

Photos taken from Ōkahu Bay Marina November, 2011, showing chemical leach into stormwater drains. Dried material can also blow off the hardstand directly into the adjacent bay and surrounds:

SUBMISSION 13 – ASSOCIATION OF DIVING CONTRACTORS

From: Matt n Kathy [super@divecom.co.nz]
Sent: Saturday, 3 December 2011 10:34 p.m.
To: Allan Bauckham
Subject: RE: Consultation on draft Anti-fouling and In-water Cleaning Guidelines [BC]

Attachments: Anti fouling and inwater cleaning giudelines submission 1.jpg; Anti fouling and inwater cleaning giudelines submission 2.jpg; Anti fouling and inwater cleaning giudelines submission 3.jpg

Hi Allan,

Many thanks for holding the bus for us. I have back dated the submission, but feel free to change that if you think it inappropriate. I have read through the draft as far as it concerns us in the in-water cleaning and maintenance section and it appears to be a workable document. The only issues that I could find are that the schematic that is part of the Decision Support Tool has incomplete text in the boxes and I couldn't find anywhere that explained what an MGPS is. I can guess that it is some kind of Bio-fouling protection system, but that is, as I say, a guess.

Maybe I missed something. I'm not a great reader.

Regarding the DST, we have some very capable people in the regional council that would have no trouble following this. We also have others that seem to be more intent on starting a fight than getting a consensus. Not sure if it's anything to do with your process, but I think adequate training for the administrators of these guidelines is a must.

I can see that some foreign vessels that usually want a fast turnaround for any cleaning, generally during unloading- loading cargo may be lost as clients. Some may go to anchor and spend the time to get the work done, but I think most will shy away from the paperwork and down time. Certainly the tankers at Marsden point, who seem to like you to work in a 3-4 knot current while they are unloading- loading cargo.

I think in the long term we will see the environmental benefits of the principles of the guidelines, and support will gradually build.

Cheers,
Matt Conmee.
President
ADCNZ Inc

Submission on MAF Discussion Paper

Template for optional use

Draft Anti-fouling and In-water Cleaning Guidelines

Submission by: MATT CONMEE

On behalf of: ADCNZ Inc

If responding on behalf of an organisation, please let us know who the organisation represents:

CONSTRUCTION DIVING

General

Question 1: The Guidelines contain a suite of principles. Do these principles adequately reflect the balance that environmental managers should be seeking between managing the environmental risks of maintenance practices and operational realities of the maritime industry? If not, what should the principles be?

ADEQUATE

Question 2: The scope of the Guidelines is broader than the ANZECC Code of Practice, covering all vessel types and movable structures in all aquatic (marine, estuarine and freshwater) environments, regardless of whether they are coated in an anti-fouling coating. Do you agree or disagree with the proposed scope of the Guidelines, and why?

AGREE

Part 1: Shore-based application, maintenance, removal and disposal of anti-fouling coatings

Question 3: Is the guidance under each of the following headings accurate, complete, effective, practical, and easy to understand? If you consider the guidance could be improved, please explain how. N/A

Anti-fouling Coating Types-

Choosing the Correct Anti-fouling Coating-

Requirements for Shore-based Maintenance Facilities-

Application of Anti-fouling Coatings-

Maintenance and Removal of Anti-fouling Coatings-

Disposal of Residues and Wastes-

Emergency Response-

Question 4: Is the guidance in Part 1 likely to have a positive or negative effect on your current activities or practices? If so, please explain how. N/A

Part 2: In-water Cleaning and Maintenance

Question 5: Do the Guidelines provide a transparent decision framework for balancing the risks associated with biofouling management practices with the risks of failing to manage biofouling? If you consider the framework could be improved, please explain how.

ADEQUATELY TRANSPARENT

Question 6: Is the guidance in Part 2 of the Guidelines sufficiently clear about when to use in-water cleaning and when to remove vessels and movable structures from the water for cleaning and maintenance? If not, how could it be improved?

Sufficienty clear

Question 7: Does the information provided in Section A under each of the following headings adequately describe the contamination and biosecurity risks associated with in-water cleaning? If you consider the guidance could be improved, please explain how.

Anti-fouling coating type- ADEQUATE

Biofouling origin- ADEQUATE

Biofouling type- ADEQUATE

Question 8: Section B provides guidance on situations where in-water cleaning is considered acceptable and any conditions that may apply. Do you agree or disagree with this guidance, and why?

AGREE

Question 9: Section B also contains recommendations for decision-making on in-water cleaning according to biofouling type and origin. Do you agree or disagree with the recommendations, and why? AGREE

Question 10: Will the DST assist environmental managers in making decisions about in-water cleaning practices within their jurisdictions; and/or help owners or operators of vessels and other movable structures to determine the type of evidence that may be required to obtain approval for in-water cleaning?

If you consider the DST could be improved, please explain how.

DST IS GOOD BUT TEXT IN BOXES IS INCOMPLETE IN ONLINE PDF FORM.

Question 11: Is the guidance in Part 2 likely to have a positive or negative effect on your current activities or practices? If so, please explain how.

THERE MAY BE LESS INTERNATIONAL CLIENTS BECAUSE OF TURNAROUND TIME IN PORT

Other Comment on the Code of Practice

DST BEING USED BY UNTRAINED ENVIRONMENTAL OFFICERS FROM LOCAL COUCILS MAY TAKE LONGER. COUNCILS MUST ENSURE THAT STAFF ARE WELL TRAINED IN WHAT TO LOOK FOR.
WHAT IS MCPS?

Signed: M. E. Cammell

Date: 24/11/11

You can post a submission to:
Ministry of Agriculture and Forestry
PO Box 2526
WELLINGTON

Attention: Allan Bauckham

Or email it to:
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