## PROCEDURE

Handbook for the Inspection of Ships and Issuance of Ship Sanitation Certificates (WHO, 2011).

International Health Regulations (2005) Articles 20 and 39

International Health Regulations (2005) Articles 1

International Health Regulations (2005) Article 1

Handbook for the Inspection of Ships and Issuance of Ship Sanitation Certificates (WHO, 2011).

## 9. SHIP SANITATION CERTIFICATION

#### 9.0 Purpose

This procedure explains the implementation of the International Health Regulations 2005 (IHR 2005) ship sanitation certificate requirements in New Zealand. The section should be read in conjunction with the WHO Handbook for the Inspection of Ships and Issuance of Ship Sanitation Certificates (WHO handbook).

#### 9.1 Introduction

IHR 2005 requires all ships making international voyages to hold a current Ship Sanitation Control Certificate or a Ship Sanitation Control Exemption Certificate.

- Ship Sanitation Control Certificates are issued when a public health risk (including sources of infection or contamination) has been identified on the ship that necessitate a control measure being applied
- Ship Sanitation Control Exemption Certificates are issued where ships have been inspected and no evidence of a public health risk on board has been found.

In the case of a conveyance "international voyage" means a "voyage between points of entry in the territory or territories of the same State if the conveyances have contacts with the territory of any other State on its voyage".

IHR 2005 provide that certificates are valid for a maximum of six months.

The purpose of the ship sanitation certification system is to minimise the extent that ships undertaking international journeys pose a public health risk with national and/or international implications. Public health risk is defined as "a likelihood of an event that may affect adversely the health of human populations, with an emphasis on one which may spread internationally or may present a serious and direct danger".

Ship sanitation certificates are important because they:

- are internationally recognised evidence that a ship was inspected by an authorised body and either deemed free from infection and contamination or required to undertake measures to improve the sanitary conditions present aboard the vessel
- reduce the need for further inspection and compliance regimes during the period in which a certificate is valid, thereby reducing compliance costs
- make no distinction between the size, type, or flag of the vessel
- provide a common basis for international understanding and cooperation to tackle ship borne sources of infection and contamination, which are highly mobile due to the increased volume and speed of globalised trade.



Handbook for the Inspection of Ships and Issuance of Ship Sanitation Certificates (WHO, 2011).

#### 9.1.1 Scope of the ship sanitation certificate system

Ship sanitation certificates are concerned with public health risks associated with infection or contamination, and their associated medical vectors or reservoirs. The focus is not on occupational health and safety issues for the crew. These matters are the responsibility of International Labour Organization (ILO) and, in New Zealand, Maritime New Zealand.

International agreements from the ILO are in place to address crew safety issues, such as exposure to excessive noise or lack of protective equipment for crew. Health protection officers should not focus on these as part of ship sanitation inspections. However, if health protection officers do encounter issues that raise clear health and safety implications it would be appropriate to bring the matter to the attention to the ship's Master or a relevant authority. For example, reporting of an incapacitated (intoxicated) person on duty.

## 9.2 Implementing the ship sanitation certificate system in New Zealand

New Zealand law is being updated to support the IHR 2005 requirement for ship sanitation certificates.

#### 9.2.1 Exemptions from Ship Sanitation Certificates in New Zealand

Yachts, and ships from the New Zealand, Australian, American, Canadian and Royal (Great Britain) navies, are not required to hold ship sanitation certificates for travelling into New Zealand ports.

Yachts are defined by the legislation current at the time of the 1983 circular memo:

"Pleasure yacht means a ship, however propelled, that is used exclusively for pleasure and does not carry passengers for hire or reward; but does not include a ship that is provided for the transport or entertainment of lodgers at any institution, hotel, private hotel, boardinghouse, lodging house, guest house, or other establishment; and does not include a ship that is used on a single voyage for pleasure if it is normally used or intended to be normally used as a fishing boat or for the carriage of passengers or cargo for hire or reward".

Some ships, in particular fishing boats, have foreign owners but are chartered to New Zealand companies and then operate out of a local New Zealand port. These ships may operate in international waters but will not, in normal course of events, visit overseas ports. These ships may receive supplies and crew while at sea (in international waters). These ships do not need a current ship sanitation certificate for the period of the charter operations but a valid ship sanitation certificate is needed when they first port into New Zealand and one should be issued before they depart for another overseas port.

#### 9.2.2 Authority to issue Ship Sanitation Certificates



Health (Quarantine) Regulations regs. 15-19 [need to update with changes to HQR]

Circular Memorandum 1983 and Health (Quarantine) Regulations reg. 21

Shipping and Seamen Act 1956 (now repealed) http://www.who.int/ihr/ ports\_airports/ihr\_aut horized\_ports\_list.pdf World Health Organisation (WHO) maintains a list of ports authorised to issue ship sanitation certificates. Only certificates issued from these ports are considered valid. Ministry of Health provides WHO with the details of authorised ports in New Zealand. A port does not need to be an IHR designated port to be authorised to issue ship sanitation certificates.

In the United States there are no port authorities, public agencies, or private organizations authorized to issue ship sanitation certificates. Certificates issued by authorities or private companies in the United States should be considered invalid.

New Zealand Public health units have been identified as competent authorities in accordance with the IHR 2005. Health protection officers and medical officers of health employed by public health units may issue ship sanitation certificates and Evidence Report Forms. Normally it is health protection officers who undertake the ship inspections.

When ship sanitation certificates have been issued at unauthorised overseas ports Ministry of Health should be advised so international agencies can be informed.

#### 9.2.3 Arrival of ships with invalid or no ship sanitation certificate

If an arriving ship does not have a valid Ship Sanitation *Control* Certificate or Ship Sanitation *Control Exemption* Certificate, or does not have a certificate at all, it is considered to be an 'affected conveyance'.

Pratique does not need to be withheld unless there is illness on board in which case usual pratique processes must be followed. A ship sanitation inspection should be undertaken as soon as practicable and prior to the ship departing for the next port of call.

The ship should be treated in the same manner as a ship that has requested a new ship sanitation certificate. This includes issuing controls and taking regulatory action if indicated.

If justified, additional health measures should be implemented, including isolation of the ship, as necessary, to prevent the spread of disease. This may include:

- Requiring the ship to be disinfected, decontaminated, dis-insected, or de-ratted, as appropriate; and
- Deciding the technique to secure an adequate level of control of the public health risk.

#### 9.3 Undertaking ship sanitation inspections

The ship sanitation inspection process can be divided into four key phases:

- Phase 1 notification, planning, and preparation
- Phase 2 ship visit
- Phase 3 issuing the ship sanitation certificate, and
- Phase 4 post-visit administration.

A summary of these phases is provided below.



Environmental Health Protection Manual Draft version 1.0: May 2017

Handbook for the Inspection of Ships and Issuance of Ship Sanitation Certificates (WHO, 2011).

Handbook for the Inspection of Ships and Issuance of Ship Sanitation Certificates

(WHO, 2011). 4.4.5

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International Health

Regulations (2005)

Articles 27, 39

International Health

Regulations (2005)

Article 19

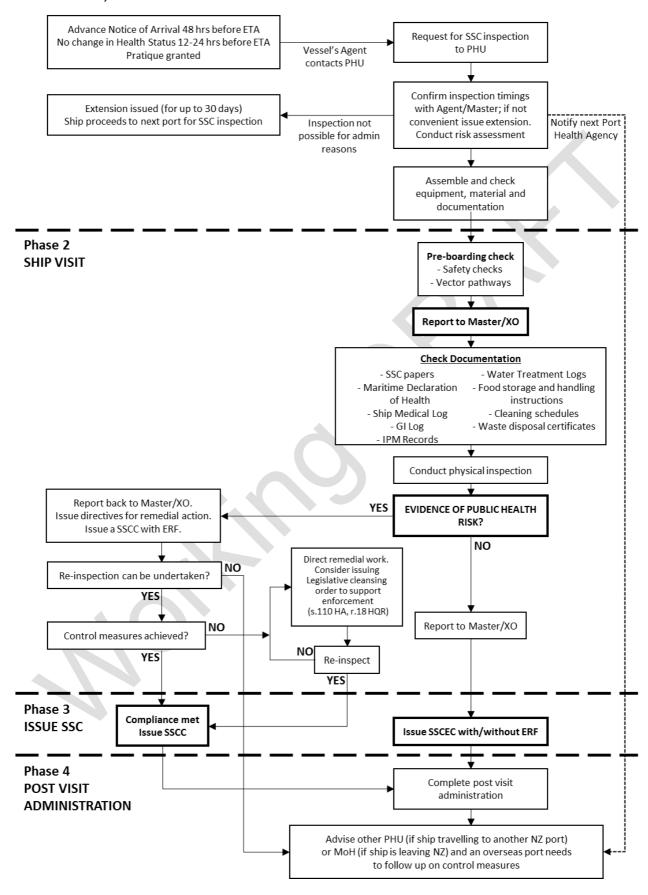
WHO On-Line Training Package: register through "ihrhrt@who.int" Health protection officers undertaking ship sanitation inspections should ensure they (as a minimum):

- comply with all Health and Safety requirements including completing and maintaining District Health Board and port specific training
- have completed the WHO online ship sanitation inspection modules, and
- have attended a Ministry of Health border health and ship sanitation course or medical vector surveillance workshop within the last three years.



#### 9.3.1 Summary of the ship sanitation certification process

#### Phase 1 NOTIFICATION, PLANNING AND PREPARATION



#### 9.4 Phase 1 – Notification, planning, and preparation



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#### 9.4.1 Notification requirements for ship sanitation inspections

Advance Notice of Arrival form: http://www.customs.govt .nz/news/resources/form s/Documents/NZCS%20 344.docx Ship's masters, or agents, should request ship sanitation inspections well in advance of the expiry of the ship's current certificate.

First porting ships usually make the request for an inspection when the New Zealand Advance Notice of Arrival is submitted. Officers reviewing the Advance Notice of Arrival should check the date of expiry of the Certificate, the port of issue, and alert the vessel's agent if the certificate has expired, requires renewing within a month, or has been issued at port that has not been authorised by the WHO to issue ship sanitation certificates.

If a certificate has been issued by an unauthorised port then arrangements need to be made to inspect the ship at the first port of call as soon as possible.

Ships that have been in New Zealand waters for some time may also request a ship sanitation inspection.

After receiving a request for a ship sanitation inspection from the master or agent, an appropriate time for the visit should be agreed.

The Master and/or agent should be advised of the expected process for the inspection, including the documents to be reviewed, individuals to be interviewed, and the areas of the ship to be inspected.

When agreeing the inspection time, consider:

- time of vessel arrival and departure
- time required to complete inspection.

An inspection will generally take two to three hours. If public health risks are found (eg insanitary conditions) or if it is a particularly large and complex ship (such as a cruise ship), then the inspection may take longer. If the ship has only a limited time in port, or is large and complex, additional health protection officers may be required to assist.

If an inspection cannot be undertaken or cannot be fully completed while the vessel is in port, refer to 7.7.0 Granting extensions.

#### 9.4.2 Follow-up inspections requested by competent authorities

Follow-up inspections may be requested by one competent authority of another if public health risks have been identified or where there are outstanding control measures that require follow-up. Requests may originate from within New Zealand direct from one public health unit to another, or may come from another country via the National Focal Point system.

If follow-up is required on a ship departing to an overseas port the Ministry of Health Environment and Border Team should be notified so they can inform at the National Focal Point of the country of the next port of call.

The scope of the follow-up inspection will depend on the nature of the issue. Usually the investigation and inspection should focus on matters relating to the issue identified and a full inspection should not be required. For example an inspection on a cruise ship after a passenger



Inspection of Ships and Issuance of Ship Sanitation Certificates (WHO, 2011), Annex 2

Handbook for the

is confirmed as having a legionella infection and travelled on the ship during the full incubation period. The focus of the visit should be on medical records and facilities, legionella management systems and any enhanced controls. It is unlikely that an inspection of areas such stores or cargo holds would be necessary.

All follow-up visits, actions or controls should be documented on the ship sanitation certificate by updating or amending the certificate or evidence report form, or, if indicated, issuing a new certificate.

At present follow-up inspections cannot be charged for however provision for this is being sought in an amendment to the Health (Quarantine) Regulations 1983 to provide for this.

#### 9.4.3 Engaging with shipping agents and other border agencies

A ship's agent may choose to be present during the ship sanitation inspection. This can be useful especially if, or when, control measures are required. If the agent is not present, then the agent must be informed of any formal control measures or of any other concerns with the vessel's operation or condition as soon as possible following the inspection. If significant concerns have been identified, the agent may be contacted and requested to be present for the inspection.

Liaison with Ministry for Primary Industries (MPI), Maritime New Zealand (MNZ) and/or New Zealand Customs Service (Customs) may be necessary where there are matters requiring a joint agency approach such as numerous and consistent non-compliance or if the vessel is to be inspected offshore, as occurs intermittently in Taranaki. Good operational relationships should be developed with these border agencies.

Occasionally public health units may be notified by another agency of public health concerns on ships. An MOU between Ministry of Health and MNZ requires that MNZ notify Ministry of Health of identified issues relating to crew and passenger health or conditions relating to the harbouring of disease vectors or the spread of disease. Notifications should be followed up on a case-by-case basis depending on the nature of the notification with actions or controls being implemented and documented through the ship sanitation certificate. As for follow-up visits these investigations are currently not able to be charged for with the costs expected to be covered by existing regulatory budgets.

#### 9.4.4 Recommended pre-inspection preparation

Assemble and check equipment and documentation to ensure that the inspection kit is complete, items required include:

- sampling equipment
- copies of documentation including checklists, forms and stamps
- copy of the Handbook for the Inspection of Ships and Issuance of Ship Sanitation Certificates (WHO, 2011)
- personal protective equipment
- entry ID to access the port.

Consider the type, size and known history of ship to be inspected and incorporate this into the inspection plan. Review the Advance Notice of Arrival and any previous records.



Health (Quarantine) Regulations regs. 15 [need to update with changes to HQR

www.customs.govt.nz/a bout/contactus/ports/Pa ges/default.aspx

MOU between MNZ and MoH, 5 December 2014

#### 9.4.5 Ship Sanitation Inspections of cruise ships

Most cruise ships have a ship sanitation certificate inspection undertaken in the Northern Hemisphere before they depart for the Southern Hemisphere cruise season however on occasion requests for inspections of cruise ships may be received.

Cruise ships are complex environments with large numbers of passengers and crew and multiple locations of public health interest (galleys, dining areas, pools and recreation facilities, water and sewage infrastructure).

Cruise ships operate under a parent Cruise Line Company. These companies generally have a high level of awareness of the health risks and have standardised health and safety procedures they expect to be implemented including triggers for outbreak responses and enhanced controls.

Preparation for a cruise ship inspection includes identifying the inspection team. A minimum of two persons with knowledge and expertise in drinking water treatment, public health engineering, communicable disease, vector control and food safety is highly recommended. Request to review Cruise Line Company policies before the ship visit.

Inspections on cruise ships will include a desktop audit of operating procedures and records, a face-to-face meeting with key personnel (master, chief engineer, doctor, food services) to confirm general ship operations, and a visual inspection of some areas. This includes at least one galley, dining room, and food storage area and the medical facilities. Advise the master and agent that a full inspection of all areas of the ship will not be undertaken.

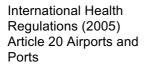
#### 9.4.6 Health and Safety

Working in accordance with established safety procedures is important due to the inherent safety hazards unique to the seaport environment. Awareness of hazards in the dock area is essential (eg, cranes, straddle carriers, forklifts, trucks, prime movers, dunnage, drainage systems etc). Refer appendix 1 for a list of common hazards at sea ports.

Wear appropriate clothing that will allow climbing ladders, entering confined spaces and moving through engine rooms and galleys. Personal protection equipment includes hard hats, hearing protection, high visibility jackets, gloves, safety shoes, head mounted LED torches and, in some environments, safety eye wear. Refer appendix 2 for recommended equipment list.

#### 9.5 Phase 2 – ship visit

Prior to, and during boarding, observe the general condition of the ship. Check rodent guards to ensure that they have been fitted to mooring lines. If the gangplank is seen to be unsafe do not board until the hazard has been mitigated.





#### 9.5.1 Documentation check

Report to the Master or Executive Officer and advise of the purpose of the inspection. Once introductions are completed check documentation. Request hard copy, current, original documents.

The key documents are:

- 1. current Ship Sanitation Control or Exemption Certificate (request a copy to file)
- 2. Maritime Declaration of Health (if first porting)
- 3. crew and passenger list (if applicable)
- 4. vaccination list (if available)
- 5. medical log (and gastro/intestinal (GI) illness log (if available)
- 6. Integrated Pest Management (IPM) plan or other documentation describing pests/vector control
- 7. potable water records and water safety plan (chemical and bacteriological testing records and certification of source quality for last loaded bunkered water)
- 8. food source and storage records, food handling standard operating practices
- 9. waste management plans/waste disposal records (including sewage)
- 10. cargo declaration and ships stores declaration.

In New Zealand Ballast water is the responsibility of MPI and need not be considered during the SSCC inspection.

Reviewing documentation and check the following:

- consistency between documentation, ie if there has been an illness it should be reported in the Captain's Log and the Sick Bay Log
- currency of the documents and evidence updates
- evidence of samples being taken and results recorded, for example potable water
- what notations were there made during the previous inspection that there are on the Certificate and the Evidence Report Form.
- Consider whether the level of documentation provided appears appropriate to for the size and scale of ship operations.

#### 9.5.2 Inspection

Complete the physical inspection of the ship. Arrange to be accompanied by one of the ship's officers to ensure ready access to all areas being inspected and as a safety precaution.

The sequence of the inspection should be undertaken to move from clean to dirty areas avoiding cross contamination. The recommended sequence for inspection is:

- 1. crew and officers' quarters
- 2. galley, pantry and service areas
- 3. stores
- 4. childcare facilities (if applicable)
- 5. medical facilities
- 6. swimming pools, spas and saunas (if applicable)
- 7. solid and medical waste
- 8. engine room
- 9. potable water
- 10. sewage



- 11. cargo holds, rope stores
- 12. upper decks including lifeboats
- 13. other systems and areas (eg sites where standing water may accumulate).

Inspections must include, as a minimum, a visit to high risk areas such as, the galley, food storage compartments, general storage (including rope stores), waste management storage, medical facilities, cabins and amenities. It is not necessary to inspect all cabins or amenities but inspection of a representative number of sites is expected.

A broad public health risk assessment approach is expected, but particular focus should be given to ensuring ships are free of vectors and vector management and controls are in place. Refer Appendices 4 and 5 for further guidance on vector detection, management and control, and an integrated pest management plan template.

The type of ship (cruise, container, fishing), size, prior ports of call, nature of cargo carried, access to holds, outcome of previous inspections or investigations, and standards found during the inspection of the minimum areas will indicate if a full inspection or more intensive scrutiny is needed.

Ships operated by major shipping companies such as Maersk or MSC have a reputation for having good standards of ship management and will likely only require the minimum inspection.

On the other hand ships that trade in the South West Pacific operated by small companies often struggle to meet the necessary standards and full inspection of these "Island Traders" will likely be needed.

If areas of the ship are not inspected then record these as "not inspected" on the ship sanitation certificate against the relevant areas.

Prior to the in inspection familiarise yourself with the WHO Handbook. The WHO Handbook details the 13 key areas on a ship, potential health risks, evidence of issues and appropriate control measures to take in response to public health risks. The WHO Handbook is to be used to define evidence of non-compliance to ensure it meets the WHO codification. It is not expected to be followed comprehensively for each inspection. This would impractical given the level of detail required.

Ministry of Health recommends a simplified inspection process for routine inspections. Refer appendix 3 for Ministry of Health Inspection Checklist.

Ship standards and complexity of operations varies from small poorly maintained boats with basic facilities and minimal systems to large ships with sanitised environments, highly complex infrastructure, tightly managed systems and documentation controls. Assessment of risks based on observation and information gathered is an important component of the inspection. The risk assessment will inform decisions on the acceptability of conditions and if controls are necessary.

#### 9.5.3 After the inspection



Handbook for the

Issuance of Ship

(WHO, 2011)

2011)

Inspection of Ships and

Sanitation Certificates

Guide to Ship Sanitation

(third edition) (WHO

Return to meet the ship's Master or Executive Officer in charge. Report on the inspection and ship's sanitary condition and discuss the certificate being issued and any actions/controls required. Provide the completed documentation to the ship's master before leaving the ship.

## 9.6. Phase 3 - Issuing ship sanitation certificates and determining control measures

#### 9.6.1 Types of ship sanitation certificates

There are two certificates available (refer appendix 6 for examples of certificates):

- Ship Sanitation Control Exemption Certificates issued when there is no evidence of a public health risk on board, and the ship is free from infection and contamination.
- Ship Sanitation Control Certificates issued when evidence of a public health risk (including sources of infection or contamination) has been detected on board. The Ship Sanitation Control Certificate details and confirms the control measures necessary to rid the vessel of any specified infection, contamination, vector or reservoir.

Ministry of Health provides public health units with copies of the certificates, labelled with the Ministry of Health's logo. E-copies of the certificate template are available on Health EMIS.

In most cases there will not be a significant public health risk on board the ship. Sanitary standards will be acceptable or may only require some minor improvements/controls and a Ship Sanitation Exemption Certificate (SSCE) can be issued.

An Evidence Report Form (ERF) may be issued attached to the Ship Sanitation Exemption Certificate if there are improvements identified or minor controls needed and there is not sufficient room to document these on the exemption certificate. These will usually be "recommended" controls. Examples of minor controls include no documented integrated pest management plan, no sharps bin, expired medicines. Refer appendix 5 for Integrated Pest Management Plan example that can be provided to ships.

Documenting these minor controls ensures there is a record of the controls identified so they can be considered by competent authorities in subsequent inspections.

If evidence of a public health risk is identified, a Ship Sanitation Control Certificate should be issued, with an Evidence Report Form attached documenting the control measures required.

The presence of pests or vectors of public health significance, especially rodents and mosquitoes or insanitary conditions and evidence of illness in crew and/or passengers are circumstances of when it is likely that a Ship Sanitation Control Certificate would be issued and control measures applied.

If additional or urgent controls are required, consider the need for enforcement action in consultation with the Ministry of Health. Any intention to issue a Ship Sanitation Control Certificate or any form of regulatory controls must be notified to the Ministry of Health's Senior



Handbook for Inspection of Ships and Issuance of Ship Sanitation Certificates (WHO, 2011)

Health (Quarantine) Regulations 1983 . <mark>Add new HQR ref when new</mark> regs passed

International Health Regulations (2005): definitions

Handbook for Inspection of Ships and Issuance of Ship Sanitation Certificates (WHO, 2011) Advisor (Border Health) or Manager (Environmental & Border Health) (refer appendix 8).

Refer page 17 of this section for summary guidance on triggers for issuing certificates.

#### 9.6.2 Determining appropriate control measures

Refer WHO Handbook Part B to identify the specific control measures that are needed for the inspection areas. Use these controls and codes to ensure internationally consistent practice.

Corrective actions and control measures are categorised according to two broad classes:

- those that are *required* (for more serious risks), and
- those that are *recommended*, but not necessarily mandatory.

Control measures are organised under a classification code system using headings and subheadings that refer to specific inspection areas and results. Use this coding when recommending or requiring control measures.

Below is an excerpt from the Handbook to illustrate potential control measures for certain public health risks in medical facilities.

Code of Areas	Inspection results: evidence found, sample results, documents reviewed	Control measures and corrective actions	Required	Recommended
	5.4 Clea	ning and maintenance		
5.4.1	No evidence of procedures and policies on cleaning, sanitation, sharps disposal or waste mana- gement.	Provide written procedures and policies relating to the complexity of medical care on board.		٩
5.4.2 □	Evidence of disease vectors and/or reservoirs that harbour disease vectors.	Disinfect, derat and apply insecticides imme- diately.		
5.4.3 □	Toilet dirty or not flushing pro- perly.	Clean toilets; repair toilet flushing system.		
5.4.4	Medical equipment and de- vices not in good operational and hygienic condition and not operated and maintained according to manufacturers' re- commendations.	Operate and maintain equipment and medical devices according to manufacturers' recommendations.		

Figure: Section of the WHO Ship Sanitation Handbook pp. 68

#### 9.6.3 Key considerations for applying control measures

Consider the following when deciding whether to apply control measures and/or issue a Ship Sanitation Control Certificate:

- The nature of the risk. Is it a potential public health risk of national or international concern ie, will it be likely to create risks ashore?
- Is the risk more of a personal or occupational health issue for the crew/passengers?
- What are the consequences or magnitude of the risk if nothing further is done?
- What controls are already in place?
- What are the costs and benefits of applying the controls? Do the public health benefits outweigh the costs?
- What is the sanitation history of the ship?



Handbook for the Inspection of Ships and

Handbook for the

Issuance of Ship Sanitation Certificates

(WHO, 2011)

Inspection of Ships and

Handbook for the Inspection of Ships and Issuance of Ship Sanitation Certificates (WHO, 2011)

- What range of suitable control options is available?
- What is the most suitable and practical control for the particular operation?
- Can low cost controls significantly reduce the risk as effectively as high cost ones?
- Does the ship have a valid ship sanitation certificate? Have any control measures already been required or recommended? If so, what is the level of compliance?

It is the responsibility of the ship Master and/or agent to take action to control any risks. Nevertheless, reasonable assistance in identifying suitable and relevant control options needs to be given.

#### 9.6.4 Using Evidence Report Forms

Evidence Report Forms are used because there is insufficient room on Ship sanitation certificates to clearly document either evidence of public health risks found or suggested control measures. The Evidence Report Form is then attached to the ship sanitation certificate.

Use the Evidence Report Forms to:

- detail the evidence found
- set out the control measure to be applied to mitigate the public health risk
- define whether the control measure is 'required' or 'recommended
- enable the competent authority undertaking subsequent inspections to confirm if the control measure has been successfully performed.

Any additional information must be on the Evidence Report Form - do not attach "additional comments" or other addenda to the certificate.

Once the Evidence Report Form is completed stamp the front page of the issued certificate with the standard Ministry of Health stamp. Ensure the name of the port, the date, and number of pages contained in the Evidence Report Form are entered.

Handbook for Inspection of Ships and Issuance of Ship Sanitation Certificates (WHO, 2011)

-	SEE ATTACHMENT
A	document has been attached to this certificate by the Competent Authority at the Port of:
	The attachment consists of pages
Date &	Signature:

Refer appendix 6 for examples of completed Evidence Report Forms.

# 9.6.5 Completing Ship Sanitation Certificates and Evidence Report Forms

Health protection officers and medical officers of health can issue ship sanitation certificates, and Evidence Report Forms.

International Health Regulations (2005)



Handbook for Inspection of Ships and Issuance of Ship Sanitation Certificates (WHO, 2011) Complete certificates as follows:

- strike through the non-applicable certificate in the heading (either Ship Sanitation Control Exemption Certificate or Ship Sanitation Control Certificate)
- fill in the required information in the two tables (name of ship, etc);
- choose the applicable table (left: Ship Sanitation Control Exemption Certificate; right: Ship Sanitation Control Certificate)
- complete every box in all the columns
- write legibly and use consistent wording from the checklists in the Handbook
- complete the Evidence Report Form attachment where required or recommended control measures are identified
- identify areas not inspected as "not inspected"
- note areas not applicable by marking "N/A"
- use the wording "None" or "Nil" in areas in which no evidence is found;
- list the documents reviewed
- use the wording "None" or "Nil" if no documents were reviewed
- if relevant ie samples taken, indicate if sample results are not yet available by noting "Sample results pending"
- sign, write name, date, and stamp the certificate
- ensure that all certificates are legible and written in plain English.

Certificates may be completed by hand or electronically.

Ministry of Health has issued stamps that must be used when completing certificates. Use the stamp over the signature field on the certificates and Evidence Report Form, enter the port of issue, date and sign (refer appendix 6).



Once the documentation has been completed and signed it should be hand it to the Master or Executive Officer in charge. Take a copy for the file records. Copies can usually be made on the ship or a photo can be taken.

#### 9.6.6 Follow up on control measures



If controls are "recommended" then re-inspection will not be needed. The ships Master and/or Executive Officer will be expected to ensure any actions are implemented. The recommended controls will then be checked at the next six monthly inspection.

If control measures are "required", then remedial work will need to be checked to ensure compliance. This may occur in the current port or, if the ship is departing before the measures can be completed, at the next port of arrival. Contact the next port to alert them and to advise of the potential public health risk found, control measures applied and followup required. If the next port is a New Zealand port then communicate directly with the public health unit responsible for that next port. If the next port is overseas advise Ministry of Health's Environment and Border Team, who will arrange for a message to be sent via the National Focal Point to the next port of arrival.

Once the decontamination, disinfection, disinsection, or deratting or other action has been undertaken, verify that it has been completed and update the Evidence Report Form.

#### 9.6.7 Enforcement and Sanctions

The IHR 2005 do not provide for enforcement and sanctions. States will apply their own domestic legislative tools to ensure effective implementation of the IHR. The Health Act, Health (Quarantine) Regulations 1983 and the Biosecurity Act 1993 contain mechanisms for enforcement if needed.

Health Act (section 97A) requires the person appearing to be in charge of the craft to promptly provide information requested by a designated officer.

Health Act (section 97B) enables a designated officer to direct a vessel to be detained for inspection if it appears that, during the voyage a person on it has died, or become ill, from a quarantinable disease; or death not attributable to poison or other measures for destruction has occurred among birds, insects, or rodents on vessel.

Health Act (section 110) enables a designated officer, if he or she believes that a craft is in an insanitary condition or in a condition favourable to the outbreak or spread of an infectious disease, to issue a written order requiring the craft to be cleansed, fumigated, disinfected, or treated (a 'cleansing order'). The order may be given whether or not the craft is liable to quarantine. The order must be issued by the medical officer of health or health protection officer and be in the form specified (refer appendix 7).

Health Act 1956 s.110 If a cleansing order is not complied with, the Master or Executive Officer commits an offence, and is liable to a fine not exceeding \$10,000. In addition, the health protection officer may have the work done and all expenses recovered from the owner or agents of the vessel as a debt due to the Crown. Failure to comply with other quarantine provisions may be an offence against the Health Act and the maximum penalty, on summary conviction, is a fine not exceeding \$500 and, if the offence is a continuing one, to a further fine not exceeding \$50 for every day on which the offence has continued.

#### 9.6.8 Reporting to the Ministry of Health



Health Act 1956 s.97A, 97B and 110

Health (Quarantine) Regulations 1983 reg.18 and Schedule 2, Form 4 Detections of rodents or mosquitoes on ships must be notified to the Ministry of Health within two hours of the detection being notified to the public health unit.

Any intention to issue a Ship Sanitation Control Certificate or any form of regulatory controls must be notified to Ministry of Health's Senior Advisor (Border Health) or Manager (Environmental & Border Health. If these Ministry officials are unavailable, call 0800 GET MOH then press the key for environmental & border health. Environmental & Border Health Team will brief the National Focal Point as required (refer appendix 8 for Ministry of Health reporting lines).

If a Ship Sanitation Control Certificate is required and/or other regulatory controls, notify the Master and agent (it is their responsibility to carry out the required control measures). Once the decontamination, disinfection, disinsection, or deratting or other action has been undertaken, verify that it has been completed and, if so, the Evidence Report Form should be updated.

# 9.6.9. Scenarios when issuing Ship Sanitation Certificates and Evidence Report Forms

The table below provides additional guidance on issuing of Ship Sanitation Certificates and the use of evidence report forms.



Type of Certificate	Indicative scenario	Report to Ministry?
	Ship Sanitation Control Exemption Certificate (without Evidence Report Form)	Routine matter.
Ship Sanitation Control Exemption Certificates	<ul> <li>Potential triggers:</li> <li>no evidence of public health risk</li> <li>ship is free from infection and contamination.</li> <li>Example: The ship in good order, well managed and no issues of concern are identified.</li> </ul>	No need to a report to Ministry of Health
are issued when no evidence of a public health risk is found on board and the health protection officer is satisfied that ship is free from infection and contamination.	Ship Sanitation Control Exemption Certificate with Evidence         Report Form         Potential triggers:         • no evidence of infection or contamination found         • some items requiring action are identified, but there is no evidence of systemic issues         • no known history of insanitary conditions.         Example: Ship generally in good order and well managed. There may be some isolated items identified requiring action eg, no Integrated Pest Management Plan (but no evidence of vectors), no sharps container, or isolated cleaning required. Risks may be identified but they are limited to personal health and safety risks on board the ship affecting the crew only.	Routine matter. No need to report each Ship Sanitation Control Exemption Certificate (and Evidence Report Form) to the Ministry of Health
Ship Sanitation Control Certificates are issued when evidence of public health risk of national or international implications ie a risk posed ashore is found on board.	<ul> <li>Ship Sanitation Control Certificate with Evidence Report Form</li> <li>Potential triggers: <ul> <li>evidence of public health risk, including infection and contamination, is found on board</li> <li>threat to public health is high</li> <li>inspection identifies systemic issues indicative of poor ship management and high likelihood of public health risks beyond the vessel</li> <li>history of poor practice/previous non-compliance.</li> </ul> </li> <li>Example: A ship where inadequate cleaning is systemic. Storage practices poor. Cockroach infestations in food prep areas. Medical log indicates diarrhoeal illness in staff.</li> <li>Ship Sanitation Control Certificate with Evidence Report Form and invoke statutory powers</li> <li>Potential triggers: <ul> <li>threat to public health is very high</li> <li>there are national and international implications of not managing the risk</li> <li>need high level of assurance that risk has been mitigated</li> <li>operator has history of non-compliance.</li> </ul> </li> </ul>	Always report these cases. Report to the Ministry of Health's Senior Advisor (Border Health) or Manager, Environmental and Border Health; phone 0800 GET MOH if either official is not available Always report these cases Report to the Ministry of Health's Senior Advisor (Border Health) or Manager, Environmental and
	<ul> <li>Example 1: Rodent infestation on board vessel. History of rodent issues previously. Poor practices. Lack of adequate cleaning and storage.</li> <li>Example 2: Standing water identified with mosquito larvae. No Integrated Pest Management Plan. Master has not implemented control measures to mitigate mosquito habitat documented on evidence report from attached to ship sanitation certificate.</li> </ul>	Environmental and Border Health; phone 0800 GET MOH if either official is not available



Health (Quarantine) Regulations 1983 Add new HQR ref 9.7 Extension of Ship Sanitation Certificates

Ship sanitation certificates are valid for six months from the date of issue. Certificates may be extended for up to one month.

Extensions may be required for a number of reasons. For example:

- the inspection could not be completed because access to the holds (or other parts of the vessel) was not available while the vessel was in port
- required control measures could not be completed before the vessel departed for the next port
- bad weather or engine failure required the ship to enter a port and the port was not able to issue a new certificate before the old certificate expired.

An extension cannot be granted if the current certificate has expired.

Extensions should only be granted when visiting the vessel in person and a genuine reason is found as to why a standard ship sanitation inspection cannot be carried out.

An extension is authorised by the health protection officer or medical officer of health stamping the existing ship sanitation certificate with the standard Ministry of Health "extension stamp".

Handbook for Inspection of Ships and Issuance of Ship Sanitation Certificates (WHO, 2011)



The agent must be notified that the extension has been granted. Keep a record of the original certificates' reference and date of issue/expiry by taking a copy or a photo.

# 9.7.1 Charges for issuing certificates and applying control measures

The Director General of Health fixed the fees and charges for ship sanitation inspections and certification at <u>\$96 per hour</u> (excluding GST) for the health protection officer's time for the inspection, including travel time. Currently public health units can charge for issuing Ship Sanitation Control Certificates or Ship Sanitation Control Exemption Certificates.

The fee includes an allowance for overheads, administrative and other support services (eg filing documentation, invoicing etc). If more than one officer undertakes the inspection, the second officer's time can be included (provided the second officer is undertaking inspection activities and not simply accompanying the first officer). Overtime cannot be charged.



Setting Fees and

Charges: Guidelines for

August 2011, Ministry of

District Health Board

Public Health Units.

Health

Provision to extend the current scope of charging is being sought in changes to legislation

#### 9.7.2. Protection against forgery

There is no evidence that the use of forged certificates is widespread, but it is possible that instances forgery or production of an invalid certificate might occur (for example, changing the dates on an otherwise genuine certificate; forging a certificate in its entirety; or obtaining a certificate from a body that is not authorised to issue certificates).

Public health units should keep a copy of all ship sanitation certificates issued, and file records of inspections. These can be referred to if queries arise over whether a certificate was issued at a particular port on a particular date. If a ship loses their ship sanitation certificate, a copy of the file record can be provided. A new ship sanitation certificate can only be issued if another inspection is undertaken.

Always use the stamps provided by Ministry of Health.

#### 9.8 Phase 4 – Post-visit administration

On return to the office:

- check the kit and ensure stocks are replenished, batteries charged, any repairs made
- provide any copies, reports or advice to the vessel's agent (if not present during the inspection)
- inform other agencies of any concerns noted (eg MPI for biosecurity risks, MNZ of concerns about occupational health and safety issues or the crew's health and wellbeing)
- ensure documents are appropriately filed
- ensure administrative staff have logged the inspection and have information needed to charge for the inspection
- inform the public health unit at the next port of call in New Zealand if any control measures have been recommended or required
- inform Senior Advisor (Border Health) or Manager (Environmental & Border Health of any matters that need to be passed on to the National Focal Point in the country at the next port of call (if overseas).



## **APPENDIX 1: COMMON HAZARDS AT SEAPORTS**

The maritime industry is a hazardous environment whether ashore or on board a vessel. Officials should be prepared to identify and deal with risks associated with these industrial sites. All PHU staff working at sea ports must ensure that they complete the relevant health and safety induction for their port.

Staff awareness of hazards in the dock area is a key component of such procedures.

Dockside the hazards include:

- mechanical handling equipment
- trip hazards (rail lines, slot drains, gully traps, sumps, dunnage etc)
- cargo stacks
- service vehicles.

On board the vessel staff will need to maintain vigilance and constantly look out for:

- wet and slippery decks, companionways and ladders
- moving machinery
- cargo loading or discharge
- unstable cargo or stores
- high voltage wiring
- hot surfaces (galleys and engine rooms)
- moving lifts, cranes and forklifts, (both on the vessel and on the dockside)
- working fans and fan blades
- dangerous goods
- low overhead clearances
- gangways
- closed compartments (freezers cold stores).

#### Line Hazards

Ships lines, winch lines, and crane lines are to be treated with the utmost caution. Staff should at all times ensure that they do not place themselves between objects being moved or secured by lines and the winding engine. Tidal movement and cargo discharge or loading will affect ships lines.

#### **Buddy Awareness**

If there are two or more officials then the "Buddy System" should be adopted whereby the staff team up and ensure their co-workers are safe and accounted for at all times.



## **APPENDIX 2: RECOMMENDED EQUIPMENT LIST**

#### **Equipment Checklist**

The table below details a <u>suggested</u> list of items that HPOs might have for the conduct of a SSC inspection. The list is not exhaustive and there may be other items required.

Serial	Туре	ltem	Remarks
1	Admin & documentation to be carried	Blank SSC forms Port pass HPO warrant of appointment Photo ID Check list WHO SSC Handbook Blank directive forms Health Act 1956 Health (Quarantine) Regulation	A true copy of the MoH Template Valid Valid Current For inspection
2	Personal Clothing to be worn or to be available	Hard hat High visibility jacket Safety shoes Wet weather gear Gloves Hearing protection	
3	Equipment to be carried	Back pack and/or belt bag Torch Cell phone with translation app SSC stamp Notepad Aerosol of insecticide Specimen sample tubes (larvae/insects) Collection dipper Camera (or Smart phone) First aid kit	For carrying equipment so HPO can operate hands free
4	Equipment to be accessible (located in HPO's vehicle)	Hazard lights Pest control products Sampling kit (H2O) H2O sample bottles	On vehicle In vehicle – for display <i>Bti</i> Pyrethroid residual insecticide S methoprene



# APPENDIX 3: MODEL TEMPLATE OF A CHECKLIST FOR SHIP SANITATION INSPECTIONS



Name of vessel

Type of Vessel

Date of inspection

#### Checklist for Ship Sanitation Inspections undertaken in New Zealand

	Vessel documentation to be sig		Dees Sighted
Document	What to check	Handbook Reference Codes	Docs Sighted
Current or expiring SSC	Any evidence of problems, any outstanding control measures not completed	X	Yes / No
Maritime Declaration of Health (if not seen already)	No cases of illness All Health Questions answered		Yes / No
Ship's log/ Sanitary Inspection	Master's inspections of galley, stores and accommodation		Yes / No
Medical Log	Indication of illness of public health concern e.g. gastro outbreak Galley staff unwell while working	5.6.1 (no log available) 2.1.2	Yes / No
Garbage Management Plan (required for vessels >400tonnes or 15 or more persons on board)	Specific crew are designated to deal with waste. All crew have signed to say they are trained		Yes / No
Garbage Record book (required for vessels >400tonnes or 15 or more persons on board)	Waste is being disposed of regularly. No build up.	7.1.1 (no log) 7.11.1	Yes / No
International Sewage Pollution Prevention Certificate (ISPPC)	Certificate expiry date (less than 5 years old)	10.1.1	Yes / No
Cargo Declaration and Ship's Stores Declaration	Useful information to inform risk assessment pre-vessel inspection		Yes / No
Potable water analysis reports/records	FAC test results is applicable E coli (0 E coli per 100ml water)	9.1.1 (no analysis)	Yes / No
Quality Manual/ sanitary inspections	Pest sighting logs, treatment records, Regular inspections to confirm vessel in insanitary condition	13.1.2 (No IPM)	Yes / No
Temperature records (food)	Food is stored at safe temperatures	2.5.1	Yes / No

Note: Refer the WHO Handbook for Inspection of Ships and Issuance of Ship Sanitation Certificates when detail on the Handbook Codes is required. Guide for indicators for issuing controls at back of checklist.



Area 1 - Quarters		
Key IHR Criteria	Comments/Observations	
<ul> <li>Toilet facilities provided</li> <li>Hand washing and drying facilities</li> <li>Acceptable cleanliness</li> <li>Vector/Reservoir-free</li> </ul>		

Area 2 - Galley Pantry		
Key IHR Criteria	Comments/Observations	
<ul> <li>In good repair</li> <li>Vector/Reservoir-free</li> <li>Good food storage/safety practices</li> <li>Toilet, hand washing &amp; drying facilities for food handlers</li> </ul>		
<ul> <li>Temp controls within acceptable limits (pg 53 Handbook)</li> <li>Good personal hygiene practices of staff</li> </ul>		
<ul> <li>Clean and tidy</li> <li>Waste management practices good</li> </ul>		

Area 3 - Stores		
Key IHR Criteria	Comments/Observations	
□ In good repair		
□ Clean and tidy □ Vector/reservoir-free		
□ Good food storage/s		
Temp controls within	acceptable	
limits (pg 53 Handbo		
□ Separate storage of	chemicals	

Area 5 - Medical Facilities			
Key IHR Criteria	Comments/Observations		
<ul> <li>Dedicated room/area</li> <li>In good repair</li> <li>Clean and Tidy</li> <li>Toilets and hand washing facilities</li> <li>Vector/reservoir-free</li> <li>Documented medical log</li> <li>Designated crew member</li> <li>Medicines on board to control public health risks</li> <li>Sharps container and medical waste management</li> </ul>			
Area 7 - Sol	Area 7 - Solid and Medical Waste		



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Key IHR Criteria	Comments/Observations
<ul> <li>Practices and processes for managing &amp; disposing of waste</li> <li>Waste containers intact, tightly covered</li> <li>Vector/reservoir-free</li> <li>Designated haz sub storage area</li> </ul>	

Area 8	- Engine Room
Key IHR Criteria	Comments/Observations
□ Clean and tidy	
Vector/reservoir-free	

Area 9 - Potable Water		
Key IHR Criteria	Comments/Observations	
<ul> <li>System for providing potable water</li> <li>Disinfection process</li> <li>Potable water provided where required for human consumption</li> <li>Safe bunkering procedures</li> <li>Filling hoses in sanitary condition</li> <li>Backflow preventers in place</li> <li>Hot water system above 65C</li> </ul>		

Area 10 - Sewage			
Key IHR Criteria	Comments/Observations		
<ul> <li>No spills, leaks, blockages, cross connection</li> <li>Sewage holding tank required for all vessels &gt;400 tonnes or with &gt;15 persons on board</li> </ul>	9		
<ul> <li>Treatment system operational (if installed)</li> <li>No unpermitted discharges</li> </ul>			

Area 12 - Cargo Holds					
Key IHR Criteria Comments/Observations					
□ Vector/reservoir-free					
Nil cross contamination of cargo					

Area 13 - Other Systems and Areas				
Key IHR Criteria Comments/Observations				
<ul> <li>Rat guards in place</li> <li>Deck including storage area (bosuns store, forepeak, afterpeak) has no standing water or evidence of vectors.</li> </ul>				

(refer WHO handbook for code areas and control measures to quote)

Other				
Key IHR Criteria Comments/Observations				
	· · · · · · · · · · · · · · · · · · ·			



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Area 4 – Childcare facilities – refer to handbook	
Area 6 – Swimming pools – refer to handbook	

## **General Additional Notes**

Date of SSC Inspection/Certificate Issued	
Evidence Report Form Issued	
Next Port follow up inspection required	
If YES notify the PHU asap	
Name of HPO	
HPO Signature	
, , , , , , , , , , , , , , , , , , ,	



#### Indicators for considering controls (guidance only)

#### Area 1 - Quarters

Indicators for considering controls (refer IHR handbook for code areas and control measures to quote):

- Toilet or hand washing facilities not available or not operational (1.1.6, 1.2.1, 1.2.2,
- Significant vector infestation (1.1.9, 1.3.1, 1.3.7)
- Cases of illness or disease outbreak on board **and** lack of adequate hand washing/drying facilities **and/or** no cleaning programme **and/or** vector infestation (1.2.1, 1.2.2, 1.3.1, 1.3.7)

### Area 2 - Galley Pantry

Indicators for considering controls (refer IHR handbook for code areas and control measures to quote):

- Facilities in very poor repair (2.3)
- Hand washing in galley absent (2.2.1)
- Significant vector infestation(2.7.7, 2.7.8)
- Cases of illness or disease outbreak on board **and** inadequate cleaning (2.7.5) **and/or** poor food hygiene practices (2.4, 2.5) **and/or** personal hygiene practices (2.6.1) **and/or** sick food handlers working (2.6.2) **and/or** inadequately equipped hand washing in galley (2.2.1)

## Area 3 - Stores

Indicators for considering controls (refer IHR handbook for code areas and control measures to quote):

- Facilities in very poor repair (3.1.1, 3.1.2)
- Significant vector infestation(3.2.3, 3.4.4)
- Significant and widespread poor food storage/safety practices (3.2.1, 3.2.2, 3.3.1, 3.4.1, 3.4.3, 3.4.5, 3.4.6, 3.5.1)
- Cases of illness or disease outbreak on board and poor food storage/safety practices (3.2.1, 3.2.2, 3.3.1, 3.4.1, 3.4.3, 3.4.5, 3.4.6, 3.5.1)

#### Area 5 - Medical Facilities

Indicators for considering controls (refer IHR handbook for code areas and control measures to quote):

- Cases of illness or disease outbreak on board and insanitary facilities/practices in medical facility/room (5.2.1, 5.2.2, 5.2.3)
- Cases of illness or disease outbreak on board and no medical log being kept (5.6.1)
- No designated crew member or medical doctor (required if >100 PAX for international voyage for >3 days) (5.5.1, 5.5.2, 5.5.3).

## Area 7 - Solid and Medical Waste

Indicators for considering controls (refer IHR handbook for code areas and control measures to quote):

- Significant vector infestation & no garbage management records (7.1.1, 7.2.1)
- Significant vector infestation & poor garbage management practices (7.4.1, 7.4.2, 7.4.3, 7.4.5, 7.4.6, 7.10.5, 7.10.6)
- Cases of illness or disease outbreak on board and poor management of medical waste (7.5.1, 7.5.2, 7.5.3, 7.5.4, 7.5.6, 7.5.7, 7.5.9, 7.7.3, 7.8.4, 7.8.6, 7.8.8, 7.9.1, 7.9.5, 7.9.9)

## Area 8 - Engine Room

Indicators for considering controls (refer IHR handbook for code areas and control measures to quote):
Significant vector infestation (8.2.1)



## Area 9 - Potable Water

Indicators for considering controls (refer IHR handbook for code areas and control measures to quote):

- No supply of potable water (9.2.3)
- Analysis reports indicate evidence of contamination and no evidence controls implemented
- Possible waterborne illness on board and lack of potable water (inadequate treatment, contaminated supply) (9.1, 9.3, 9.4, 9.5, 9.6, 9.7, 9.8, 9.9, 9.2.2)
- Insanitary practices and engineering (9.5, 9.9, 9.10, 9.13, 9.14, 9.15, 9.16, 9.17, 9.18)
- Absence of legionella controls (9.12.4, 9.14.5)

#### Area 10 - Sewage

Indicators for considering controls (refer IHR handbook for code areas and control measures to quote):

- Untreated sewage has been discharged into port basin (10.11.1)
- ISPPC is not available (10.10.1)
- Insanitary conditions on board due to poorly operated sewage system (10.4.3, 10.7, 10.8, 10.9, 10.10, 10.11, 10.12, 10.13)

## Area 12 - Cargo Holds

Indicators for considering controls (refer IHR handbook for code areas and control measures to quote):

• Evidence or vectors or reservoirs (12.2.2, 12.3.2, 12.6.2)

## Area 13 - Other Systems and Areas

Indicators for considering controls (refer IHR handbook for code areas and control measures to quote):
 Evidence of live vectors and harbourage conditions (standing water, nesting) (13.2.2).



# APPENDIX 4: GUIDANCE ON VECTOR MANAGEMENT, CONTROL AND DETECTION FOR SSC INSPECTIONS

#### **INTEGRATED PEST MANAGEMENT (IPM)**

	-91			
ltem		Remarks/Requirements		
PM Plan to ocumented	be	Every ship must have a documented IPM Plan that documents effective monitoring and control strategies for pests. If the ship has no documented IPM this should be recorded on the SSC/Evidence Report Form at the time of inspection. A copy of the template IPM (appendix 5) can be provided to the ship's master and agent to use.		
PM – what heck	to	Insects, rodents, and other pests are effectively controlled to minimize their presence in the food storage, preparation, and service areas. Areas of harbourage for pests/vectors/rodents have been eliminated Incoming shipments of food and supplies are routinely inspected for evidence of insects, rodents, and other pests. Entry points where rodents may enter the vessel are protected. Records of sanitary checks, inspections, reports of sightings or infestations and treatment (if applicable). When trapping has been implemented dead or trapped insects, rodents, and other pests must be removed from control devices and the vessel at a frequency that prevents their accumulation or decomposition, or the attraction of pests.		

#### VECTOR DETECTION – checking for rodents

Item	Remarks/Requirements				
Places to inspect	Inspect spaces listed on the SSC systematically. Note that a				
	sample of crew and officer accommodation are to				
	inspected as representative of all such accommodation.				
	Particularly check for rodent evidence in mooring ropes,				
	galleys and food stores.				
	The holds are best inspected when empty as this enables the				
	inspector to observe all concealed niches and grain residues.				
	Accommodation and food stores should normally be examined				
	before the holds because they are 'clean' areas.				
	Rat or mouse droppings are usually found in hidden places in				
	galleys, storerooms, food handling rooms, refuse storage				
	areas and deck stores.				
Aids to Identification	Rat marks are dark greasy smears resulting from contact with				
Identification	the dirty fur of the rodent. They should be looked for in				
	runways, especially on deckhead pipes and on the underside of deck beams. The marks are sometimes difficult to detect				
	and on old ships usually indicate a long-standing infestation.				
	Talcum powder may be laid in runways, near doors, around				
	food stores, in galleys or kitchens and near garbage bins to				
	aid the identification of the presence of rats. The powder				
	should be laid in the evening and inspected the next morning				
	for marks left by tails and feet of rodents.				
Harbourage sites	Harbourage sites for rodents and opportunities for gnawing				
0	may be limited in ships of modern construction, but should be				
	drawn to the attention of the ship's master if found.				
Levels of	Usually it is not possible to confirm actual numbers of rodents				
infestation	however a relative measure of the level of infestation can be				



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determined.
Methods which can be used are:
Identification of rat signs
Actual observation or visual sightings
Census of food consumption
Indications of infestation levels will determine the action required by the MOH or HPO. For example, a light infestation may be dealt with by baiting or trapping, while a high or heavy infestation will require fumigation of the ship. Factors such as the general level of ship sanitation and type of cargo carried will need to be taken into account.
Light infestation: A single rat sighting or small infestation present might indicate that the infestation is new or only recent. The presence of droppings, smear marks, urine, gnawings, footprints, especially on overhead girders, tail marks, nests and food caches indicates a larger infestation. It may be difficult to see rats during the daytime and more likely at night using a torch. A dead rat that shows no signs of having been bitten (since rats may eat corpses where there is a high infestation and no other food source is available) could be indicative of light infestation. The rat may have died through poisoning or disease.
Heavy infestation: The presence of all rat signs mentioned above along with the sighting of rats during the daytime indicates a large infestation. As a guide if one rat is seen there may be ten rats or more in the area. The sighting of rats during daytime is dependent on activity on the vessel and a tendency for rats to come out when disturbed. Estimations of rodent population should not be made while cargo unloading is taking place. The bodies of rats that have just died may be examined for the presence of bites from other rats.

#### VECTOR DETECTION – checking for larvae and mosquitoes

ltem	Remarks/Requirements		
Places to inspect	Check for and inspect standing water commonly found on decks and lifeboats but may also be seen elsewhere. It is not expected that cargo will need to be inspected. This is the role of MPI. However be aware of the nature of cargo carried and any increased mosquito risks. Check common indoor areas and cabins for any potential breeding receptacles such as pot plants.		
Aids to Identification			
Harbourage sites			



## APPENDIX 5: INTEGRATED PEST MANAGEMENT PLAN TEMPLATE Integrated Pest Management Plan

## \_\_(insert name of vessel\_\_\_\_

The core components of an integrated pest management plan are:

- identification
- preventative Practices
- monitoring
- mechanical Controls
- pesticides

#### Identification

Identification refers to deciding which organisms are pests that must be controlled, and which are not. For example, mosquitoes must be controlled as they can spread serious infections and therefore present a significant health threat.

Identification should be conducted by <the shipping company> and communicated to all crews to ensure the scope is understood and the plan is conducted effectively.

#### **Preventative Practices**

For example:

- appropriate storage of garbage that may attract pests
- regular cleaning of the vessel
- removing standing water

#### Monitoring

For example:

- regular inspections of areas likely to harbour pests
- encouraging crew to report sightings of pests

#### **Mechanical controls**

For example:

- deployment of rat guards
- rat traps
- door and window screens

#### Appropriate Pesticide Use

For example:

- rat poison
- insecticide sprays
- s-methoprene

The <Chief Officer/Master> will conduct <weekly> inspections of the ship and conduct a review of the measures taken. This will be recorded in the pest/vector log.



Area	Preventative Practices	Monitoring	Mechanical Controls	Appropriate Pesticide Use
Galley and Provisions store	e.g. cleaning up spilled food	e.g. weekly inspection	e.g. deploying cockroach traps	e.g. use of insecticides
	Responsibility of:	Responsibility of:	Responsibility of:	Responsibility of:
	Galley Staff	Master	Galley Staff	Galley Staff
Crew Accommodation	e.g. garbage bins used and emptied regularly	Eg, weekly inspection	e.g.indows screened	e.g.use of pesticides
	Responsibility of:	Responsibility of:	Responsibility of:	Responsibility of:
Holds	eg. cleaning of holds Use of fumigants			
	Responsibility of:	Responsibility of:	Responsibility of:	Responsibility of:
Deck and deck stores				
	Responsibility of:	Responsibility of:	Responsibility of:	Responsibility of:



Area	Preventative Practices	Monitoring	Mechanical Controls	Appropriate Pesticide Use
Mess Rooms				
	Responsibility of:	Responsibility of:	Responsibility of:	Responsibility of:
Offices			01	
	Responsibility of:	Responsibility of:	Responsibility of:	Responsibility of:
Bridge		Ó		
	Responsibility of:	Responsibility of:	Responsibility of:	Responsibility of:
Toilet/showers/laundry				
	Responsibility of:	Responsibility of:	Responsibility of:	Responsibility of:



Details of Inspection	Name & rank	Date

Space for Pest/vector log if no separate log exists e.g.

Plan signed off by Captain, 1<sup>st</sup> officer, 2<sup>nd</sup> etc.

**References:** WHO International Health Regulations 2005 WHO Medical Guide for Ships, Version 3. Chapter 29. WHO Guide to Ship Sanitation, Third Edition, Version 10. October



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## APPENDIX 6: SAMPLES OF COMPLETED SSCEC, SSCC AND ERF



#### NEW ZEALAND SHIP SANITATION CONTROL EXEMPTION CERTIFICATE/ SHIP SANITATION CONTROL CERTIFICATE



Port of Welligton.	Date 5 May 2016
This certificate records the inspection and (1) exemption the	from control or (2) control measures applied.

Name of ship or vessel .

MJ Brown Owl Flag Panama Registration / IMO no. 9455373

At the time of inspection the holds were unladen/laden with 15600 tonnes of containerised cargo.

Name and organisation of inspecting officer Sally Giles, Regional Public Health

1. Ship sanitation co	Ship sanitation control exemption certificate 2.			2. Ship sani	. Ship sanitation control certificate			
Areas (systems and services inspected)	Evidence found (1)	Sample results (2)	Documents reviewed	Control me applied	easures	Re-inspection date	Comments regarding conditions found	
Galley	None	NO	Temperative and cleaning records.					
Pantry	None.	NO	temperative and cleaning records.					
Stores	see attachment.	NO	Temperature and cleaning records.					
Hold(s) / cargo	Not inspected	NO.	None					
Quarters					4			
Crew	None	NO .	Sanitary inspection					
Officers	None	No	Mone		/			
Passengers	None	NO	None		s	EE ATTACHMENT		
Deck	NA	NA	NA		A docum	ent has been attached to this ce Competent Authority at the Po	atificate rt of:	
Potable water	Nore	Yes	Analysis reports water management plan.		The at	wellington.		
Indicate when the areas list	ed are not applicable by mar	king N/A.			Date & Signat	MINISTRY OF HEALT	PTO to comple	



Section 9 – Border Health



Areas (systems and services inspected)	Evidence found (1)	Sample results (2)	Documents reviewed
Sewage			ESSP - International
	None	NO	Sewage Portupin Prevention
Ballast tanks	Assessed by 1	MPT	Nore
Solid and medical waste	Nore	MO	Garbage Management Plan
Standing water	Nore	No	Sanitary Inspection
Engine room	Nore	NO	None
Medical facilities	see autochment	NÓ.	medical log
Other areas specified – see attached	NA	NA	NA

		MANATÜ HAUOR
Control measures applied	Re-inspection date	Comments regarding conditions found
/		
/		
/		

No evidence found. Ship/vessel is exempted from contrpl measures

Name and designation of issuing officer Sally Gites Health Potection Officer	HEALTH HEALTH	
Song one, freenin housen ounes	Port of weington.	
Signature and seal	Date 5 May 2016	Date (dd/mm/yyyy)
NA.	Signature Ally	050520

Control measures indicated were applied on the date below.

5201

Evidence of infection or contamination, including vectors in all stages of growth; animal reservoirs for vectors; rodents or other species that could carry human (1)(a) disease, microbiological, chemical and other risks to human health; signs of insanitary measures.

Information concerning any human cases (to be included in the Maritime Declaration of Health). (b)

(2)Results from samples taken on board. Analysis to be provided to the ship's master by the most expedient means and, if re-inspection is required, to the next appropriate point of call coinciding with the re-inspection date specified in this certificate.

Sanitation Control Exemption Certificates and Sanitation Control Certificates are valid for a maximum of six months, but the validity period may be extended by one month if inspection cannot be carried out at the port and there is no evidence of infection or contamination.

Attachment rendered (tick applicable box)

1 No Yes



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This form supports the ship sanitation certificate (SSC) and provides a list of evidence found and control measures to be performed. When attached to the SSC, each page needs to be signed, stamped and dated by the competent authority. If this document is used as an attachment to a pre-existing SSC, this attachment must be noted on the SSC (eg. by using a stamp).

Name of ship or IMO number or registration		Name and signature of the responsible onboard ship officer						
MV Brown Owl IMO 9455	MV Brown OWI IMO 9455373.			Vladamir Juritos No-				
Name of issuing authority Ministry of Health, New Zealand		Actual inspection date (dd/mm/yyy)	_					
SSC issued at the port of		Date of referred SSC (dd/mm/yyyy)						
Wellington		05052016						
Indicate areas that have not been inspected:       Ga         Quarters       Ga         Medical care facilities       Sa         Potable water       Sa         Other (laundry, lifeboats, etc)       Detected health events on board       Ye	<ul> <li>Stores</li> <li>Solid and medical waste</li> <li>Ballast water</li> <li>✓ Childcare facilities</li> <li>Engine room</li> <li>✓ Cargo holds</li> </ul>							
Area Evidence found code (brief description according to WHO checklist)	Measure to b	e applied Required	Recommended	Measure successfully performed (stamp and signature of reinspecting authority)				
3.2.1 Blood spillage onto floor of Chills from stored meats.	12 clean Chiller 2			MINISERY OF LEALTH LANNTO HALORA				
Name (issuing inspector) Sally Gies	Signature (issuing inspector)	Stamp (issuing inspect	or) Date	12016 Page 1 of 1				



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SEE ATTACHMENT	
A document has been attached to this artificate ZEALAND SHIP SANITATION CONTROL EXEMPTION CERTIFICATE/	MINISTRY OF HEALTH
Wellington NZ SHIP SANITATION CONTROL CERTIFICATE	MANATŪ HAUORA
The attachment consists of	
Date & Signature: 16 Port of Wellington Date 5 May 2016	
NZ MINISTRY OF HEALTH his certificate records the inspection and (1) exemption from control or (2) control measures applied.	
Name of ship or vessel MJ Brown Owl Flag Panama Registration / IMO no. 9455373	
At the time of inspection the holds were unladen/laden with 15600 tonnes of containerised car	go.
Name and organisation of inspecting officer Sally Giles Regional Public Health	

#### -1. Ship sanitation control exemption certificate

1. Ship sanitation cor	ntrol-exemption-certifica	ato-		2.	Ship sanitation control c	ertificate	
Areas (systems and services inspected)Evidence found (1)Sample results (2)Documents reviewed			Control measures applied	Re-inspection date	Comments regarding conditions found		
Galley	Yes-see endlowe report form	Temps O.K	roud Safety Plan		Ves - See endere report form (2-1-3	10 may 2016	Significant co durach MEStadon
Pantry	None	Temps O.K.	cleaning log		None		None
Stores	None	None.	ships stores Declaration		Nore	None	None
Hold(s) / cargo	None - inspected	None	None		None	Nore	None
Quarters	Nore	Nore	sanitary inspection log.		None	Nore	None
Crew	None	None	santlary inspection log		None	None	Nore
Officers	None	None	sanitary inspection log.		None	None	Nore
Passengers	NA	NIA	NIA		NIA	NIA	NIA.
Deck	None	None	Sanitary inspection log.		None	None	None
Potable water	Yes-see report	Nore	Microbiological results		Yes - see endence report Brm (9-19-2)	10 May 2016	Unsafe water sourced, Gastro outbread

Indicate when the areas listed are not applicable by marking N/A.

\_

in crew PTO to complete



Areas (systems and services inspected)	Evidence found (1)	Sample results (2)	Documents reviewed	Control measures applied	Re-inspection date	Comments regarding conditions found
Sewage	Nore	None	TSPP	Nore	Nore	Nore
Ballast tanks	Not inspected	Nare	Nore	Nore	Nare	Nore.
Solid and medical waste	Nore	Nore	Carbage management Aan.	None	Nore	Nore.
Standing water	Yes - see endence report form	Results pending.	Sanitory inspection log.	Yes-see (13.2.1) endence report form.	10 May 2016	lance find in standing verter in dec
Engine room	nore	Nore	None.	Nore	Nore	Nore
Medical facilities	Yes-see eridence report Bim.	Nore-	medicial log, medicines insentory	Yes-see endence report Brm( .)	10 May 2016.	crew returing to work before symptom free for a
Other areas specified – see attached	Wore	Nore	Nore	Nore	Nore	None

No evidence found. Ship/vessel is exempted from control me	aaouros.	Control measures indicated
Name and designation of issuing officer	MUNISTRY OF HEALTH	
Saily Giles Health Protection Officer		
0	Port of welligton.	
Signature and seal	Date 5 May 2016	Date (dd/mm/yyyy)
MA-	Signature A	05052016

ted were applied on the date below.

Evidence of infection or contamination, including vectors in all stages of growth; animal reservoirs for vectors; rodents or other species that could carry human (1) (a) disease, microbiological, chemical and other risks to human health; signs of insanitary measures.

Information concerning any human cases (to be included in the Maritime Declaration of Health). (b)

Results from samples taken on board. Analysis to be provided to the ship's master by the most expedient means and, if re-inspection is required, to the next appropriate (2)point of call coinciding with the re-inspection date specified in this certificate.

Sanitation Control Exemption Certificates and Sanitation Control Certificates are valid for a maximum of six months, but the validity period may be extended by one month if inspection cannot be carried out at the port and there is no evidence of infection or contamination.

Attachment rendered (tick applicable box) 1

Yes

No





This form supports the ship sanitation certificate (SSC) and provides a list of evidence found and control measures to be performed. When attached to the SSC, each page needs to be signed, stamped and dated by the competent authority. If this document is used as an attachment to a pre-existing SSC, this attachment must be noted on the SSC (eg. by using a stamp).

Name	of ship or IMO number or registration		Name and signature	of the respons	ible onboard ship	officer	
mv	Grown Owl.		Vladani	hurtos -	45		
Name	of issuing authority		Actual inspection dat	e (dd/mm/yyyy	)		
mon	stry of Health New Zealand.		05052	2016	,		
	sued at the port of		Date of referred SSC	(dd/mm/yyyy)			
Well	igton.		05052	016			
Indicat	e areas that have not been inspected:						
	Quarters Ga	lley, pantry, service area	Stores			Childcare facilitie	5
	Medical care facilities 📈 Sw	imming pools/spas	Solid and med	cal waste		Engine room	
E F	Potable water Se	wage	Ballast water		$\checkmark$	Cargo holds	
	Other (laundry, lifeboats, etc)						
Detec	ted health events on board Ve	S	No				
Area code	Evidence found (brief description according to WHO checklist)	Measure to b	e applied	Required	Recommended		essfully performed e of reinspecting authority)
	medical logs indicate crew	Food handlers or gally	w staff with ga	sho 🗹			
2.1.2	with diarinocal illness returned to not	Food handlers or gallers in gallers mus	that perform an	1			
	before being symptom free for a	food related work in	il sunstan free				
		Non round works on	al and	ŝ	- ALEMINIST	RY OF	
	maximm of 48hrs.	for a minimum of 4	sws.		CHEAL	TH	
				R	MANATON A		
Nama		Signature ,			e S May 20	016	Page of
Name (issuing in	spector) Sally Glas	(issuing inspector)		(issuing inspecto	or)	×	rage 1 or 2



Section 9 – Dorder Health

Area code	Evidence found (brief description according to WHO checklist)	Measure to be applied	Required	Recommended	Measure successfully performed (stamp and signature of reinspecting authority)
2-1-3-	Insailtay conduction of galley. Cochroach infestadion in galley.	Develop and implement policies for hygrine, cleaning and maintenance procedures.			
9-19-2	water has been burkered from unsafe sources.	Test for micro-organism contamination.			
13-2-1.	Endence of the vectors or their Larvae	Eliminate standing water and apply vector conduct measures	Í		
				<b>D</b> HE	ISTRY OF ALTER TELECORY
Name (issuing in		gnature suing inspector)	Stamo	Data 5 MAG	O



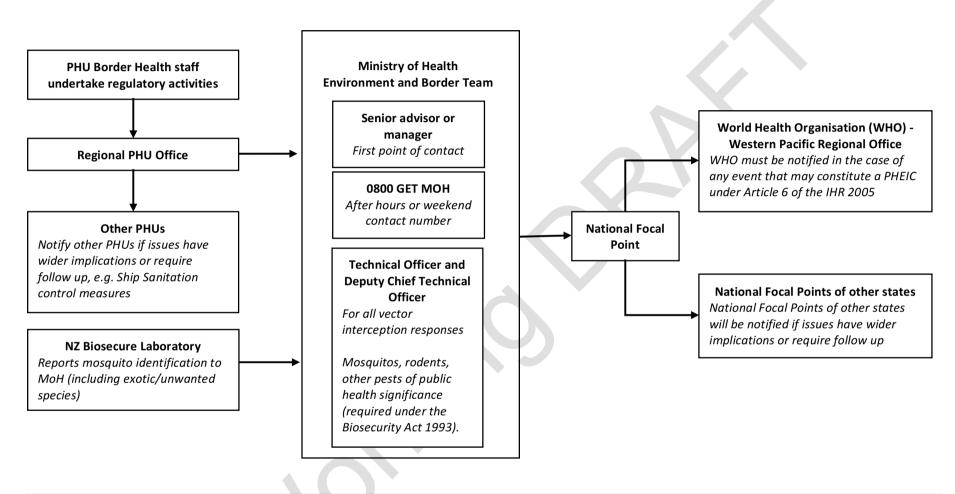
## **APPENDIX 7: CLEANSING ORDER TEMPLATE**

## ORDER TO CLEANSE, FUMIGATED, DISINFECT OR TREAT A SHIP

(Under Regulation 18 of the Health (Quarantine) Regulations 1983)

Medical	Officer	of	Health	/	Health	Protection	Officer





## APPENDIX 8: POINTS OF CONTACT AND REPORTING FOR BORDER HEALTH

#### When and what to report to Ministry of Health

Immediately – interception exotic mosquito, immediate threat to public health, intention to undertake enforcement action at border Within two hours of notification – vector interception responses (includes mosquitoes, rodents, others pests of public health significance) As required - when requested eg, Ministry of Health Border Annual Returns



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