



Natural Heritage Trust

Helping Communities Helping Australia

An Australian Government Initiative

Australian Emergency Marine Pest Plan (EMPPlan)



Control Centre Management Manual



AUSTRALIAN EMERGENCY MARINE PEST PLAN

EMPPlan

[Working Draft -- May 2005]

Control Centres Management Manual

The EMPPlan Control Centres Management Manual is an emergency response document that describes the intended generic response to a marine pest emergency event within Australia. The plan aims to provide guidance based on sound analysis, linking policy, strategies, implementation, coordination and emergency response management.

The EMPPlan Manual describes the chain of command in a marine pest emergency and the layout and organisation of the local, field and regional (State/Territory) control centres, including the organisation of an infested site operations team at an infested site.

The manual is structured so that personnel at all levels can quickly identify from the contents page what tasks they are expected to perform in preparation for and during a marine pest emergency.

This Management Manual forms part of:

EMPPlan Version 2.0

This document will be reviewed regularly. Suggestions and recommendations for amendments should be forwarded to the CCIMPE Secretariat (see Preface).

Record of amendments to this manual

[Insert record of amendments as necessary]

PREFACE

The Joint SCC/SCFA National Taskforce on Prevention and Management of Marine Pest Incursions (2000), recommended that a *National System for the Prevention and Management of Marine Pest Incursions* be implemented through the development and establishment of three key elements;

- Prevention;
- Emergency Management; and
- Ongoing Management and Control

To ensure national coordination of the emergency response arrangements to incursions by a variety of exotic pests and diseases, the Australian Government Department of Agriculture, Fisheries and Forestry (DAFF) maintains a series of emergency response documents. The Australian Emergency Marine Pest Plan (EMPPlan) is the emergency response document relevant to the emergency management of incursions by introduced marine pests.

EMPPlan complements the existing AUSVETPLAN and AQUAVETPLAN series of manuals that were designed to address incursions by emergency animal diseases in terrestrial and marine environments.

The EMPPlan Control Centres Management Manual outlines the phases of activation of an emergency response to incursion by an introduced marine pest of national significance and the associated response activities that should be undertaken by an affected jurisdiction.

In addition to EMPPlan, each State and the Northern Territory is to develop and maintain its own emergency response action plan that identifies key personnel to undertake specific roles and responsibilities at the State/Territory level. Guidelines for the development of State and Territory emergency response plans are provided in Appendix 1 Appendix 1 State/Territory Action Plans (attached).

This manual is to be reviewed regularly through experience gained with incursion management as well as feedback from exercises and workshops and amended versions will be provided to relevant agencies and personnel in all Australian jurisdictions. Recommendations for amendments should be forwarded to:

CCIMPE Secretariat
Product Integrity Animal and Plant Health
Agriculture, Fisheries and Forestry - Australia
Edmund Barton Building
GPO 858 ACT 2601

ph: (02)-6272-4266

fax: (02) 6272-3150

ACKNOWLEDGEMENTS

The original version of the national Emergency Marine Pest Plan was drafted by Dr Grant Rawlin (formerly of DAFF) and Peter Graham (formerly of Marine Group, Environment Australia) in 2000. This subsequent version has been drafted in response to input provided by various State and Territory government personnel with responsibilities for, and expertise in the day-to-day management of marine pest issues in their respective jurisdictions, as well as technical advice provided by personnel from CSIRO Marine Research.

As with the original version, this manual has been adapted to maintain a similar format and content to the equivalent manual in AUSVETPLAN and AQUAVETPLAN to enable emergency managers and other officers trained in AUSVETPLAN and AQUAVETPLAN procedures to work efficiently with this document in the event of a marine pest emergency.

CONTENTS

PREFACE	V
ACKNOWLEDGEMENTS	VI
1. INTRODUCTION	10
1.1 SCOPE.....	Error! Bookmark not defined.
1.2 Agreed principles.....	Error! Bookmark not defined.
1.2.1 Organisation	Error! Bookmark not defined.
1.2.2 Command and Control	Error! Bookmark not defined.
1.3	10
1.4 Objectives	10
1.5 EMMPlan Framework	Error! Bookmark not defined.
1.6 Emergency response framework	11
1.4.1 Marine pest emergency	11
1.4.2 Consultative Committee on Introduced Marine Pest Emergencies	12
1.4.3 National Management Group	13
1.4.4 A Government Industry and Community Partnership	Error! Bookmark not defined.
1.4.4 Scale of response	13
1.7 Overview of the protocol	16
1.5.1 Investigation Phase	16
1.5.2 Alert Phase	16
1.5.3 Operations Phase	16
1.5.4 Stand-down Phase	17
2. PHASES OF ACTIVATION	18
2.1 Investigation	20
2.1.1 Actions to be taken by the Field Officer	21
2.1.2 Actions to be taken by the Senior Manager	21
2.1.3 Actions to be taken by the State/Territory Director	22
2.2 Alert Phase	24
2.2.1 Actions to be taken by the Field Officer	25
2.2.2 Actions to be taken by the Senior Manager	25
2.2.3 Actions to be taken by the Director	26
2.2.4 Actions to be taken by the emergency investigation team	29
2.3 Operational Phase.....	32
2.3.1 Actions to be taken by the Field Officer	33
2.3.2 Actions to be taken by the Senior Manager	34
2.3.3 Actions to be taken by the Operational Pest Control Centre Controller	35
2.3.4 Actions to be taken by the Director	36
2.3.5 Actions to be taken in non-affected areas	37
2.3.6 Infested area operations field personnel	38
2.4 Stand-down Phase.....	38
2.4.1 When a marine pest emergency is not confirmed	38

3.	OPERATIONAL PEST CONTROL CENTRE (OPCC)	40
3.1	Functions of the OPCC	40
3.1.1	Objectives	40
3.1.2	Administrative functions	41
3.2	Establishment of an OPCC	43
3.2.1	OPCC site	43
3.2.2	Equipment	44
3.2.3	Recommended layout	45
3.3	Summary of functions of sections within the OPCC	47
3.3.1	Operations Section	47
3.3.2	Planning Section	49
3.3.3	Logistics Section	51
3.4	Infested sites operations teams (ISOT)	52
3.4.1	Infested sites operations teams (ISOT)	52
3.5	Forward command post	53
4.	STATE PEST CONTROL HEADQUARTERS (SPCHQ)	54
4.1	Functions of the SPCHQ	54
4.1.1	Administrative functions	54
4.2	Activation and establishment of the SPCHQ	55
4.2.1	Layout	55
4.2.2	Communications	55
4.2.3	Public access	56
4.3	Structure, management and staffing	56
4.4	Functions of SPCHQ sections	56
4.4.1	Planning Support Section	56
4.4.2	Operations Section	59
4.4.3	Logistics Section	60
5.	NATIONAL COORDINATION	61
5.1	Consultative Committee on Introduced Marine Pest Emergencies	61
5.1.1	Functions of CCIMPE during a marine pest emergency	61
5.1.2	Other CCIMPE activities	62
6.	INFORMATION SYSTEMS AND MANAGEMENT	63
6.1	Information management system	63
6.2	Administration Systems (OPCC)	63
6.3	Control centre information management	63
6.3.1	Modus operandi	64
7.	GLOSSARY	66

8. ABBREVIATIONS	69
Appendix 1 State/Territory Action Plans	70
Appendix 2 Outline of Roles	71
Appendix 3 Reporting forms	73
Appendix 4 Checklist for Director	84
Appendix 5 Sample draft agenda for first meeting of incident management team	86
Appendix 6 Guidelines for Preparing an Emergency Eradication Operational Response Plan	92
Appendix 7 Interim Trigger List of Introduced Marine Pests	94
Appendix 8 Eligible Costs under Commonwealth/States Interim Cost-sharing Agreement for Marine Pests???	98
Appendix 9 Pro forma agenda for the Consultative Committee on Introduced Marine Pest Emergencies	99

Figures

Figure 1. Schematic of the national emergency response framework for incursions by marine pests of national significance.	14
Figure 2. Intra-departmental and multi-departmental models of the State/Territory pest control headquarters (SPCHQ).....	15
Figure 3 The phases of activation of a marine pest emergency.....	18
Figure 4. Restricted Movement Area classifications that may be.....	19
Figure 5. Schematic relationship of linkages between a State/Territory Pest Control Headquarters (SPCHQ) and an Operational Pest Control Centre.	33
Figure 6 Model OPCC structure	43
Figure 7 Suggested layout of an OPCC	46
Figure 8 Proposed ISOT structure	53
Figure 9 Model SPCHQ structure.....	57

1. INTRODUCTION

1.1 SCOPE

An emergency response to a marine pest incursion can place significant demands on authorities at local, regional (State/Territory) and national levels. EMPPlan aims to outline the strategic and operational resources necessary to prepare for, and respond to, a marine pest emergency. Activities described in this manual as regional would generally occur at the State/Territory level and each State or Territory will need to develop its own specific operational plans and cross-reference them to EMPPlan as required.

1.2 ,Objectives

The **Control Centres Management Manual** provides a description of the procedures, management structures and roles to be implemented in the event of a suspected or actual marine pest emergency. It is a generic manual (ie not pest specific) intended for use:

- *in operations* either as the primary manual or as a detailed reference to back up State/Territory action plans;
- *in planning* as the basis for the development of more specialised procedures; and
- *in training* as a key reference.

This manual describes the roles of personnel in the initial stages of a response to a marine pest emergency, and then describes the development and management of pest control centres, and activities in or around infested areas and at local, regional (State/Territory) and national levels. All those involved in an emergency response should be familiar with this manual. Personnel involved should be appropriately experienced and consideration should be given to seconding trained emergency response personnel from elsewhere as required.

This manual is intended as a resource from which more specific **emergency eradication operational response** (see Appendix 6 Appendix 6 Guidelines for Preparing an Emergency Eradication Operational Response Plan) plans can be developed for management of specific pest incursions on a case-by-case basis. For example, the manual is a detailed guide to the types of personnel and resources that authorities would need to access in an emergency. However the actual lists of resources, stores and personnel contact details require frequent updating and belong in the appropriate State/Territory emergency marine pest action plans (see Appendix 1).

1.3 Agreed principles

- The EMPPlan Control Centre Management Manual is based on accepted emergency management principles (Australian Interagency Incident Management System, AIIMS) and must be linked to other emergency management arrangements to encourage an effective whole-of-government (as

well as community and industry sectors where relevant) response to, and recovery from, a marine pest emergency.

- EMPPlan provides the agreed national emergency response framework; jurisdictional plans should therefore reflect this approach.
- In Australia, each State and Territory administers its own emergency management legislation. The manual should therefore be adapted as appropriate to regional (State/Territory) legislative and administrative requirements of each jurisdiction responsible for the management of marine pest emergencies.
- Lead agencies must collaborate with the *Consultative Committee on Introduced Marine Pest Emergencies* (CCIMPE) in the development of an **emergency eradication operational response plan** and with the *National Management Group*, which is responsible for approving the activation of national cost-sharing arrangements, to assist an affected jurisdiction in efficient implementation of an emergency eradication operational response.
- State/Territory Pest Control Headquarters (SPCHQs) must be established with responsibility for strategic management of a marine pest incursion and for ensuring that community and/or industry involvement and communications are in place.
- Depending on the circumstances, an Operational Pest Control Centre (OPCC) with responsibility for the management of field operations in a defined area, may be established to enable an efficient and effective operational response to be conducted. While close communication between an SPCHQ and an OPCC is imperative for the effective conduct of any emergency response, it is important that strategic management (SPCHQ) and operational management (OPCC) roles be kept separate to optimise effective decision-making and implementation during an **emergency eradication operational response**.
- Where a National Coordination Centre is established to assist in the management of concurrent incursions in more than one jurisdiction, national coordination will be effected through consultation with CCIMPE representatives and relevant industry and community sector organisations as appropriate.
- Communication with all stakeholders, including industry and the community, must be a high priority.

1.4 Emergency response framework

1.4.1 Marine pest emergency

When an incursion by an introduced marine pest** is detected, the criteria outlined below can be used as a guide to determine whether a *marine pest emergency* is likely to exist. Incursion by an introduced marine pest that fulfils at least one (or more) of the following criteria is likely to represent a *marine pest emergency* :-

1. Demonstrable invasive history

2. Demonstrable impact in native or invaded ranges on:
 - Economy
 - Environment
 - Human Health
 - Amenity
3. Inferred as likely to have major impacts in Australia based on the available data and characteristics of Australian environments and marine communities
4. One or more relevant translocation vectors are operating

**** An introduced marine pest is one that is defined herein as being exotic to Australia or previously introduced but limited in distribution**

Where expert advice, formal assessments or decision support systems are available they could be used instead, noting that:

- marine pest population colonisation, recruitment and translocation is generally likely to be sufficiently slow to enable a reasonably detailed **emergency investigation** of an incursion situation to be undertaken without adversely affecting the potential for successful eradication; and
- precautionary measures for pest containment through the control of potential translocation vectors should, where feasible, be in place during an **emergency investigation**, to minimise the potential for pest translocation.

In the majority of incursions by an introduced marine pest of national concern, the lead response agency will be a State or Northern Territory government agency and the *Consultative Committee on Introduced Marine Pest Emergencies (CCIMPE)* will provide a national communication and advisory support role. The evaluation and, where appropriate, endorsement of an **emergency eradication operational response (EEOR)** plan provided by an affected jurisdiction, is a key activity of CCIMPE that must precede the approval of an EEOR plan and activation of national cost-sharing arrangements by the National Management Group.

Adequate support with personnel, equipment and other resources is likely to require coordination at both local and regional (State/Territory) levels. At the State/Territory level, the generic line of communication will normally involve a *Field Officer* reporting to a *Senior Manager* who will in turn report to the relevant State/Territory *Director* to provide an initial assessment of an incursion situation at an affected site(s). EMPPlan is written to reflect this basic operational relationship. More detailed roles, with specific functions may need to be designated during an emergency event depending on the scale of the emergency and are outlined in Appendix 2.

1.4.2 Consultative Committee on Introduced Marine Pest Emergencies

The Consultative Committee on Introduced Marine Pest Emergencies (CCIMPE) provides national coordination for management of marine pest emergencies. CCIMPE comprises

senior representatives from each Australian jurisdiction with coastal borders (*NB*: the Government of the Australian Capital Territory is not represented). CCIMPE is the national body responsible for determining whether or not an incursion by an introduced marine pest represents a marine pest emergency (in a national context) and whether or not an **emergency eradication operational response** plan prepared by an affected jurisdiction is likely to be effective in achieving eradication.

Each of the government departments/agencies outlined below provide representation on CCIMPE:

CSIRO Marine Research

Department of Primary Industries NSW

Department of Fisheries WA

Department of Sustainability and Environment VIC

Fisheries Group, Department of Business, Industry and Resource Development NT

Department of Primary Industries, Water and Environment TAS

Australian Government Department of Environment and Heritage

Environment Protection Agency QLD

Australian Government Department of Agriculture, Fisheries and Forestry (DAFF – representation includes provision of a Chairperson and Secretariat)

Primary Industries and Resources SA

1.4.3 National Management Group

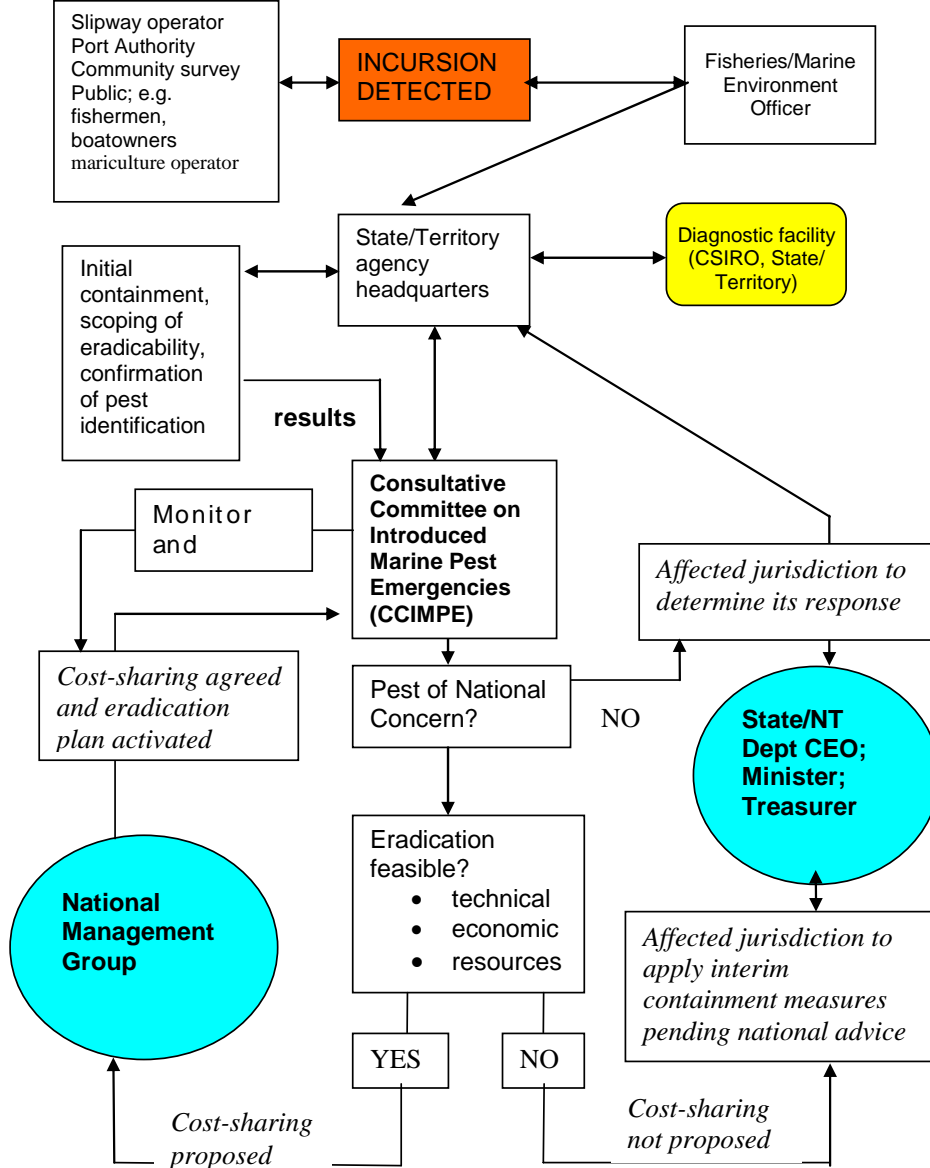
The National Management Group (NMG) comprises representatives from the relevant government agency of each State and the Northern Territory, with delegation for executive decision-making. Once an **emergency eradication operational response** plan prepared by an affected jurisdiction has been endorsed by CCIMPE, NMG's role is to consider the proposed costings of an EEOR plan and where agreed, to approve activation of national cost-sharing arrangements to assist an affected jurisdiction to efficiently implement an **emergency eradication operational response**. The role of the NMG is to be provided by the Natural Resource Management Standing Committee.

1.4.4 Scale of response

The scale and potential impacts of a marine pest emergency will determine whether a *multi-departmental* response is needed involving, for instance, environment, fisheries, agriculture, police and health departments (Federal and State), or it may need an *intra-departmental* response involving only the State/Territory environment or fisheries department (see Figure 2).

In the multi-departmental model the *directors* of those departments involved will be part of the State/Territory pest control headquarters (SPCHQ) with the *director* of the lead response agency or a ministerially appointed emergency manager being responsible for coordination of an emergency response within an affected jurisdiction.

In the *intra-departmental* model, the emergency manager would generally be the *director* of the lead response agency in an affected jurisdiction. Whichever model is used, regular communication should be provided to the Secretariat of CCIMPE to ensure that all



jurisdictions are kept aware of significant developments in responding to a marine pest emergency.

Figure 1. Schematic of the national emergency response framework for incursions by marine pests of national significance.

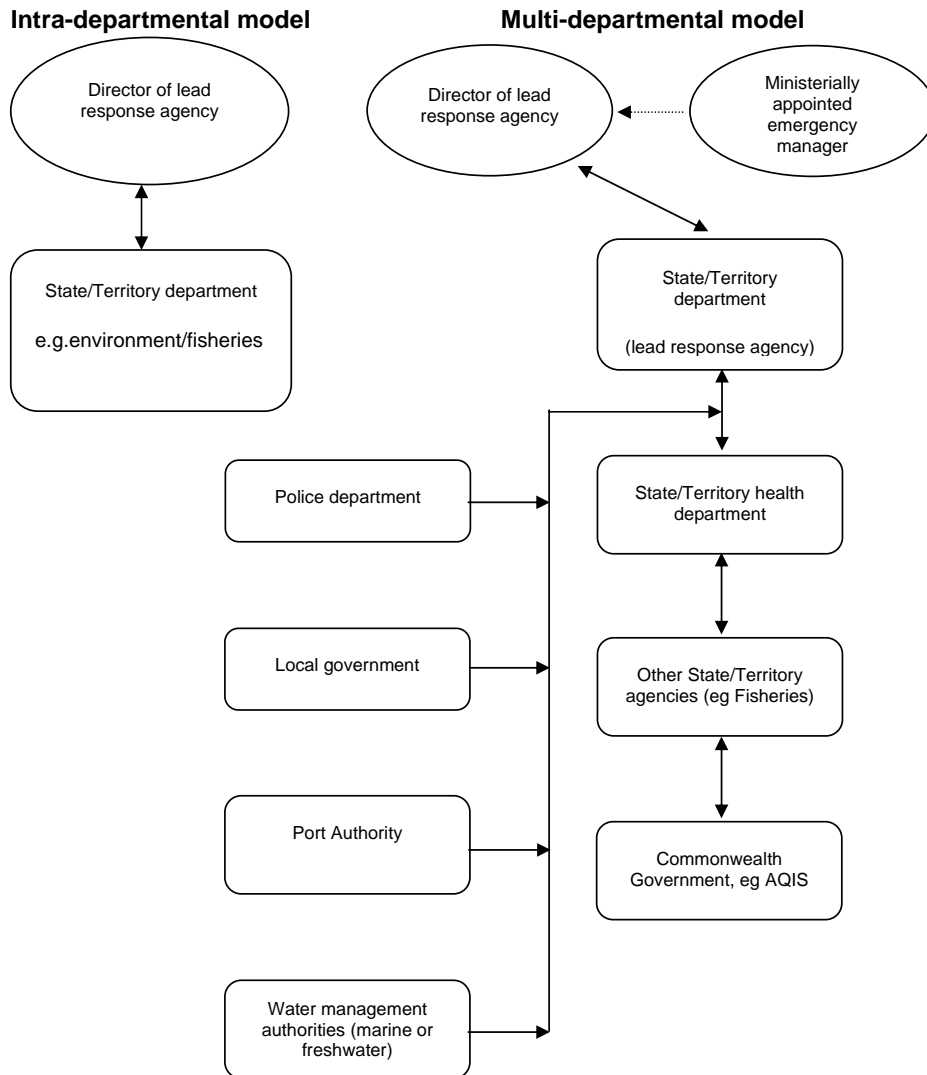


Figure 2. Multi-departmental and intra-departmental models of the State/Territory pest control headquarters (SPCHQ)

1.5 Overview of the protocol

1.5.1 Investigation Phase

- The initial report of a suspected marine pest emergency may come from a variety of sources including port surveys, slipway operators, fishermen, members of the public and routine field officer surveillance/activities. Relevant information and/or specimens will be collected from the suspect site(s) for evaluation and follow-up action by personnel within the lead response agency of an affected jurisdiction. Notification of a suspected marine pest emergency will be provided to the *director* of the lead response agency who is to determine whether to proceed to the *Alert Phase*.

see section 2.2 for further detail.

1.5.2 Alert Phase

- An **emergency investigation** team is appointed and despatched to the infested site(s), including where possible, scientists/field officers with relevant diagnostic expertise.
- The affected jurisdiction analyses the findings of the investigation team and communicates relevant information to CCIMPE for its consideration on the appropriate course of action.

see section 2.3 for further detail.

1.5.3 Operations Phase

- An *operational pest control centre (OPCC)* is established to directly manage an **emergency eradication operational response** within the affected region. Management of the OPCC is to liaise with the regional police disaster coordinator who will take the necessary actions to call on other support services as required under the State/Territory emergency plan.
- At the State/Territory level, management of an emergency eradication operational response will be coordinated via a State/Territory Pest Control Headquarters (SPCHQ). The management of the SPCHQ will liaise with the coordinator of State emergency services and other supporting agencies as necessary.
- The coordinator of State emergency services will provide a liaison officer at the SPCHQ and coordinate input from all State/Territory emergency services and supporting agencies from the State emergency operations centre.
- At the national level, the affected jurisdiction is to liaise with CCIMPE, which acts in a support role for an affected jurisdiction and also coordinates response actions across unaffected jurisdictions.

see section 2.4 for further detail.

1.5.4 Stand-down Phase

- Relevant managers will notify all relevant personnel and stakeholders of the stand-down as appropriate. Managers will need to ensure resources match but do not exceed actual operational requirements.

see section 2.5 for further detail.

2. PHASES OF ACTIVATION

There are four phases of activation in the management of a marine pest emergency of national significance (refer Fig. 3). Progression from one stage to the next depends upon the nature of the emergency and how much information is available.

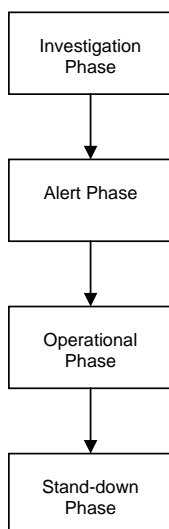


Figure 3 The phases of activation of a marine pest emergency

During a marine pest emergency, areas may be categorised as ‘infested’, ‘restricted’, ‘control’, ‘suspect’ or ‘dangerous contact’ as defined below:

Infested Area (IA) – may be all or part of a waterway in which a marine pest emergency is known or deemed to exist (eg pending confirmation of pest identification)

Dangerous Contact Area (DCA) – area in close proximity to an Infested Area in which pest has not been detected but due to potential for infestation will be subject to movement restrictions as for IA

Suspect Area (SA) – area that is relatively close to an IA that will be subject to movement restrictions as for IA pending further investigation

Restricted Area (RA) – declared/gazetted area around an infested area that is subject to intensive surveillance with movement controls on potential vectors

Control Area (CA) – a declared/gazetted area that surrounds a Restricted Area in which defined conditions apply to the entry or exit of potential vectors / specified risk items.

Similar terminology can be applied to discrete sites/premises within a designated area to facilitate risk assessment and the estimation and prioritisation of resource requirements (eg

a vessel within a *Dangerous Contact Area* would be classified as a dangerous contact vessel; a vessels within an *Infested Area* would be classified as an infested vessel).

The emergency classification areas defined above are depicted schematically in Figure 4.

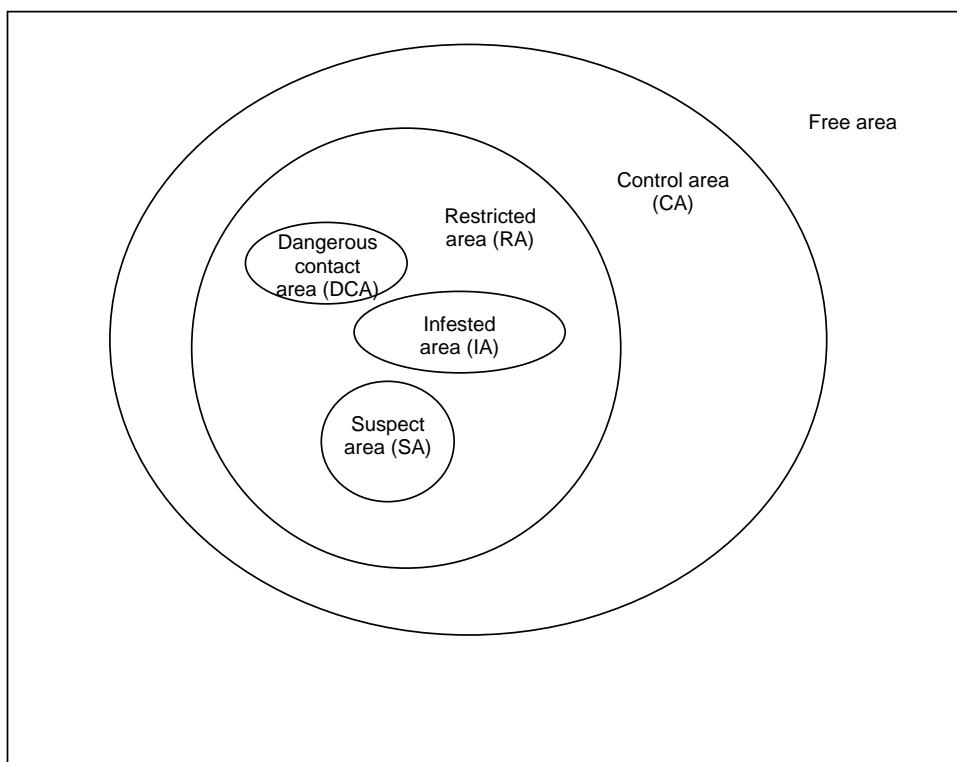


Figure 4. Restricted Movement Area classifications that may be designated during a marine pest emergency

Where expert advice, formal assessments or decision support systems are available they could be used instead, noting that:

- the dissemination rate of most marine pests is generally sufficiently slow to enable a detailed **emergency investigation** of an incursion to be undertaken without adversely affecting the likelihood of eradicability; and
- where feasible, precautionary measures should be adopted to restrict the movement of potential translocation vectors while an **emergency investigation** is being carried out.

2.1 Investigation

The *Investigation Phase* exists when a reported detection of a marine pest is being investigated by relevant authorities.

Investigation Phase	Key points
	<ul style="list-style-type: none">◆ Once an investigation begins, all personnel commence using a log-book to document details of phone calls, messages and contacts.◆ An EMPPlan Initial Reporting Form (see Appendix 3) is completed to document details of each reported detection.◆ Departmental personnel are to notify the State/Territory <i>director</i> of the lead response agency if an investigation indicates that a marine pest emergency is likely◆ Based on the findings of the investigation, the State/Territory <i>director</i> determines whether to proceed to the <i>Alert Phase</i> of EMPPlan.

The initial notification of a suspected detection of a marine pest is likely to be received by a *field officer* and may come from a variety of sources including:

- other departmental officers
- participants in State/Territory awareness and monitoring programs
- slipway operators
- mariculture operators
- fishermen
- divers
- port authorities
- community groups
- general public
- other sources (*eg* processing plant, fish markets)

The *field officer* is to collect as much information as possible to enable the relevant *senior manager* to assess whether there are grounds to suspect a marine pest emergency. The *senior manager* will notify the State/Territory *director* (or alternatively, depending on the circumstances, the *field officer* may directly notify the relevant *director*) when the findings of an initial **investigation** indicate that a marine pest emergency is likely. Once an **investigation** commences, officers should note details of all phone calls, messages and contacts in a 'log-book' to maintain a complete record of correspondence during an **investigation**.

2.1.1 Actions to be taken by the Field Officer

For each notification reported, the *field officer* is to collect and communicate all relevant information to the *senior manager*; in the majority of cases it is to be expected that a marine pest emergency will not be confirmed. However, false alarms must not be discouraged as they provide valuable information and demonstrate that the required detection and communication systems are operating.

Where there are grounds for suspecting a marine pest emergency, the *field officer* should:

- Collect details of sites, the type and preliminary assessment of distribution of the suspected marine pest as well as relevant on-site contact details as set out on the EMPPlan Initial Reporting Form (see Appendix 3);
- Take steps to limit the spread of the suspect pest from a suspect site or area by initiating voluntary restrictions on the movement of potential vectors;
- If possible, arrange for collection and preservation of specimens for subsequent identification
- Promptly notify the *senior manager* of the outcome of the initial **investigation** and provide details of:
 - the location of the infested site or area
 - the nature of the suspected pest emergency
 - the number of at-risk premises and/or sites
 - any urgent tracings that need to be undertaken
- Commence use of a log-book to maintain a record of phone calls, messages and contacts relevant to an **investigation**.
- Await further instruction from the *Senior Manager*.

see section 2.2.1 for further details.

If the *Senior Manager* is unavailable, the *Field Officer* should notify the State/Territory *Director* and relay all relevant investigation details. Notification should be verbal in the first instance and confirmed in writing (*eg* by e-mail/fax – see Appendix 3 for a sample report form).

2.1.2 Actions to be taken by the Senior Manager

The *senior manager* should:

- Commence use of a log-book to maintain a record of phone calls, messages and contacts relevant to the **investigation**;
- evaluate information provided by the *field officer*;

- identify relevant taxonomic facility and arrange for submission of specimens; and
- notify the *director* of the suspicious incident.

2.1.3 Actions to be taken by the State/Territory Director

State/Territory *director* should, in consultation with the *senior manager*, use his/her judgement to determine the appropriate response to investigation findings and to ensure that all necessary actions can subsequently be taken if a marine pest emergency is confirmed.

The *director's* initial response should include:

- recognition of a potential marine pest emergency and any actions necessary to expedite the processes necessary to confirm pest identification
- appointment of a suitably qualified *senior manager* as **incident management coordinator**
- calling an initial meeting to establish an **incident management team** to:
 - define the incident and confirm the need for the relevant lead agency (of the affected jurisdiction) to respond;
 - assess the incident to determine appropriate resource allocation;
 - define and determine the lead agency's response, including assessment of legislative options such as quarantine notices;
 - if necessary, appoint taskforce personnel, allocate initial resources and determine funding sources;
 - prepare initial and ongoing situation reports;
 - maintain a suitable response until the conclusion of the incident.
- provision of advice to the lead agency's Executive Director and Minister as necessary;
- provision of advice to CCIMPE forum; and
- consider a confidential briefing of relevant stakeholders (this may need to be done before the release of information to the public).

Appendix 4 provides a sample checklist for the *director* of items to be covered. Appendix 5 provides a sample draft agenda for the first meeting of the incident management team.

2.1.3.1 Following a notification

As the majority of notifications of suspected marine pest emergencies are unlikely to be confirmed (as a marine pest emergency), the *senior manager* and *director* must exercise judgment on a 'case-by-case' basis to determine the appropriate response during an

investigation. Guidelines for deciding whether a notification is likely to represent a marine pest emergency are presented below. The initial response must ensure that it is possible to take all necessary actions in a timely manner if **investigation** findings indicate that a marine pest emergency is likely.

To facilitate evaluation and accountability during an **investigation**, once a notification is received, all personnel involved must:

- Commence use of a log-book to record phone calls, messages and other contacts; and
- Communicate advice to relevant officers and stakeholders.

Grounds for suspecting a marine pest emergency

The following statements are intended as a guide to on-the-spot decision making and are not definitive. They are presented as an alternative to formal ecological risk assessment and formal decision support systems.

What triggers a marine pest alert?

When making a preliminary assessment, the *senior manager* may decide a notification is likely to trigger a marine pest emergency alert when:

- ◆ The description matches a species represented on the CCIMPE target species list (see Appendix 3) that is either not present in Australia, or, if present, the detection represents a new outbreak well beyond the known range of established populations of the species in Australia.
- ◆ Species detected is not on target list but meets one or more of the following criteria:
 1. Demonstrable invasive history;
 2. Demonstrable impact in native or invaded ranges on:
 - Economy;
 - Environment;
 - Human health; or
 - Amenity.
 3. Inferred as likely to have major impacts in Australia based on the available data and characteristics of Australian environments and marine communities.
 4. One or more relevant translocation vectors are still operating;

Where expert advice, formal assessments or decision support systems are available they could be used instead, noting that:

- The dissemination rate of most marine pests is generally likely to be sufficiently slow to allow a reasonably detailed investigation to be undertaken without adversely affecting the likelihood of eradication; and
- Where feasible, precautionary measures should be adopted to control the movement of potential vectors during an emergency investigation.

2.1.3.2 If the investigation findings indicate there is no marine pest emergency

The *director* will:

- Confirm this advice with the *senior manager*.
- Ensure that all information relevant to that decision is adequately documented and filed as a '*negative marine pest emergency report*'.

2.1.3.3 If the investigation findings indicate that a marine pest emergency is highly likely

The *director* will:

- Direct that the Alert Phase of EMPPlan be implemented.

see section 2.2 for further details.

2.2 Alert Phase

The *Alert Phase* exists pending confirmation of the identification of a suspected marine pest and while an **emergency investigation team** assesses the nature and extent of a marine pest incursion. The *Alert Phase* may also be referred to as an **emergency alert**.

<i>Alert phase</i>	<i>Key points</i>
	<ul style="list-style-type: none"> ◆ Notification of all relevant personnel that an emergency alert exists in the affected jurisdiction; and ◆ An emergency investigation team is appointed to confirm the identification of the suspected pest and to determine the likely extent of an incursion; and ◆ Control measures are initiated to manage the risk of pest spread from affected sites (<i>eg.</i> operational boundaries of restricted movement areas are established for potential vectors); and ◆ Findings of an emergency investigation are communicated to the CCIMPE forum to enable a decision to be made on whether to proceed to the Operational Phase of EMPPlan

2.2.1 Actions to be taken by the Field Officer

When an **emergency alert** exists the *field officer* is to:

- Ensure that all *field officers* in the region are notified (and placed on standby);
- Ensure that adequate supplies/equipment are available to conduct a site inspection/investigation; and
- Conduct or assist with site inspection/investigation as directed by the *senior manager*
- Document and communicate site inspection/investigation findings to the *senior manager* (refer attached sample reporting form -- Appendix 3)
- Identify likely vectors in the area such as marine organisms (fauna and flora), produce, immersible gear and vessels.
- At the direction of the *senior manager*, provide relevant advice on the nature of the emergency and details of any associated movement restrictions to key industry contacts and/or local stakeholders
- At the direction of the *senior manager*, enforce implementation of any movement restrictions required to reduce the risk of pest establishment and/or spread
- Provide relevant departmental contact information to assist enquiries from other government agencies, the public and/or the media as required

2.2.2 Actions to be taken by the Senior Manager

All key personnel who might be involved in operations must be advised by the *senior manager* (designated as the **incident management coordinator** in the *Investigation Phase* – refer 2.1.3) that an **emergency alert** exists to ensure that they can be contacted at all times and that necessary plans, procedures and resources are available if required. These key personnel should include:

- the senior personnel who will direct the *Alert Phase emergency investigation* and who are to keep the *senior manager* fully informed;
- the departmental executive management and the relevant Minister's office;
- senior field staff relevant to the State/Territory emergency management structure;
- an **emergency investigation** team (to include members with relevant technical expertise);
- the senior departmental legal officer and senior finance manager;
- senior administrative staff responsible for setting up systems and communications;
- emergency management authorities at the State level, in accordance with State/Territory emergency management plans;
- the chairperson of CCIMPE; and

- where necessary, key industry contacts (usually confidentially and at a State level).

The *senior manager* (designated as **incident management coordinator**), acting under the *director's* authority, is to:

- ensure that all necessary **emergency investigation** procedures (including taxonomic) are conducted efficiently and that the *director* is immediately notified of findings both verbally and in writing (*eg* by telephone and confirmed by e-mail/fax);
- appoint an **emergency investigation** team and dispatch it to the Suspect Area (SA) or Suspect Premises (SP);
- contact the appropriate Australian diagnostic reference facility (and relevant State/Territory *director* if the diagnostic facility is in another jurisdiction) to confirm arrangements for the dispatch of specimens for examination; and
- determine, following consultation with relevant personnel (*eg emergency investigation team leader, field officers, port authority officers*), any movement restrictions and boundaries of any restricted areas (RAs) or control areas (CAs) that may need to be proclaimed and prepare a pro-forma proclamation in conjunction with the relevant department's senior legal officer;
- evaluate and communicate the findings of the emergency investigation team to the *director*
- ensure action is taken to follow up any urgent tracings identified by the investigation team
- prepare a situation report for the *director*
- in consultation with the *director*, determine whether an OPCC should be established and if so, identify a suitable location (normally through consultation with the State Emergency Service)
- if appropriate, prepare an **emergency eradication operational response (EEOR) plan** (that includes estimates of personnel and other resource requirements) for the *director's* consideration

2.2.3 Actions to be taken by the Director

During an **emergency alert**, the *director* is responsible for determining which of the following actions are necessary and ensuring that they are carried out. This will usually entail the distribution of job cards or standard operating procedures appropriate to the relevant stakeholders and the attributes of the marine pest of concern.

The *director* is to ensure that:

- Appropriate measures are implemented to limit the risk of pest spread by doing some or all of the following (as required):

- Impose restrictions on the movement of potential vectors such as marine organisms (fauna and flora), produce, immersible gear, vessels, water or other vector movements into and out of suspect site(s)
 - Control the movement of people (such as property owners, scientists, tourists) into or out of the suspect site(s) - this may involve input from the police
 - If appropriate, that vectors such as vessels that have already left the site(s) are re-directed to appropriate sites for decontamination.
- Urgent tracings are identified and actioned.
 - Relevant industry personnel are notified and where appropriate, consulted.
 - A suitably located **operational pest control centre** (OPCC) is established. For potential requirements of this location refer to Section 3.2.1.
 - All relevant agencies/personnel likely to be involved in an operational role, have been notified that an **emergency alert** exists and the nature of the alert. Such personnel would include:
 - all field officers, regional (and unit) managers within the department (including those in unaffected districts of the affected jurisdiction)
 - local government (Shire Secretary)
 - police (emergency-management) coordinator
 - regional State emergency service officer
 - regional Telstra emergency-management contact officer
 - port authority officers
 - industry liaison officers
 - the Director of the national centre with expertise in introduced marine pests (currently CSIRO Marine Research)

2.2.3.1 If an emergency investigation shows either that there is no incursion by a pest of concern or that there is an incursion but it is unlikely to be eradicable

The *director* will:

- Ensure that interim containment¹ measures are implemented to minimise the risk of pest translocation from any infested waterway(s)
- Provide a **situation report** to the CCIMPE Secretariat for the information of CCIMPE representatives and request a CCIMPE teleconference to enable consultation with all jurisdictions.
- Following agreement via consultation with CCIMPE representatives, instruct that the *Stand-down Phase* (of EMPPlan) be implemented
(see section 2.4 for further details).
- Ensure that documentation relevant to the decision-making process is maintained and filed as a '*negative marine pest emergency alert*'.

2.2.3.2 If the emergency investigation shows that there is an incursion by a marine pest of concern and that it is potentially eradicable

The *director* will:

- Ensure that appropriate emergency containment² measures are continued to minimise the potential for pest translocation both from and within any infested waterway(s)
- Provide a **situation report** and forward an **emergency eradication operational response plan** to the CCIMPE Secretariat for urgent consideration by CCIMPE representatives and request a CCIMPE teleconference to enable consultation with all jurisdictions.
- Following endorsement by CCIMPE of an EEOR plan, seek approval via the National Management Group for activation of national cost-sharing arrangements to assist resourcing of an **emergency eradication operational response**.

See Section 2.3.4 for further details.

¹ Interim containment refers to measures implemented to prevent the translocation of a pest of concern from any infested waterway(s)

² Emergency containment refers to measures implemented to prevent the translocation of a pest of concern both from and within any infested waterway(s)

Appointment and composition of the emergency investigation team

The *director* will, in consultation with the *senior manager*, appoint suitably skilled personnel to an **emergency investigation team**.

As a minimum, the team is to include:

- an experienced marine biologist/scientist
- an epidemiologist/invasion biologist, preferably with experience/knowledge of the particular pest concerned.

It is also desirable that the team includes:

- a technically trained person with experience in the collection, storage, packaging and transport of samples for examination (as required under International Air Transport Association rules)
- suitably qualified divers
- additional support staff (e.g. *field officers*) to assist with disinfection/treatment procedures and the dispatch of samples collected.

Formation and briefing of the emergency investigation team

Generally the *senior manager* is to oversee the formation of the **emergency investigation team** and is to ensure that team members are briefed about:

- support personnel contacts at an infested area (e.g. *field officer*)
- the location(s) of the suspect site(s) (and how to get there)
- the details of the initial site report(s) -- (if available), including the type of pest suspected
- any specific actions required of them
- quarantine and disinfection /treatment requirements for entry to and departure from the suspect site(s)
- arrangements for the dispatch of specimens for laboratory examination.

2.2.4 Actions to be taken by the emergency investigation team

Objectives

Principal objectives of an emergency investigation team are to:

- Collect appropriate specimens to ensure that pest identification can be confirmed as quickly as possible
- Assist with evaluating the nature and extent of the infestation and the potential for spread/translocation
- Assist with ongoing epidemiological investigations including identification of the likely source of the outbreak, determination of likely sites for pest establishment, analysis of likely vectors and the likelihood of pest spread and/or translocation.

Preparation

*Prior to departing for a suspect site, the **emergency investigation team** is to ensure they have available an appropriate vehicle/vessel and necessary/relevant equipment:*

- adequate protective clothing and safety equipment , eg life jackets, overalls, rubber boots, gloves and hats or diving equipment if applicable
- an appropriate diagnostic kit including preservatives, secure containers, labelling pens, photographic equipment
- mobile telephone, global positioning equipment, if appropriate
- other equipment as requested by the field officer and/or specified by the senior manager
- the relevant sections of EMPPlan, the State/Territory Action Plan if available; and paperwork for International Air Transport Association (IATA) packaging of biological specimens and appropriate maps

Emergency investigation team site visit

Upon arrival at the suspect site(s) the team is to:

- Leave the vehicle/vessel outside the site(s) (if feasible).
- Store street clothes in the vehicle/vessel (if appropriate) or other suitable storage facility and change into appropriate protective clothing and/or wetsuit.
- In conjunction with the attendant *field officer*, conduct examinations as required, collect samples and relevant additional information. Where possible, ensure that representative specimens of various sizes of the pest of concern are collected.
- Collect detailed epidemiological information and provide a tentative assessment of the source of the infestation and the likely means of spread within the local habitat and translocation to other sites.
- Complete the EMPPlan Site Investigation Form (refer Appendix 3).
- Provide the *field officer* with an assessment of appropriate disinfection/treatment techniques.
- Conduct comprehensive collection of samples/specimens
- Pack samples into secure containers for transfer to diagnostic facility.

*Immediately on leaving the suspect site(s) the **emergency investigation team** must:*

- Thoroughly disinfest/treat exposed equipment off-site(s), ensuring that potentially contaminated waste-water does not disperse into the marine environment.
- Place protective clothing and/or immersible gear in secure containers for further disinfection (if appropriate).
- Report investigative findings to the *senior manager* and *director*, including an assessment of the likelihood of a marine pest emergency .

Within 24 hours of leaving the suspect site(s) the emergency investigation team is to ensure:

- Specimens are dispatched to the appropriate diagnostic laboratory as confirmed by the *senior manager*, with a completed specimen advice form.
- Fax, e-mail or otherwise transmit the EMPPlan Site Investigation Report (see Appendix 3) to the *senior manager* and *director*.

2.3 Operational Phase

The *Operational Phase* of EMPPlan exists when the marine pest emergency is confirmed by agreement through the CCIMPE forum. The *Operational Phase* of EMPPlan may also be referred to as an **emergency eradication operational response** (EEOR).

<i>Operational Phase</i>	<i>Key points</i>
	<ul style="list-style-type: none">◆ Notification of all relevant personnel/agencies that an emergency eradication operational response is being undertaken in the affected jurisdiction;◆ Establishment of a separate State/Territory pest control headquarters and operational pest control centre, if necessary;◆ Ongoing implementation of control measures initiated in the <i>Alert Phase</i> to manage the risk of pest spread from affected sites;◆ Implementation of measures to achieve eradication at infested sites;◆ Collection, documentation and analysis of information from infested sites to enable progress of an EEOR to be monitored;◆ Documentation of expenditure associated with eligible costs under cost-sharing arrangements◆ Communication of regular situation reports to the CCIMPE forum◆ Decision made on when to proceed to <i>Stand-down Phase</i>

A State Pest Control Headquarters (SPCHQ) evolves from the **incident management team** established in the *Investigation Phase* and is responsible for development and management of the **emergency eradication operational response** strategy. The SPCHQ Director is responsible for determining whether an Operational Pest Control Centre (OPCC) should be established close to an affected site to ensure that operational requirements are delivered in an effective and efficient manner. An OPCC might consist of only a controller and a field operator (but will usually involve more personnel) and is the control centre responsible for delivery of 'hands-on' operational activities at an infested site(s).

The relationship between the SPCHQ and an OPCC is outlined schematically in Figure 5.

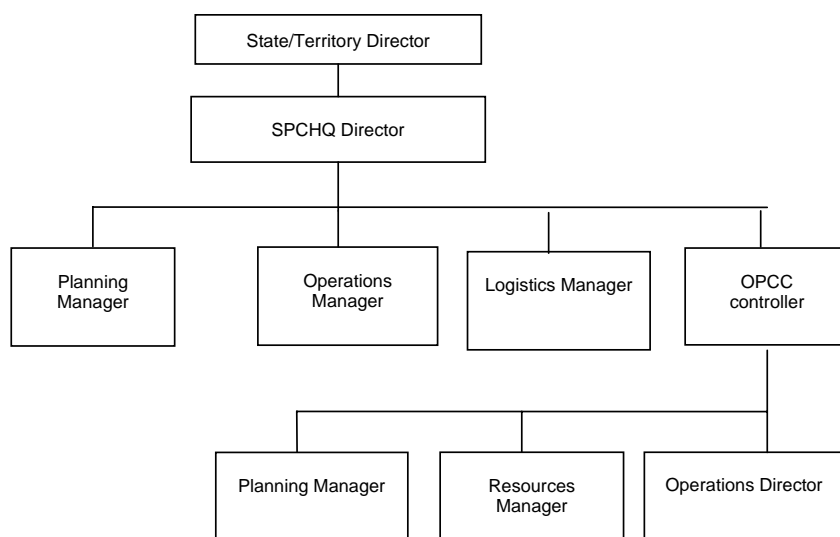


Figure 5. Schematic relationship of linkages between a State/Territory Pest Control Headquarters (SPCHQ) and an Operational Pest Control Centre.

2.3.1 Actions to be taken by the Field Officer

In an **emergency eradication operational response**, the *field officer* is to:

- confirm with the *senior manager* the declaration and specifications of any RA(s) and CA(s), and the location of an OPCC if established;
- ensure that all other field personnel, port authority staff and key industry contacts for the affected area are advised:
 - that a marine pest **emergency eradication operational response** is being undertaken;
 - of the nature of the marine pest emergency;
 - of the location of the IA(s);
 - of the boundaries of any RA(s) and CA(s) declared;
 - of the location and telephone and fax numbers of the OPCC;
 - that no movement of vessels or other designated risk vectors is to be made within any declared RA(s) without permission of the *senior manager* (or a nominated delegate) ;

- of the nature of movement restrictions in place in any declared RA(s) and CA(s) and of any associated disinfestation procedures that must be performed on entry and/or exit from a restricted movement area;
- that any detections of a suspected pest of concern be reported immediately to relevant personnel within an OPCC and that the person reporting must remain on the premises until permission to leave is given by the *Senior Manager* (or a nominated delegate).

When the above tasks are completed, the *field officer* is to report to the *senior manager*.

At the IA(s) the *field officer* or a delegate has a responsibility to:

- reinforce the provisions of quarantine and ensure adequate security of the IA(s);
- implement appropriate disinfestation procedures;
- act as site supervisor for infested area operations until relieved of that duty;
- advise the *senior manager* of the resources needed for preliminary or urgent activities, such as the collection and disposal of pests from infested sites and surveillance/inspection of at-risk vessels and other materials;
- where appropriate, erect barriers to confine the movement of free-ranging pests;
- make a preliminary assessment of suitable pest destruction procedures;
- identify suitable sites for disposal of pests and infested materials;
- make a preliminary assessment of personnel and other resources required for the operation;
- consider occupational health and safety issues (OH&S) that might arise from surveillance, disinfestations and disposal activities;
- ensure that he/she is contactable by phone and that communications with relevant personnel at the OPCC are facilitated;
- advise the *senior manager* of further urgent tracings that need to be investigated; and
- provide for the welfare of any personnel present at the IA(s) by ensuring that their short-term needs for food and other provisions are met.

2.3.2 Actions to be taken by the Senior Manager

In an **emergency eradication operational response** the *senior manager* is to confirm with the SPCHQ Director:

- the declaration of any RA(s) and/ CA(s);
- the location and telephone and fax numbers of the OPCC;
- resource requirements (personnel and equipment) and their supply;
- any urgent tracings into or out of the IA(s) (e.g. of ‘at-risk’ vessels, including those outside the RA(s) that need to be referred to another Senior Manager or interstate); and
- the control measures that will apply within any RA(s) and CA(s);

- establish an OPCC (see Section 3.2) if required, and ensure adequate resources are available to manage restricted area movement requirements;
- advise the following key contacts
 - field officers and relevant Port Authority staff in the region;
 - the Director of the State/Territory diagnostic facility
 - departmental regional and unit managers;
 - the Shire Secretary or other head of local government;
 - owners/managers of slipway operations;
 - the regional police emergency management coordinator;
 - the State Emergency Service officer;
 - the regional Telstra emergency management contact officer; and
 - key industry contacts (e.g. fishing industry associations)
- that EMPPlan is in the *Operational Phase* ;
- the nature of the marine pest emergency that has been declared;
- the location of any IA(s);
- the location and telephone and fax numbers of the OPCC and/or SPCHQ;
- the boundaries of the RA(s) and CA(s) and conditions that apply therein;
- that personnel within their organisations need to be aware of movement restrictions that are being enforced in regard to the movement of vessels and other potential vectors in RA(s) and CA(s);
- the need to report suspect pest detections as required;
- any actions required of them; and
- the need to be prepared to relocate to the OPCC if required;
- ensure that personnel involved in the emergency eradication operational response are aware of their duties and powers; and
- inform personnel of any additional resources that may be required (e.g. extra clothing, money, protective gear, reporting stationery)

2.3.3 Actions to be taken by the Operational Pest Control Centre Controller

The operational pest control centre (OPCC) controller has the following key functions:

- oversee the establishment of the OPCC if it was not set up in the *Alert Phase*;
- fully activate the field operational response; and
- establish effective communications with all key stakeholders in the Restricted Area

2.3.4 Actions to be taken by the Director

- The State/Territory *director* is responsible for declaring, in the format required by State/Territory legislation, that a marine pest emergency exists, and for ensuring that an **emergency eradication operational response** (EEOR) is implemented.

The *director* will initially:

- appoint an SPCHQ Director;
- advise the relevant Minister's office and departmental executive management and arrange all necessary legislative matters to initiate an EEOR;
- invoke any necessary regulations;
- proclaim any RA(s) and/or CA(s); and
- initiate necessary funding arrangements through the treasury department of the affected jurisdiction;
- provide regular situation reports (refer Appendix 5) to CCIMPE representatives to outline developments/progress on the EEOR;
- activate the State/Territory's emergency management arrangements and request relevant authorities to appoint liaison officers.
- under delegation from the State/Territory *Director*, the *SPCHQ Director* should:
 - arrange for the establishment and management of the SPCHQ and appointment of personnel to key positions;
 - if an OPCC is required, instruct the nominated *senior manager* to establish the OPCC and take charge of the eradication campaign in the RA;
 - advise all key departmental staff of the marine pest emergency situation, the controls and restrictions on potential vectors and the potential need to provide support staff to the OPCC and SPCHQ;
 - prepare media releases, including technical information, and initiate media conferences (in some cases joint State/Territory and Australian Government releases may be needed);
 - arrange for the appointment (gazettal) of interstate and other appropriate personnel as officers with powers under the relevant legislation;
 - arrange for approved valuers to be appointed under the relevant legislation;
 - arrange for any urgent tracings outside the RA to be followed up appropriately; and
 - arrange for the notification of key industry and other contacts of the following:
 - the nature of the marine pest emergency that has been declared, and that an EEOR is being undertaken;
 - the location of any IA(s);
 - the location and telephone and fax numbers of the OPCC;
 - the boundaries of the RA(s) and CA(s) and conditions that apply therein;

- that officers of their organisations should be made aware that movement restrictions are being enforced in regard to the movements of potential risk vectors in RA(s) and CA(s);
- the need to report suspect pest detections; and
- any other actions required of them.

2.3.5 Actions to be taken in non-affected areas

The State/Territory *director* will advise relevant key departmental staff in non-affected areas on the status and progress of an emergency response. Those staff will then advise the following personnel in non-affected districts:

- port authority officers;
- owners/managers of slipway operations;
- regional police emergency management coordinators;
- regional State emergency service officers; and
- other agencies as required

of the following:

- that an EEOR is being undertaken;
- the nature of the confirmed marine pest emergency (giving details);
- the location of the IA(s);
- the location and telephone and fax numbers of the OPCC;
- the boundaries of any RA(s) and CA(s) and conditions that apply therein;
- the need to be prepared to re-locate to the OPCC if required;
- the need to report suspect pest detections; and
- any additional actions required of them.

Field Officers in unaffected areas must ensure that the following personnel:

- relevant departmental staff;
- port authority personnel ; and
- key industry contacts

have been advised of the details above, as well as about:

- any movement restrictions that apply (refer Appendix 6);
- any actions required of them; and
- the need to report any suspect pest detections and to restrict the movement of any suspect vessels and/or other potential vectors until permission to move has been approved by either the OPCC or SPCHQ, depending on location.

Relevant departmental staff should be advised:

- of the nature of the marine pest emergency, pest identification and procedures for specimen submission;
- of the likely methods of spread/translocation from an infested area and any precautions that should be undertaken to minimise the risk of spread/translocation;
- to be prepared to re-locate to the OPCC if required; and
- of any further actions required of them.

The action officer(s) should confirm with the relevant managers when these tasks have been completed.

2.3.6 Infested area operations field personnel

Operational field personnel conduct all operational activities in any IA(s) and dangerous contact area (DCAs). These activities are coordinated through the infested area operations unit of the OPCC (refer Section 3.3.1) and are aimed at:

- the eradication of the pest from the IA(s); and
- the prevention of pest spread from the IA(s).

2.4 Stand-down Phase

The *Stand-down Phase* exists when following appropriate consultation between the affected jurisdiction and CCIMPE, it is agreed that there is no need to progress to or continue with an **emergency eradication operational response**. The *Stand-down Phase* may be entered either directly from the *Investigation* or *Alert Phases* or following implementation of *Investigation*, *Alert* and *Operational Phases*.

Key points	Stand-down Phase
◆	There must be a systematic approach to winding-down operations to ensure that operational effectiveness is not jeopardised.
◆	All personnel, agencies and industry contacts involved in the emergency response are to be notified
◆	<i>Stand-down Phase</i> is to commence once operational objectives have been achieved or otherwise in accordance with advice provided by CCIMPE to the affected jurisdiction that an emergency eradication operational response is no longer required. .

2.4.1 When a marine pest emergency is not confirmed

When an **emergency investigation** conducted during the *Alert Phase* fail to confirm the existence of a marine pest emergency, the State/Territory *director, senior manager* and

field officer will need to advise those people and agencies contacted during the *Alert Phase* accordingly (refer Section 2.2). All personnel involved should be given the opportunity to discuss any issues that arose during or after the **emergency alert** notification.

2.4.2 When the marine pest emergency is confirmed

Towards the end of an **emergency eradication operational response**, activities in IAs and DCAs, in the field, at the OPCC and at the SPCHQ will begin to wind down and require fewer resources. Managers at all operational levels should align personnel, equipment and other resources according to operational needs to ensure that resource allocation and use is commensurate with operational requirements.

During this process:

- There is to be a systematic approach to scaling down operations with co-ordination by the relevant manager (e.g. OPCC Controller for OPCC activities) to ensure that the reduced allocation of personnel and resources is managed in an efficient manner that does not jeopardise operational effectiveness.
- The scaling down of operations should occur as soon as practical and operational performance needs to be appropriately monitored.
- All parties/agencies involved with the EEOR need to be notified
- Undertake a review ('post-mortem') of the EEOR process with all personnel involved.
- Ensure that all documents relating to the incident have been obtained and filed and that all entry of data into the information management system has been completed
- Debriefing of personnel involved should provide an opportunity for staff to talk through the issues that arose during the emergency. There should be a debriefing immediately after the emergency is over and then another a week or two later. All staff involved in the emergency are to be included in the debriefing process.

In the event that an EEOR fails to eradicate the pest of concern, the State/Territory *director* is to ensure that appropriate State/Territory Action Plans are developed and implemented to reduce the impact of pest establishment in the affected environment and the likelihood of pest spread to unaffected localities (see Appendix 1).

3. OPERATIONAL PEST CONTROL CENTRE (OPCC)

3.1 Functions of the OPCC

An OPCC is established during a marine pest emergency eradication or control operation at the direction of the State/Territory *director* who has overall strategic command of eradication and containment activities. When an OPCC is established, an OPCC Controller (refer Section 2.3.3) will be appointed to coordinate all eradication campaign activities from the OPCC.

The role of the OPCC Controller is to manage eradication and control activities within the OPCC's defined area of responsibility and to assist the affected community to return to normal. Initially the OPCC's defined area of responsibility will include an infested site and surrounding areas. Subsequently the OPCC area of responsibility will be a designated RA and any other adjacent areas that the State/Territory *director* designates as needing to be serviced operationally by personnel operating from the OPCC. The suggested personnel structure of the OPCC and the relationships between its sections are outlined in Figure 1.

Matters for policy determination are to be referred to State/Territory Pest Control Headquarters (SPCHQ) which will also have primary responsibility for media and public relations, interdepartmental liaison and national liaison (see section 4).

The OPCC will refer pest-tracing activities outside of its designated jurisdiction to the SPCHQ. The relevant SPCHQ contact officer will refer details of any interstate tracing to the appropriate State/Territory authorities.

3.1.1 Objectives

The functions and size of the OPCC will vary according to the nature and size of the outbreak, but the centre should have the following objectives:

- Determine the source of the outbreak by tracing movements of produce, immersible gear, vessels, water or other vectors into the area during the incubation period.
- Define the extent of the outbreak by detecting all foci of infestation.
- Eradicate or control all known outbreaks of the pest if feasible.
- Control the spread of an outbreak as appropriate by:
 - placing restrictions on the removal of potential vectors such as marine organisms (fauna and flora), produce, immersible gear, vessels, water or other potential vectors into, within and out of its area of responsibility
 - collection, destruction and disposal of pests including disinfestation (*eg* by destruction/manual removal/chemical treatment) of any marine organisms, marine products, materials and objects that may be infested
 - treatment of sites that may have been in contact with the pest, where appropriate
 - tracing the movements of produce, immersible gear, vessels, water or other vectors from and within the area during the suspected infectious/reproductive period

- disinfestation of vessels, vehicles and persons moving from and within any RA(s)
- establishing control of special risk enterprises (*eg* aquaculture, processing plants, boat ramps, slipways, contained wash-down sites etc)
- undertaking pest monitoring activities.
- Accurately record and value all stock and property destroyed or damaged and arrange compensation payment for these if appropriate.
- Maintain accurate records of pest surveillance activities and detections including locations, numbers, density (no. of pests/unit area), age-size information, reproductive status
- Maintain accurate records of human and physical resources and of OPCC activities and decisions.
- Manage public relations and communications within the defined area.
- Establish cooperation with the affected industry and/or community

3.1.2 Administrative functions

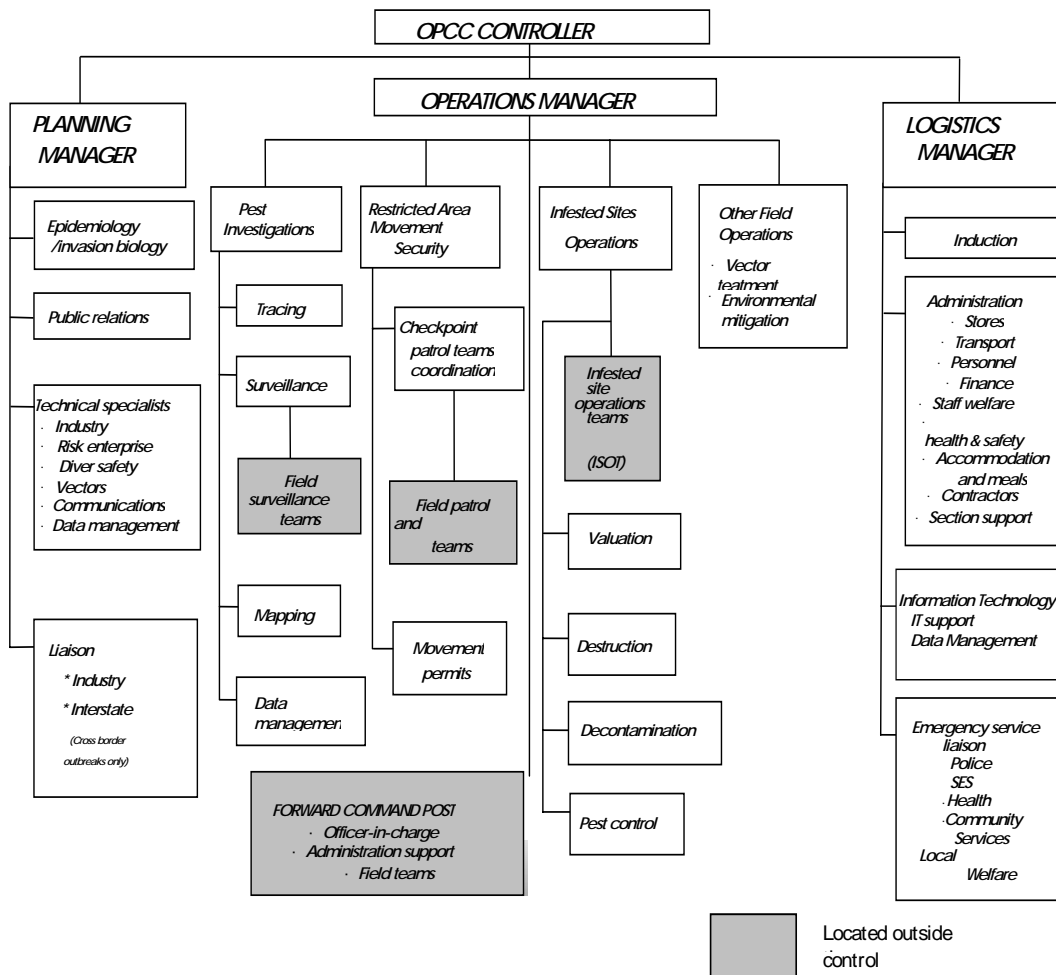
The functions and size of the OPCC will vary according to the nature and size of the pest incursion. In most situations the OPCC controller will establish priority tasks and will ensure that personnel carry out these tasks:

- Accurately define the nature and extent of the pest incursion (assisted by effective visual displays such as maps, flowcharts and diagrams).
- Maintain an effective information system (log, record and file data, and ensure efficient movement of data within, to and from sections).
- Continuously review priority tasks and modify them if necessary.
- Liaise with other emergency service agencies.
- Provide daily situation reports and other relevant information to the SPCHQ.
- Allocate people, plant and other resources in an efficient manner.

In certain circumstances, the OPCC must be capable of 24-hour operation. This will require multiple staff shifts. Note that in these circumstances it is preferable to rotate shift-workers into/out of the control centre at least every 4 days.

- Maintain effective communication and liaison with local industry, the local media and the community for response, relief and recovery.
- Support actions to minimise impacts on affected communities and industry.
- Refer vector-tracing requirements outside the RA to the SPCHQ for action. Requirements for interstate tracing will be referred, through the SPCHQ, to the appropriate interstate authorities
- The OPCC will establish task priorities by:
 - daily development of written plans (incident action plans);

- accurate definition of the nature and extent of the pest incursion (assisted by effective visual aids, such as maps, flow charts and diagrams);
- maintenance of pest surveillance and eradication information systems (logging, recording and filing data, and ensuring efficient movement of data within, to and from OPCC sections);
- efficient allocation of people, equipment and other resources; and
- liaison with regional emergency management agencies and industry



3.2 Establishment of an OPCC

The OPCC Controller (or delegate) is to consult with the *regional police emergency management officer* and regional *State emergency service (SES) officer*, as required, to identify suitable locations for an OPCC. Usually the SES will maintain a register of possible sites and final selection will be based on factors prevailing at the time.

It is essential to identify the resources required to run an OPCC, both initially and for ongoing operations. Section 3.3 outlines the OPCC sections that need to operate, however the final determination of resources required will depend on a number of factors including:

- the pest involved
- size of the incursion (extent and abundance)
- environmental system involved
- types of marine enterprises in the area
- density of marine enterprises
- local human population (relevant to support facilities for the OPCC).
- meteorological information
- local marine industry factors
- hours of expected operation
- relief staff requirements and availability
- environment and topography
- projected personnel requirements.

3.2.1 OPCC site

Final selection of an OPCC site will depend on:

- **Size** - Generally a large hall will be required, however the factors listed above will influence the size required.
- **Location** - Location of the OPCC is important for two reasons. Firstly the OPCC must be located close to the infested site so that all infested site activities can easily be managed from the centre. Secondly the OPCC should be sited close to a location from which services can be provided for personnel, ie. accommodation, meals and the provision of stores and supplies for the OPCC and infested sites.
- **Communications** - The provision of effective communications is one of the elements essential for the successful operation of an OPCC. It is essential that the selected site has access to an adequate number of telephone lines, facsimiles, computer lines and other communications needs. It is better to have the OPCC located slightly further from the infested site if communication facilities are better. It is usually essential to be able to connect up to 25–30 telephone lines. Cellular phones, if usable in the area, simplify this requirement. Don't forget the batteries and chargers. Consideration should also be given to the establishment of two-way radio communications.
- **Duration of operation** - Marine pest emergency eradication campaigns will take a considerable time (months/years) to complete. It is essential that this is clearly understood by the owners/caretakers of the facility chosen for the OPCC. It is

inappropriate to attempt to change an OPCC location in the middle of an eradication and/or control campaign.

- **Biosecurity** – An OPCC must provide adequate biosecurity for infested specimens and /or materials that are collected for examination and subsequent submission to a designated taxonomic facility.
- **Noise control** - It is important to minimise external and internal noise so that efficiency is maximised. The provision of carpets and matting and the use of partitions help alleviate noise problems.
- **Community considerations** – As most OPCCs will be sited in regional locations, consideration must be given to potential adverse impacts on the community of selection of an OPCC site (eg community centres may provide significant recreational facilities that may no longer be accessible to the community when an OPCC is established)
- **Staff amenities/support facilities** – Access to adequate staff amenities and support facilities is important to ensure personnel can work in an efficient and supportive environment
- **Security** - Security must be considered in terms of firstly the internal security of the OPCC so that only authorised personnel have access to operational areas of the OPCC. Secondly, consideration should be given to the external security and in particular the provision of adequate and secure vehicle parking and decontamination areas. Finally there must be an area where stores can be held securely.
- **Temperature control** - Ensure that the OPCC has the capacity for adequate heating or cooling.

3.2.2 Equipment

Equipment will be available from a number of sources including local department units, SES, local government and private hire firms. A list of suggested office equipment is:

- photocopying machines
- facsimile machines
- IBM compatible computers and printer
- whiteboards and marker pens
- felt noticeboards on stands for maps
- filing cabinets and protective sleeves for files
- typewriters
- typist tables, chairs and accessory typing supplies
- office tables and chairs
- EMPPlan Control Centre Management Manual
- required forms, permits for movement etc
- stationery requirements, e.g. paper, pens

3.2.3 Recommended layout

- Restrict entry into the main operations area to staff on duty. No access to this area for the general public and media.
- Separate key operational areas from areas for meals and other personnel support functions. Accommodate staff reception, toilets and showers, refreshments and kitchen separately.
- Separate the staff briefing area from the operational area.
- Use partitions to separate the main operations area into sections. Signs indicating the various sections or units are useful.
- Store marine pest emergency material in a secure area in the OPCC or a secure site adjacent to the OPCC as soon as possible.
- Provide offices for unit managers.

It is likely that a large number of people will require various movement permits. If the OPCC is in the RA a separate facility may need to be set up for the issuing of permits and licences outside the RA. The *Restricted Area Movement and Security (RAMS)* unit requires an area for dealing with the public who require movement permits that is separated from operational work areas.

An example of an OPCC layout is presented below:

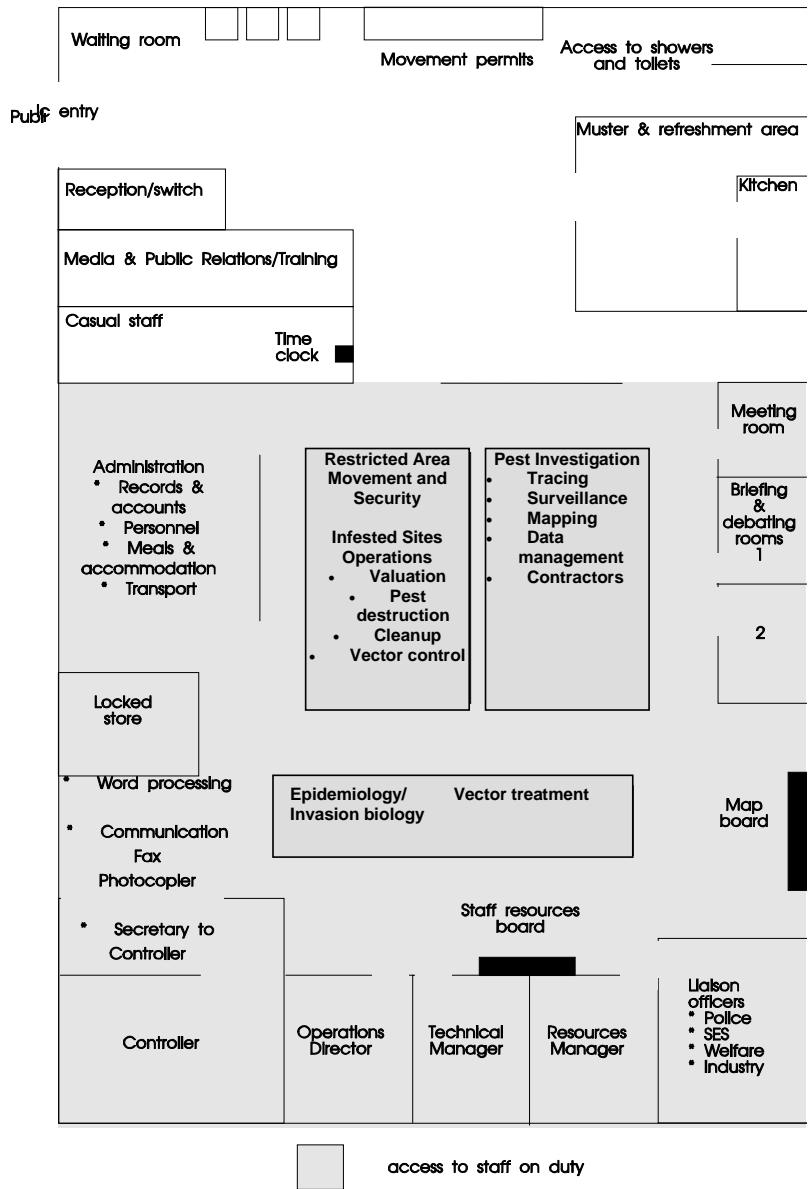
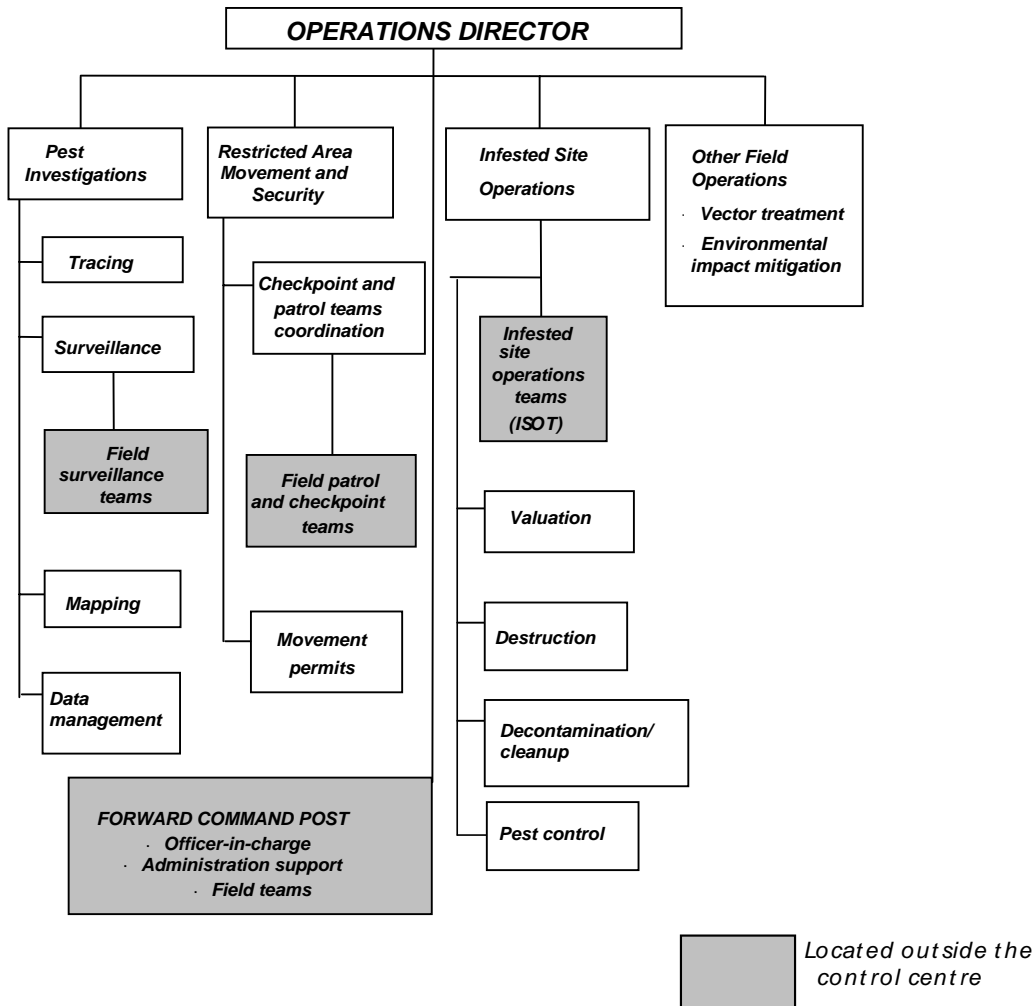


Figure 7 Suggested layout of an OPCC

3.3 Summary of functions of sections within the OPCC

3.3.1 Operations Section



The *Operations Section* conducts the operational aspects of an **emergency eradication operational response** plan. The *Operations Director* is usually second-in-charge to the OPCC controller.

3.3.1.1 Pest Investigations

The *Pest Investigations Unit* manages all tracing and surveillance activities within the area controlled by the OPCC. These activities aim to identify any undetected foci of infestation.

The main duties of this unit are to:

- Dispatch field teams to systematically visit and inspect all sites under its jurisdiction that may have pest infestations.
- Trace the movement of vectors from infested sites and DCAs.
- Advise SPCHQ of tracings required outside the RA.
- Maintain a detailed map identifying infested sites, DCPs and all other sites with susceptible animals or contaminated material within the area under its jurisdiction.
- Liaise with key industry contacts and enlist their support in containing the outbreak.

3.3.1.2 Restricted area movement and security (RAMS)

The *Restricted Area Movement and Security Unit* controls the movement of produce, immersible gear, vessels, water or other vectors including people into, within and out of the RA as appropriate in order to minimise the potential for pest spread.

The main duties of this unit are to:

- Issue movement permits to the public.
- Establish and operate road/water checkpoints in the RA, including liaison with State transport authority, water authorities, police and local government.
- Coordinate movement and security activities across infested sites.
- Maintain registers of all movements (RA and infested sites), permits issued and staff deployed in RAMS Unit.

Many personnel in the RAMS Unit will have no background in fisheries or environment protection, so initial briefings and reinforcement of quarantine measures and movement restrictions appropriate to the pest in question are necessary.

3.3.1.3 Infested sites operations unit (ISOU)

The ISOU manages all activities to eradicate or control the infestation on known infested sites and DCPs from the OPCC. Field activities are conducted on infested sites and DCPs by the ISOTs (see Section 3.4).

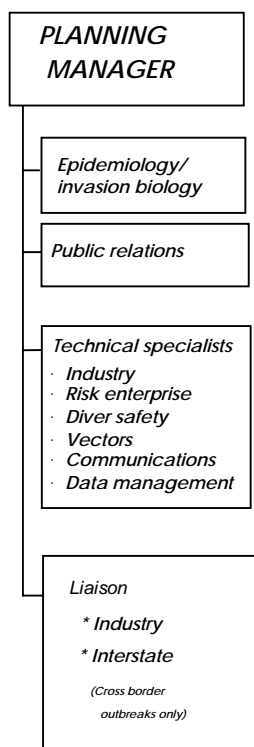
The duties of the ISOU are to:

- Manage resources to enable effective operation on infested sites and DCPs.
- Ensure inventories, valuation, compensation and other financial activities are conducted appropriately.
- Ensure that disinfection and pest disposal is prompt, environmentally safe and within budget.
- Ensure that decontamination and clean-up is conducted according to the designated standards.

3.3.1.4 Other field operations

This unit includes personnel responsible for field operations such as vector control and treatment, and environmental impact mitigation as appropriate.

3.3.2 Planning Section



3.3.2.1 Epidemiology/invasion biology

This is a specialist unit that is to work in close cooperation with other units and the OPCC controller. It is *not* the role of this section to perform duties of the identification, surveillance and tracing subsections of the Pest Investigations Unit.

The *Epidemiology Unit* will:

- Determine:
 - if possible, the source of the outbreak/method of pest introduction
 - how long the pest is likely to have been present at the site
 - any previous and future mechanisms of pest spreading.
- Analyse information from:
 - reports from the Pest Investigations and Infested Sites Operations Units
 - Bureau of Meteorology or other appropriate agency supplying daily oceanographic reports
 - liaison officers for specific industries, as well as the OPCC vector control coordinator.
- Make recommendations to the OPCC controller on:
 - the boundaries of the proclaimed RA
 - declaration of infested sites and DCPs

- samples to be taken from infested sites and DCPs
- decontamination techniques
- vector control and treatment programs
- release of quarantine.

3.3.2.2 Public relations

The *public relations unit*, under the direction of the *local public relations officer* prepares material for distribution to the media, local industry and the public on the progress of the campaign. It is also responsible for preparing material for briefing staff when they first arrive at the OPCC.

The main duties of this unit are to:

- Prepare updates on the progress of the eradication or control campaign for distribution to OPCC and other departmental operational staff.
- Prepare information packages for local distribution and for visitors to the OPCC.
- Organise press conferences.
- Coordinate arrangements and briefings for visitors.
- Preparing news releases.
- Prepare bulletins for public release that describe the movement restrictions and any other conditions that apply within the RA.
- Prepare information for new staff on arrival at the OPCC.
- Continually re-evaluate information needs.

The OPCC controller must appoint a spokesperson to speak to the media. This person will preferably have suitable experience, seniority and professional standing to be credible to the media.

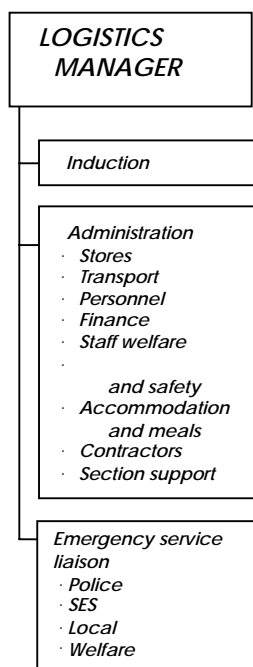
3.3.2.3 Technical specialists

Technical specialists are included in the Planning Section as appropriate for a particular pest and incursion scenario. Specialists may include vector experts, control agent experts, diving safety experts, engineers and/or specialists in the operation of a risk enterprise that may be in the area (see Figure 1).

3.3.2.4 Liaison

The Technical Section also includes officers to liaise with affected industry sectors and, if necessary, for interstate liaison with the relevant government agency in an adjacent jurisdiction in the situation where a pest incursion crosses or occurs close to State/Territory borders.

3.3.3 Logistics Section



The *logistics section* provides the administrative support to the OPCC.

3.3.3.1 Induction

The *induction unit* is responsible for briefing incoming staff on the nature of the pest, the current situation and operational procedures.

3.3.3.2 Administration

The *administration unit* is responsible for providing coordinated administrative services to the OPCC and infested sites.

The main duties of this unit are to:

- Provide adequate personnel services.
- Coordinate accommodation and meals to all OPCC and ISOT staff.
- Manage the OPCC transport fleet.
- Coordinate the hiring and firing of private contractors.
- Provide IT support.
- Coordinate administrative services on infested sites.

3.3.3.3 Emergency services liaison

An *emergency services liaison officer* will be responsible for coordinating activities with the State emergency management services, *eg* police, SES, local government.

3.4 Infested sites operations teams (ISOT)

3.4.1 Infested sites operations teams (ISOT)

The role of the ISOT is to manage and conduct all activities on the infested site(s) and dangerous contact premises (DCPs). These activities are coordinated through the Infested Sites Operations Unit (ISOU) of the OPCC and are aimed at:

- the eradication or control of the marine pest on these areas
- the prevention of pest spread to other areas.

(see section 3.3.1 for further details).

The main duties of each ISOT is to:

- Manage day-to-day activities of valuation (if applicable *eg* affected aquaculture enterprises), disinfection, destruction and disposal of infested stock and equipment as required.
- Enforce quarantine for physical and biological security.
- Prepare an accurate inventory of all sites and other material for disinfection and disposal.
- Prepare valuations for compensation for material to be destroyed and disposed of.
- Plan and conduct efficient disinfection and pest disposal operations.
- Plan and conduct cleaning and/or decontamination operations (*eg* application of suction dredge techniques).

Figure 8 shows the proposed staffing structure for an ISOT.

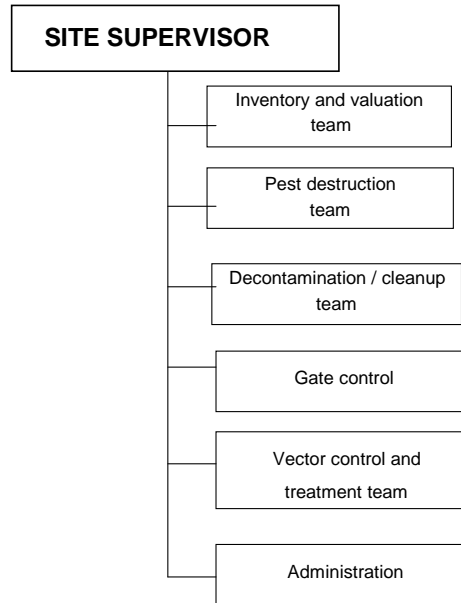


Figure 8 Proposed ISOT structure

3.5 Forward command post

Tracing and surveillance activities by field surveillance teams may detect infested sites or DCPs in locations remote from the OPCC. Where the extent of an infestation at a remote locality is minimal, the establishment of another full-scale OPCC is not warranted and the OPCC controller, after consultation with the State/Territory *director*, may choose to establish a *forward command post* (FCP).

The role of the FCP is to provide a base for field activities and communicate relevant information to the OPCC. The FCP may be outside the RA being controlled by the OPCC. Therefore, another smaller RA may need to be declared to include the remote infested sites/DCPs and surrounding areas. It is essential that there is accurate and timely information flow between the FCP and the OPCC.

4. STATE PEST CONTROL HEADQUARTERS (SPCHQ)

4.1 Functions of the SPCHQ

The SPCHQ is established at the direction of the State/Territory *director* of the relevant lead response agency in an affected jurisdiction once a marine pest emergency has been confirmed anywhere in the State/Territory and the *Operational Phase* is activated. The SPCHQ may also be set up if a marine pest emergency is suspected or confirmed in another State/Territory. This is relevant when there are traces to the unaffected State/Territory.

The SPCHQ is the emergency operations centre responsible for State/Territory-wide coordination of all marine pest emergency operations; it plays a vital support role, in the development and communication of pest containment, eradication and surveillance policies that are implemented operationally by OPCC personnel. The SPCHQ collates, assesses and summarises the complex information coming from various sources, informs the State/Territory *director* of significant developments, and advises on strategies, procedures and resource requirements. Policy decisions are relayed by SPCHQ back to the OPCC for implementation.

4.1.1 Administrative functions

While the SPCHQ structure is similar to that of the OPCC, it must not assume responsibilities or duplicate the functions that are more appropriately carried out by the OPCC.

The primary functions of the SPCHQ are to:

- Determine, implement and coordinate State/Territory-wide marine pest emergency management policies and strategies.
- Provide regular intra-State communications to keep relevant regional government, industry and community sectors informed of the status of an **emergency eradication operational response**;
- Provide regular communications to the CCIMPE Secretariat for distribution to relevant Australian Government and other State/Territory government agencies to keep relevant national level stakeholders informed of the status of an **emergency eradication operational response**;
- Liaise with the CCIMPE Secretariat, the Commonwealth, State and Territory authorities. All communications with other jurisdictions must go through the SPCHQ, except with cross-border operations where the SPCHQ will encourage direct liaison and cooperation on operational matters between with an OPCC in an adjacent jurisdiction.
- Brief the department's executive management and relevant ministers.
- Create and coordinate a crisis communication strategy to the public.
- Coordinate pest investigation, tracing, surveillance and movement controls in the CA and elsewhere throughout the State/Territory.

- Notify other States/Territories of tracings to their jurisdiction.
- Approve tasks not delegated to the OPCC, such as confirming new infested sites and DCPs and approving treatment.
- Provide information statewide to the public and groups with special information needs.
- Implement legal arrangements and ensure that all legal requirements are met.
- Provide additional technical support as required.
- Supervise financial arrangements and provide administrative support.
- Ensure effective information flows between the OPCC and field operations.
- Liaise with emergency services at State/Territory level.
- Determine policies and strategies for quarantine, movement controls, monitoring, surveillance.

4.2 Define financial and other delegations Activation and establishment of the SPCHQ

The SPCHQ is activated on the direction of the State/Territory *director* of the lead response agency and usually established in the head office of the relevant State/Territory department.

4.2.1 Layout

The *logistics manager* is primarily responsible for setting up the SPCHQ. The initial layout will depend on the available facilities, and should be modified as required to suit the requirements of the campaign and the available resources (see Section 4.5).

Unlike an OPCC, the siting and selection of an SPCHQ does not require provision for large numbers of stores and vehicles.

There must be adequate open floor space with maps and bulletin boards for briefing sessions as well as sufficient offices or partitioned areas to allow undisturbed work.

Preferably the site will be able to expand in cases of large scale incursions as venue changes are disruptive.

4.2.2 Communications

Arrangements must be made in advance with telecommunication providers to ensure that sufficient lines for additional facsimile machines, on-line computers and dedicated telephone lines which cannot be jammed. Staff must be trained in advance in the procedures necessary to activate these special communications arrangements and to locate and activate all office and information management systems. In most States/Territories, the police can provide recorded message services of very high capacity to provide standard information to the public.

4.2.3 Public access

Public access to the SPCHQ must be restricted to avoid disruption and ensure security of confidential and/or personal information. It is usually best to have the Media and Public Relations Unit in a separate room. The State/Territory *director* may give television crews permission to film the SPCHQ at work, but they must *not* be allowed to film details of any sensitive information that may be on display at the SPCHQ (e.g. on white boards/bulletin boards).

4.3 Structure, management and staffing

The State/Territory *director* will have allocated the key SPCHQ roles to relevant personnel during the commencement of an **emergency eradication operational response**. The following descriptions define these key SPCHQ roles in an ongoing EEOR.

The State/Territory *director* is in overall control of the pest eradication or control campaign. The SPCHQ Director coordinates the day-to-day conduct of the campaign and liaises directly with OPCC controllers. In a large scale operation at least four other officers are required to staff the SPCHQ: a *planning manager*, *logistics manager*, *operations manager* and a *registry clerk*. The managers are each responsible for units staffed, if required, by various coordinators, officers, additional registry clerks and other support staff. The *logistics manager* is responsible for ensuring the smooth day-to-day operation of the SPCHQ.

The precise nature and scale of emergency operations will vary considerably between different **emergency eradication operational responses** and during the course of a single campaign, depending on the nature, location and scale of the pest incursion outbreak, the stage and progress of the campaign, and the availability and capability of personnel. Consequently, the structure and staffing of the SPCHQ must remain flexible and be adapted to best meet the prevailing needs of the campaign.

- In a small campaign or during periods of reduced activity, sections or units might combine with staff performing more than one function.
- In a large campaign or during busy periods, two or more people might share the same function.
- In a large and widespread campaign, especially if there is more than one OPCC, certain functions will be centralised within the SPCHQ, including technical support, media and public relations, legal support and supporting agency liaison.

A proposed staffing structure for a SPCHQ is shown in Figure 5.

4.4 Functions of SPCHQ sections

4.4.1 Planning Support Section

The Planning Support Section is responsible for:

- Assessing the pest incursion and its management
- Providing technical and policy advice.

- Preparing situation reports and CCIMPE agenda papers.
- Coordinating industry liaison.
- Coordinating media and public relations.
- Providing legal services.

The section is headed by the *planning support manager*, assisted as required by *industry liaison officers*, the *State/Territory public relations manager*, *legal officers*, *specialist support officers*, and an *epidemiologist/invasion biologist*.

The SPCHQ and OPCC *planning managers* must work closely together to ensure their activities are well coordinated. Responsibilities, functions and workloads must be clearly defined to avoid duplication of effort, matters being overlooked, or conflicting advice.

4.4.1.1 Industry liaison

Industry liaison is a vital adjunct to marine pest emergency operations. Key industry organisations and representatives are to be kept well informed of the situation and where appropriate, consulted over policy.

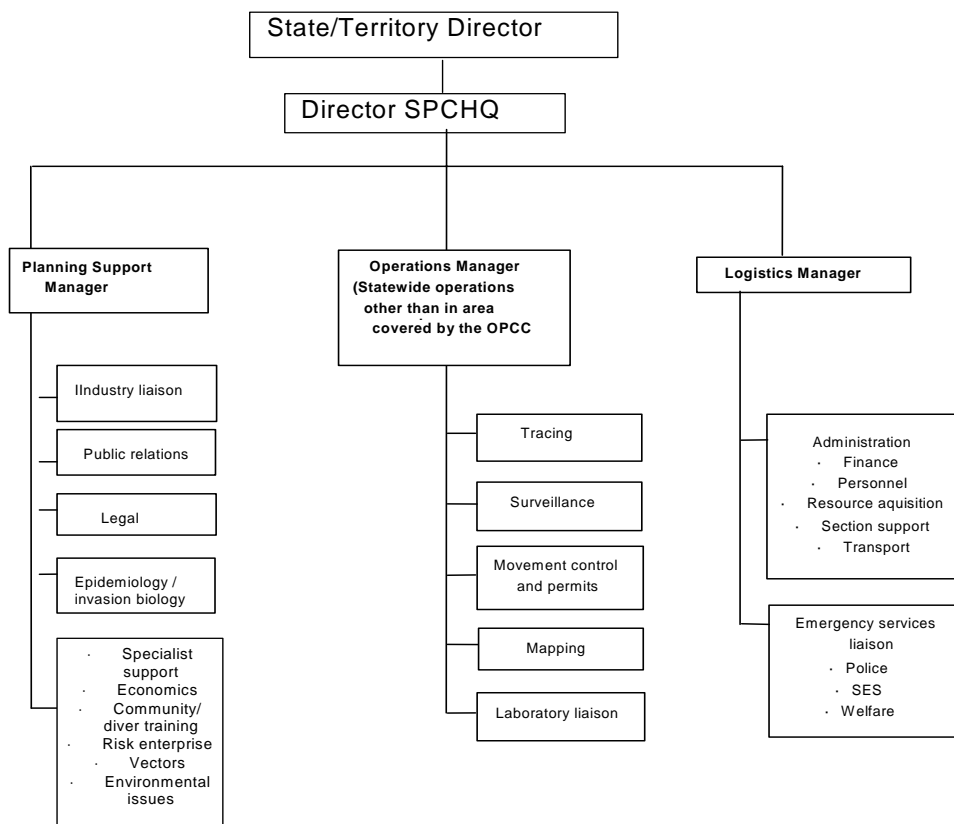


Figure 9 Model SPCHQ structure

The functions of industry liaison are to:

- Keep relevant industry sectors informed of developments in the campaign.
- Consult with relevant industry sectors to determine likely methods of pest spread, options for pest containment and eradication, the effect of pest containment and emergency eradication policies and programs on industry, and to obtain feedback on the progress of an **emergency eradication operational response**.
- Seek/encourage industry sector endorsement of and cooperation with pest containment and eradication measures through the dissemination of relevant information to their members.

Industry liaison at both State and local levels is supervised by a coordinator assigned to the SPCHQ. If necessary, additional *industry liaison officers* might be appointed at the SPCHQ and OPCC. These officers may be department staff who normally work closely with the relevant industry, or they may be representatives of the relevant industry. The number and type of officers will vary, depending on the pest, the environment affected, the location of an incursion, and the longevity of an **emergency eradication operational response**. Separate liaison officers might be needed for different industry sectors (eg. wild fisheries and aquaculture) during an EEOR. Good linkages must be established between SPCHQ and OPCC personnel to ensure consistent and accurate information is provided to all stakeholders. SPCHQ liaises with industry associations and representatives at State and national levels. OPCC liaises with local industry branches and representatives, community groups and with individuals.

4.4.1.2 Public relations

A crisis communication strategy is essential for the efficient running of a campaign. A campaign may be technically perfect but can fail due to lack of public and political support. The crisis communication strategy needs to be up to date and integrated into the technical strategy. It is essential that appropriate, accurate and adequate media coverage of the campaign is provided, in order to:

- Increase industry and public sector awareness of an incursion by a pest of national concern and encourage early recognition and reporting.
- Enhance knowledge of and compliance with movement restrictions and other incursion management activities.
- Maintain community and political support for the campaign.
- Fulfil legal obligations for freedom of information.

The role of the *Public Relations Unit* is to prepare and convey appropriate information about the pest and the control campaign to the media, to industry, and to the general public in both rural and urban communities. It is also responsible for preparing material for briefing staff at the SPCHQ, as well as department staff statewide.

The SPCHQ *public relations manager* has overall responsibility for operations at both State and local levels. The SPCHQ and OPCC media officers must work closely together. SPCHQ is responsible for the development and implementation of policy on media coverage, approves all media releases relating to policy and other sensitive issues, and will

primarily handle the capital city and national media. OPCC maintains close contact with local media.

4.4.1.3 Legal support

All pest control activities must be carried out in accordance with the relevant State/Territory legislation. The functions of legal support are to:

- Prepare and arrange proclamations, delegations and orders.
- Advise on the legality of proposed policies and operations.
- Provide legal advice on specific issues as they arise.
- Prepare and arrange prosecutions.

The SPCHQ *legal coordinator* has overall responsibility for legal services at both State and local levels. A *legal officer* with clearly defined responsibilities might also be appointed to the OPCC to provide local support if required.

4.4.1.4 Epidemiology/invasion biology

The OPCC epidemiologist/invasion biologist is primarily responsible for the collation and interpretation of epidemiological data. It is appropriate, particularly in a widespread or multi-focal campaign, to appoint an epidemiologist/invasion biologist to the SPCHQ to supervise this process and provide technical advice about pest spread and control to the SPCHQ technical and operations managers and the State/Territory *director* as required.

Other specialist support

Specialist support officers might be assigned on a full or part-time basis to provide technical, financial and policy analysis and advice on a diverse range of issues such as animal welfare, economics, environmental protection, wild animals or vectors, and matters peculiar to unique industries and risk enterprises.

4.4.2 Operations Section

The SPCHQ Operations Section is responsible for coordinating all technical and regulatory operations within the CA and elsewhere throughout the State/Territory.

The Operations Manager undertakes most of these functions in a small campaign. In larger operations, various tasks are delegated to appointed coordinators and officers. A registry (section) clerk assists with mapping, whiteboard displays and information management.

4.4.2.1 Tracing, surveillance and movement controls

Tracing of contacts outside the RA will be relayed by the OPCC to the SPCHQ. If these relate to movements within a State, the SPCHQ Operations Section will pass this information on to appropriate and available field staff for follow up. Information about movements interstate will be relayed to the relevant CR or a nominated delegate.

Surveillance of any suspect sites identified by tracing is similarly arranged by this section and carried out by field staff.

The monitoring and enforcement of movement restrictions applying within the CA or across State/Territory borders are supervised by the Operations Section.

4.4.2.2 Mapping

The Operations Section maintains maps showing the boundaries of the RA and CA, the location of suspect sites outside the CA, key regional and emergency service resources, and other information as required.

4.4.3 Logistics Section

The SPCHQ Resources Section liaises with emergency services at the State level, acquires the resources and provides administrative support and expertise for the smooth and efficient operation of the campaign and SPCHQ function. This frees technical and policy staff from day-to-day administrative concerns.

4.4.3.1 Administration

The administration coordinator manages financial, personnel, stores and other administrative matters within the SPCHQ. The Administration Unit also oversees administrative functions at the OPCC and across the State (as they relate to the pest control campaign) to ensure they comply with policy, and provide adequate support. However, the OPCC Administration Unit will carry out their day-to-day functions autonomously.

The administration coordinator might delegate administrative tasks. Additional registry (section) clerks might be engaged to handle information flow in the SPCHQ. Although the Administration Unit is responsible for staffing this function, the registry clerks will be directed in their day-to-day duties by the director or by the manager of the section or unit to which they are assigned.

4.4.3.2 Emergency services liaison

Under State/Territory emergency management arrangements, the responsibility of lead response agency for a marine pest emergency may rest with one of a number of a State/Territory Departments as designated through inter-departmental agreements and generally prescribed in relevant State/NT emergency management plans. Many other agencies may have a significant supporting role to play including police services, transport and/or port authorities.

SPCHQ is responsible for establishing and maintaining liaison at the State level. The OPCC is responsible for working with district and local emergency services.

- **Small localised campaign** — most emergency services liaison will be undertaken locally by the OPCC. The role of SPCHQ will be limited to ensuring that appropriate operational use is made of emergency services, and keeping the State headquarters informed of developments through situation reports.
- **Large widespread campaign** (which is beyond local resources) — coordination of support will be done at the State level, and the role of SPCHQ in supporting agency liaison will become much more prominent.

Emergency services might appoint liaison officers to coordinate the services of their agency. They remain responsible to their own organisations. Liaison officers might only be required from certain agencies during the initial stages of an **emergency eradication operational response** or for other limited periods. The *logistics manager* is to ensure that liaison officers are provided with necessary information, facilities and support.

5. NATIONAL COORDINATION

5.1 Consultative Committee on Introduced Marine Pest Emergencies

The Consultative Committee on Marine Pest Emergencies (CCIMPE) is the primary coordinating body for a marine pest emergency at the national level, comprising representation for the lead government agency of each State, the Northern Territory and from relevant Australian Government agencies (Dept. of Environment and Heritage; Dept. of Agriculture Fisheries and Forestry) – see 1.3.2. The CSIRO Centre for Marine Research, provides specialist technical expertise on marine pests to the CCIMPE forum. CCIMPE may also call on additional expertise as required, and such an approach is encouraged.

5.1.1 Functions of CCIMPE during a marine pest emergency

5.1.1.1 Investigation and Alert phases

During the *Investigation* and *Alert Phases* of EMPPlan, CCIMPE's main objectives are to:

- Determine whether an incident meets the criteria of a marine pest emergency;
- Advise on the level of response required during the *Alert Phase*. This may include provision of advice to the lead response agency of an affected jurisdiction on appropriate **emergency investigation** activities including containment (quarantine and vector control) and surveillance activities to enable the extent (*eg* distribution and abundance) of an incursion to be evaluated;
- Consider, and where appropriate endorse cost-shared funding arrangements (in accordance with arrangements outlined in the national *Inter-Governmental Agreement*) to assist an affected jurisdiction to conduct an **emergency investigation**
- Assist an affected jurisdiction in determining whether eradication is likely to be feasible and if so, evaluate and determine appropriate emergency eradication operational response activities; and
- Evaluate in a timely manner and where appropriate, endorse an **emergency eradication operational response** plan provided by an affected jurisdiction for subsequent consideration and approval by the National Management Group, to enable timely activation of a nationally agreed **emergency eradication operational response**.

5.1.1.2 Operational Phase

Monitor and evaluate progress of an **emergency eradication operational response** and facilitate access to technical advice and sharing of resources where appropriate.

Specific functions of CCIMPE during the *Operational Phase* of EMPPlan are:

- Make recommendations on any additional resources that should be available in an affected region(s).
- If appropriate, or at the discretion of the CCIMPE Chairperson, direct that a National Pest Control Coordination Centre (NPCCC) be established. The CCIMPE Chairperson will then appoint a *director* of the National Pest Control Coordination Centre who will be responsible for its establishment. The functions of a NPCCC are outlined below.
- In consultation with the lead agency of an affected jurisdiction, to determine when an EEOR is no longer required and to make recommendations on possible *Stand-down Phase* activities (eg monitoring). *Stand-down Phase* activities will also include the assessment of claims for payment of costs under cost sharing arrangements. Examples of costs eligible for reimbursement can be found at Appendix 4.

National Pest Control Coordination Centre

The Australian Government Department of Agriculture, Fisheries and Forestry will provide secretariat functions for CCIMPE. At the direction of CCIMPE and/or the CCIMPE Chairperson, this secretariat role may expand during a marine pest emergency to accommodate increased strategic planning, support and coordination functions.

The Director of the National Pest Control Coordination Centre may use Section 4 as a guide to establishing the National Pest Control Coordination Centre.

Functions

The main role of the NPCCC is to provide administrative support to assist CCIMPE in achieving its objectives.

Specific functions of the National Pest Control Coordination Centre include:

- Coordination of activities by relevant Australian Government agencies as required including:
 - Australian Customs Service
 - Department of Agriculture Fisheries and Forestry
 - Department of Transport and Regional Services (maritime sector; relevant administrators of Commonwealth Territories)
 - Department of Defence (Navy, relevant administrators of Commonwealth Territories, Coastwatch and Emergency Management Australia)
 - Australian Government Solicitor
 - Department of Finance and Administration
 - Department of Prime Minister and Cabinet
- Coordination at the State/Territory level with relevant agencies as required.

5.1.2 Other CCIMPE activities

CCIMPE should convene at least once a year specifically to enable representatives to review its national coordination role and identify specific issues where research and/or development are required and to prepare relevant advice for the national management committee to which CCIMPE reports.

6. INFORMATION SYSTEMS AND MANAGEMENT

6.1 Information management system

Currently it is each jurisdiction's responsibility to maintain data relevant to the management of an introduced marine pest emergency.

In 2002 the CSIRO Centre for Marine Research, with assistance from relevant agencies in each jurisdiction, established the National Introduced Marine Pests Information System (NIMPIS). NIMPIS enables the national consolidation of existing datasets and information such as:

- species biology and impacts
- ID guides
- pest distributions
- treatment/control methods.

Information on NIMPIS is available via the internet (<http://crimp.marine.csiro.au/nimpis/>) and NIMPIS provides for:

- on-line reporting of pest monitoring data including reported sightings
- dissemination of routine pest management reports
- internet access to related websites

6.2 Administration Systems (OPCC)

It is expected that each administrative section and unit within an OPCC will maintain its own records systems. These systems should allow the accurate recording and retrieval of details of OPCC operations, be operable by relief staff when required and be capable of preparing daily situation reports for that function for the OPCC officer-in charge of administration.

Whenever possible, the standard departmental system for stores, personnel, vehicle hire, etc should be used. This will facilitate smooth operation, especially in the early stages of the campaign.

6.3 Control centre information management

Information management must be simple and easily understood by individuals not familiar with such a system during normal duties. Information must be recorded, filed, retrievable and follow-up actions checked to ensure completion.

The *Logistics Manager* in OPCCs and SPCHQs is responsible for information management. This will include the provision of sufficient clerical support and copying facilities.

6.3.1 Modus operandi

Message forms and log sheets

Control centres may be required to process a large amount of information in the course of an **emergency eradication operational response**, including all correspondence between a control centre and its supporting/reporting agencies and individuals. Rotation of staff and extended operations requiring multiple shifts, dictate that all information be recorded, distributed and located in a systematic way.

As there may be numerous points of access for external communications (usually telephone and fax) operating in a control centre, there cannot be one communications centre through which all internal and/or external communications are channelled and accounted for. This places a responsibility on each individual who has access to a means of communication. The receiver or initiator of information must keep a copy of all messages. This may be best achieved by means of a self-carboning message form. All information must be recorded on a message form, even if it is only a record of a conversation that does not need further action. Only information that has 'value' needs to be recorded (*ie* information necessary for the conduct of the campaign) so it can be referred to and found/retrieved later. Message forms should be numbered. Sections or units may use message forms with a prefix or number identifying the section/unit. Copies of message forms are kept on a file and may be copied to other files, such as site files. Faxes and radio messages should be copied to message forms.

The essential information contained in a message form is transferred to a one-line, serially numbered entry in the section logbook by the person who took the original message. The log may refer to an individual desk if it is busy, or to a small section. The purpose of the log is to account for every message on a system where messages can be easily located, avoiding the need to search many message forms to identify a single item. The log also records completed actions and whether the distribution of information has been effected and/or whether a reply is necessary. It is kept up-to-date by the individual managing the relevant desk and serves as a reminder of incomplete tasks. It is invaluable in shift handover because it provides a summary of activities for the period and a check of incomplete actions.

Log sheets should be bound so that there is no opportunity for pages to be lost.

Message forms contain an address for their destination at the top. Addressees for distribution are circled by the message initiator and the original message is placed in the section out-tray for collection by relevant staff. Administrative support staff are responsible for copying and distributing message forms. The initiator and relevant support staff are responsible for keeping the amount of paper to a minimum, consistent with the 'need-to-know' principle. The priority of the message must also be circled.

Individuals on the move around the control centre need to carry a clipboard of message forms, or a notebook to enable them to record and formally log relevant information on return to the individual's work station.

Files

All sections/units and many individuals will need to maintain their own working files. *Infested site* files are best kept and maintained as a central file in the Pest Investigations Unit of the OPCC. Extra administrative support will be necessary to maintain and keep track of these files, which may be loaned out to other sections (all loans **MUST** be recorded). Working papers, including some site information will need to be kept as small

working files in sections and at desks. As sections have no further need for site information, it should be sent to the Pest Investigations Unit where it is placed on the relevant original sites file, or discarded if duplicated. The file cover should have a one-line summary of the information on each paper in the file. This is updated as papers are added. Folios/papers must be numbered.

Personnel

In addition to administrative support in each section, the OPCC controller and operations director and SPCHQ director may need secretarial support. In large operations, the SPCHQ director may need a communications manager to control all information of an official nature that is entering and leaving the control centre in the form of reports, situation reports, press releases, and so on. The communications manager may need administrative staff to handle incoming and outgoing faxes. The secretary and communications manager may be the same person in a small operation.

Section and unit leaders are responsible for conveying all necessary information to their staff. The content and frequency of information sessions, newsletters and reports can be adjusted to achieve this.

An administrative person in the reception area restricts unauthorised entry to the control centre and may direct visitors, with an escort, to an appropriate area of the centre (away from the main operational areas) or may initiate a message into the centre.

Information boards

Whiteboards, chalkboards and maps can be used to display and convey a variety of information in the control centre. Commonly-used contacts and suppliers, major resources, locations, teams, rosters and housekeeping information, etc can be conveniently displayed. Staff must be advised by the induction officer at their initial briefing about which boards are necessary for them to consult.

Briefings

In a large operation, there will be an overwhelming amount of information which must be directed only to those who need it for action or information. Managers should not attempt to provide personnel in the centre with access to all information available but rather provide regular concise summaries of the main developments/issues. Section and individual briefings will be required on a continuing basis to reflect changing circumstances.

7. GLOSSARY

Alert Phase	See Stages of activation.
Area	A defined tract of land and or water for the time being subject to pest control restrictions under marine pest emergency legislation.
ANZECC, MCFFA, NOMB, ARMCANZ	Relevant ministerial councils that ratified national control strategies for exotic marine pests as government policy.
CCIMPE, Consultative Committee on Introduced Marine Pest Emergencies	A national consultative forum that enables effective national coordination during a marine pest emergency through representation of all Australian jurisdictions with responsibility for protecting Australia's marine environment.
CA, Control area	A declared area in which defined conditions apply to the access or egress of specified marines or fomites. Conditions applying in a control area are of lesser intensity than those in a restricted area. The limits of a control area and the conditions applying therein may be varied rapidly according to need.
DCP, Dangerous contact area/premises	An area showing no signs of pest infestation but which, due to its proximity to an infested site, will be subjected to some pest control measures or monitoring.
Director of Fisheries	The officer in each State or Territory who has prime responsibility for management of fisheries resources. In some jurisdictions the Director of Fisheries also has prime responsibility for management of marine pests.
Disinfectant	In this context, any chemical agent (including freshwater) used to render marine pests non-viable.
Disposal	Sanitary removal of marine pests and potentially infested material by burial, burning or some other process so as to prevent the spread of pest and preserve human health.
Emergency Eradication Operational Response	A synonym for the Operational Phase of an emergency response
Emergency Eradication Operational Response plan	A plan that describes and details the strategic and operational elements of an emergency eradication response to an incursion by a marine pest of national concern
EMPPlan	Australian Emergency Marine Pest Management Plan – an emergency response plan outlining the generic Australian emergency response to marine pests incursions. EMPPlan links policy, strategies, implementation, coordination and counter-disaster agency plans.
Field Officer	Government agency employee with experience in field investigations and industry liaison, who may be an initial point of contact when a marine pest incursion is suspected.
Forward command post	A field operations centre, subsidiary to a local pest control centre, established in remote area operations.
Infested area	An area in which a marine pest incursion has been detected.

Infested site	A defined area (which may be all or part of a vessel, premises, lease or waterway) in which a marine pest incursion has been detected. An infested site may be subject to mandatory quarantine and to eradication, containment and/or other control procedures to minimise the potential for pest spread.
Investigation Phase	See Stages of activation.
Lead response agency	The agency which has lead responsibility within its jurisdiction for the management of a marine pest emergency; having special expertise and legal responsibility in that particular type of emergency. The identity of the lead response agency will vary according to the emergency management legislation of the particular State/Territory.
Marine pest emergency	A marine pest incursion requiring an immediate response and highest priority for allocation of resources to minimise the potential of pest propagation and spread.
Movement control	Restrictions placed on movement of animals, people and fomites to prevent spread of pest.
National pest control centre	An established centre from which national pest control actions are coordinated in a marine pest marine pest emergency.
National Introduced Marine Pest Information System	A web-based information system on introduced marine pests developed by CSIRO Marine Research
Operational pest control centre	An emergency operations centre responsible for the management of field operations in a defined area.
Operational Phase	See Stages of activation.
Operating procedure	Detailed instructions for carrying particular tasks in pest control such as valuation, destruction, decontamination etc.
Operations	The activities necessary to give effect to a pest control strategy.
Operations manual	Document containing specific, step-wise instructions on certain operations.
Owner	Person responsible for an item of property or a premises (includes the agent of the owner <i>eg.</i> manager or other controlling officer).
Introduced Marine Pest	A marine pest considered to be exotic to Australia's marine environment that has subsequently been introduced via anthropogenic activities.
Quarantine	Legal restrictions imposed to minimise the potential for spread of a notifiable and/or noxious organism by restricting the movement of potential vectors
Rehabilitation	Process of adjustment to circumstances prevailing in the aftermath of a marine pest emergency.
Restricted area	A relatively small declared area (compared to a control area) around an infested site that is subject to intense surveillance and movement restrictions.

Risk enterprise	A marine or marine related enterprise with a high potential for enabling the spread of a marine pest.
Roadblock	Road or water check-point or barricade to maintain compliance with movement control restrictions.
Regional Emergency Manager	An officer with expertise in emergency management who is appointed to manage eradication and/or containment procedures in a designated region.
Section	Major subdivision of a pest control centre responsible for a particular element of an emergency response.
Stages of activation	Investigation, alert, operational, stand-down.
– Investigation phase	exists when key members of the fisheries or environment protection authority are notified that a marine pest emergency may be imminent, or exists in another State;
– Alert phase	exists when the State/Territory CCIMPE representative notifies the coordinator of State emergency services that a marine pest emergency may be imminent, or exists in another State;
– Operational phase	exists when the State/Territory CCIMPE representative notifies the coordinator of State emergency services that a marine pest emergency exists in their jurisdiction ;
– Stand-down	exists when the State/Territory CCIMPE representative notifies the coordinator of State emergency services that a marine pest emergency no longer exists.
State/Territory pest control headquarters	The emergency operations centre that directs the pest control operations to be undertaken in the State/Territory.
Strategy	The principles on which an emergency eradication operational response plan is based.
Support agency	An agency having a defined role to assist the lead combat agency to give effect to marine pest emergency-management plans.
Surveillance	A systematic program of inspection and examination of animals or things to determine the presence or absence of an emergency aquatic pest.
Survey	A program of investigation designed to establish the presence, extent of, or absence of pest.
Suspect area/site	An area which is likely to have been exposed to a marine pest such that quarantine and intensive surveillance, but not pre-emptive treatment, are warranted; OR an area not known to have been exposed to a marine pest but showing infestation with a species requiring further identification.
Suspect materials or things	Materials or things likely to be contaminated by a pest.
Tracing	The process of locating vectors that may be implicated in the spread of pest so that appropriate action can be taken.
Vector	Contaminated material or object capable of spreading the marine pest.

8. ABBREVIATIONS

ANZECC	Australia New Zealand Environment and Conservation Council
ARMCANZ	Agriculture and Resource Management Council of Australia and New Zealand
AQUAVETPLAN	Aquatic Animal Veterinary Emergency Plan
AUSVETPLAN	Australian Veterinary Emergency Plan
DAFF	Department of Agriculture, Fisheries and Forestry
EMPPPlan	Australian Emergency Marine Pest Plan
CR	CCIMPE representative
CSIRO	CSIRO Centre for Marine Research
AQIS	Australian Quarantine and Inspection Service
CCIMPE	Consultative Committee on Introduced Marine Pest Emergencies
CA	Control area
DCA	Dangerous contact area
DCP	Dangerous contact premises
EEOR	Emergency eradication operational response
FCP	Forward command post
FO	Field officer
IA	Infested Area
ISOT	Infested site operations team
NMG	National Management Group
NOMB	National Oceans Ministerial Board
OPCC	Operational Pest Control Centre
RA	Restricted area
RAMS	Restricted Area Movement and Security Unit
RCO	Regional Contact Officer
REM	Regional Emergency Manager
SCC	Standing Committee on Conservation
SCFA	Standing Committee on Fisheries and Aquaculture
SES	State Emergency Service
SPCHQ	State Pest Control Headquarters

Appendix 1 State/Territory Action Plans

The following notes are adapted from the *Model Comprehensive State Management Plan for the Prevention and Control of Nonindigenous Aquatic Nuisance Species* (Katherine Glassner-Shwayder, Environmental Quality and Resource Management Program, Great Lakes Commission; URL: <http://www.glc.org/projects/ans/modelsmp.html#recomm>).

Action Plans such as contingency plans for marine pest emergencies and long-term pest or population control plans will preferably include the following sections:

- **Executive summary**, including:
 - a brief synopsis of each section of the Action Plan
 - a general statement on the purpose of the Plan from the perspective of the relevant State/Territory
 - an overview of the goals on which the plan is based
- **Marine pest species and/or population information**, including:
 - history of invasion
 - relevant biology and ecology
 - likelihood of spreading and impacts
- **Legal and policy basis** within the jurisdiction, including:
 - any linkages to Commonwealth policy, legislation and plans (for example contingency plans for marine pest emergencies could refer to this Manual)
 - State/Territory institutional arrangements
- **List of specific management programs and/or actions**, including:
 - management goals and associated problem statements (for example, the goals of long-term population control plans are likely to include preventing new outbreaks and reducing the impacts of established populations; hence there are likely to be specific needs for population reduction and containment strategies, community awareness and participation, training, and research)
 - strategic actions and specific tasks needed to address them within the jurisdiction
- **Implementation**, detailing (preferably in a tabular or other graphic format) specific tasks and associated:
 - responsibilities
 - budgets and other resource requirements (for example, contingency plans may refer to lists of stores, key personnel and their contact details)
 - timelines.
- **Monitoring and evaluation sub-programs** to monitor, evaluate and (if necessary) adjust implementation.
- **Glossary** (as required).
- **Appendices** (as required).

Appendix 2 Outline of Roles

The EMPPlan Control Centres Management Manual has been structured to reflect a basic 'field officer to manager to director' communication structure at the State/Territory level.

Additional roles that may be designated during the investigative and operational phases of an emergency response are outlined below. Each role is described as though it requires one person to perform it. That person is usually described as a *director, officer-in-charge, coordinator, controller or manager*.

The roles described can be merged or split to an extent that depends on:

- the nature and size of the outbreak
- the availability and capability of personnel
- the progress of the campaign.

Merging of roles will more commonly occur as people become sufficiently experienced that they can cope with dual/multiple roles and also when the scale of an operations is relatively small. Decisions as to which tasks may be merged or split require managerial skill generally developed through experience in field operations and/ or exercises.

CCIMPE Representative

The *CCIMPE representative* (CR) is the State/Territory representative on the Consultative Committee on Introduced Marine Pest Emergencies. This Committee is a national coordination body (refer Section 5). Each CR is responsible for providing relevant communication and input into the CCIMPE forum on behalf of the jurisdiction he/she represents. For incursions that are deemed to be eradicable, the CCIMPE representative of an affected jurisdiction is responsible for submitting a marine pest emergency response plan for CCIMPE's consideration.

Field Officer

Field officer (FO) refers to any regionally based departmental field officers such as fisheries officers. The FO may be the first point of contact in receiving news of an exotic marine organism. The same officer may be directed to conduct an initial inspection of the suspect site and assist in further operations. Other FOs may be called on to provide assistance such as providing notification/information to relevant stakeholders during an outbreak.

Operational Pest Control Centre Controller

An *operational pest control centre (OPCC) controller* will preferably have public relations, emergency management and marine operations experience relevant to the site of the outbreak. The OPCC controller is the officer-in-charge of the Operational pest control centre (OPCC, Section 3) that implements the pest control operations in the vicinity of an incursion. The OPCC controller is responsible for the operational direction of the pest control campaign in the vicinity of an outbreak.

Regional Contact Officer

The *regional contact officer* (RCO) will preferably have public relations experience and specialist knowledge of marine pests. The RCO collates reports of exotic marine organisms directly from the community or via a Field Officer. There may be only one RCO in the State/Territory.

The *regional contact officer's* primary responsibility is to act as an identifiable central contact point to facilitate a marine pest emergency detection system, principally via community and agency awareness and reporting (and potentially, to promote other forms of community participation in marine pest management such as pest removal campaigns). A detection or early warning system generating reports of marine pest detections is implicit in Sections 2.1.1 to 2.1.3, which describe how it would operate in the event of an emergency by channelling all reports to the RCO, but this manual does not explicitly define the system.

Other, related RCO responsibilities are to:

- collate and analyse marine pest information
- assess reports to identify those that may require more investigation
- alert the CR to suspected marine pest emergencies.

Regional Emergency Manager

The *regional emergency manager* (REM) will preferably have emergency management experience and specialist knowledge of disease or pest emergency procedures. The REM is responsible for emergency management operations in the region affected by an outbreak. This could be the RCO or a specialist emergency manager, and there may be only one REM in the State/Territory. Hence the REM has specific functions related to the region but could also be the officer the CR puts in charge of running:

- a single OPCC where an incursion is of limited extent
or
- coordinating the running of several OPCCs where there is more than one infested site in the region
or
- the State pest control headquarters (SPCHQ, Section 4), the strategic decision making body of the pest control campaign.

SPCHQ Director

The *SPCHQ Director* will preferably have emergency management experience and specialist knowledge of disease or pest emergency procedures. The *SPCHQ Director* is the officer in charge of the SPCHQ and is responsible for administrative functions relevant to the strategic direction of the pest control campaign.

Appendix 3 Reporting forms

Explanatory Notes

- A. This reporting system is designed so that initial reports by *field officers* or members of the public of marine pest detections can be prepared for the relevant *senior manager*. There are two reporting forms in this appendix:
1. The *initial reporting form* can be used by a *field officer* when receiving a report from one of a variety of sources (e.g. a slipway operator, vessel owner, port authority, general public) regarding the possible detection of an introduced marine pest incursion. At this stage the important questions are:
 - Who is providing the information and who else can we contact for more information?
 - What do you suspect?
 - Where is it?
 - Can we obtain specimens for further investigation?
 2. The *site investigation form* is used by the site investigation team to collect details at the site of a suspected incursion or outbreak including high priority issues such as tracing vector movements. The important questions are:
 - What is the nature of this incursion ? (extent, depth, surfaces covered, densities, size range and frequency of organisms etc)
 - What are the movements of water and other likely vectors into and out of the infested area?
 - What are the contact details of stakeholders? (such as property owners, port authorities etc)

Exotic Marine Organism

Initial Reporting Form

Field Officers completing this form must:

1. Provide their contact details at the space marked *
2. Fax this page to ()

Formatted: Font: 11 pt, Bold, Italic

1. Details of person who reported this finding?

NAME DR/MR/MRS/MS

(circle)

(surname)

(first name)

ADDRESS

TELEPHONE ()

(work)

()

(home)

E-MAIL

AFFILIATION / ORGANISATION

(if relevant)

* FIELD OFFICER'S (FO) NAME

FO TELEPHONE ()

FO E-MAIL

2. What has been found? SUSPECTED SPECIES

DESCRIPTION OF SPECIMEN/SPECIES

(distinguishing features)

CONFIDENCE IN IDENTIFICATION

(experience, taxonomic training, or other basis for assessment)

3. When was it found ? DATE OF DISCOVERY

4. Where was it found ? SITE NAME

DESCRIPTION

.....

LANDMARKS

.....

LATITUDE

LONGITUDE

MAP/CHART REFERENCE

.....

5. Have specimens been collected ?

YES

NO

If YES give information as to how to get a well preserved specimen to someone who can correctly identify it (eg. as appropriate: keep immersed in salt/fresh water, refrigerate, hold for collection, send to appropriate laboratory etc).

WAS A SPECIMEN PROVIDED TO FIELD OFFICER OR REGIONAL CONTACT OFFICER?

YES

NO

(If YES circle which officer)

6. Any Additional Information ...? (if possible, obtain supplementary information)

HABITAT DESCRIPTION

.....

(include seafloor or other substrate)

DEPTH OF INFESTATION

.....

DEPTH AT WHICH SPECIMEN WAS OBTAINED

.....

ABUNDANCE/QUANTITY

.....

(include estimate of area searched)

Exotic Marine Organism

Initial Reporting Form – Regional Office Use

File No:

Status of Reported Discovery

To be completed by the Senior Manager

1. *When was this report received?*

DATE RECEIVED _____

2. *Is a site visit by investigation team recommended?*

YES

NO

If YES provide this report to the State/Territory CCIMPE Representative.

REASON(S) _____

3. *Was a site investigation conducted?*

YES

NO

DATE _____

NAME OF TEAM LEADER _____

If YES obtain a copy of the Site Investigation Form and attach it to this report.

Within 7 days of the date received the Regional Contact Officer will contact the person who reported (Question 2) and/or filled in the form (Question 5) to advise them of the outcome and/or progress. .

4. *Was the reporter contacted and informed of progress?*

YES

NO

DATE _____

SIGNATURE _____

(Senior Manager)

Exotic Marine Organism

Site Investigation Form

File No:

Report of the Site Investigation Team

NAME OF SITE/AREA

DATE & TIME OF INVESTIGATION

The aims of this form are to guide investigation of a possible marine pest emergency and hence to record standard information such as:

- Who is conducting the investigation?
- What activities have been carried out?
- What has been found?

1. Details of Field Officer responsible for conducting the site investigation?

NAME DR/MR/MRS/MS

(circle)

(surname)

(first name)

POSITION

TELEPHONE ()

FAX ()

E-MAIL

ORGANISATION

RELEVANT TAXONOMIC EXPERIENCE

2. Details of personnel who assisted in the investigation?

NAME DR/MR/MRS/MS

(circle)

(surname)

(first name)

POSITION

TELEPHONE ()

FAX ()

E-MAIL

ORGANISATION

RELEVANT TAXONOMIC EXPERIENCE

NAME DR/MR/MRS/MS _____
(circle) (surname) (first name)

POSITION _____

TELEPHONE () _____ **FAX** () _____

E-MAIL _____ **ORGANISATION** _____

RELEVANT TAXONOMIC EXPERIENCE _____

NAME DR/MR/MRS/MS _____
(circle) (surname) (first name)

POSITION _____

TELEPHONE () _____ **FAX** () _____

E-MAIL _____ **ORGANISATION** _____

RELEVANT TAXONOMIC EXPERIENCE _____

Send this report to the relevant State Pest Manager within 24 hours of completing the site investigation.

DATE REPORT COMPLETED AND SIGNED

DATE REPORT SENT TO STATE CONTACT OFFICER

**I CONFIRM THAT THE INFORMATION IN THIS
REPORT ACCURATELY REFLECTS THE RESULTS OF
THE SITE INVESTIGATION CONDUCTED.**

(Investigation Team leader)

Appendix 4 Checklist for Director

- Initiate procedures to confirm the incident.
- Advise appropriate lead agency staff, stressing the confidentiality of the incident until its nature is confirmed.
- Confirm nature of incident.
- Arrange first meeting and select attending personnel.
- Select candidates for position of incident management coordinator.
- Appoint incident management coordinator.
- Register incident.

Brief:

- Executive Director;
- Minister;
- Interstate and Commonwealth Agencies;
- Industry;
- others as required (including recreational anglers, conservation groups, general public etc).
- Categorise the incident.
- Follow guidelines for first taskforce meeting.
- Appoint taskforce staff:
 - Incident management coordinator (may already be appointed)
 - Communications coordinator
 - Media spokesperson
 - Extension coordinator
 - Administrative officer
 - Legal officer
 - Operations manager
 - Mapping and data officer

Industry liaison officer
OHS representative

- Allocate resources and assign project code.
- Consider definition of boundaries of the IA and CA.
- Assess legislative options and legal powers required to institute necessary controls.
- Brief appropriate lead agency staff and industry.
- Plan for field activities.

Note: This checklist is provided as a guide and does not contain every action that may be required in responding to an emergency/incident. The checklist is not in any particular order of priority.

Appendix 5 Sample draft agenda for first meeting of incident management team

AGENDA

1. Introductions

Incident management coordinator

2. Situation report

Outline history and situation of incident

Confirm incident

Confirm identity of causative agent

3. Categorise incident

Relevant executive director to provide a notice to all staff involved

4. Incident management team appointments

Incident management coordinator

Resources manager

Administrative officer

Technical support manager

Other staff as required. For instance,

Legislative Officer

Communications coordinator

Media spokesperson

Extension coordinator

Herbicides/fungicides/pesticides/chemicals officer

Operations manager

5. Actions

- *Any legislative requirements:*
 - Chemical registration?
 - Movement controls for produce?
 - Are Acts adequate?
 - Do you need to gazette any areas?
 - Gazette inspectors
 - Provide identity tags
 - Confirm regulatory powers

-
- *Establish a temporary cost centre*
 - *Provide briefing note for Minister's office*
 - *Extension*
 - List and inform key contacts
 - Prepare extension material and distribute as required
 - Consider need for public meetings
 - Any visiting experts needed?
 - Create internal and external distribution lists
 - *Prepare media release*
 - *Brief the CCIMPE Chairperson*
 - Unofficially prior to confirmation
 - Officially when pest identification is confirmed — establish an interstate teleconference of CCIMPE if required
 - Prepare agenda of items for teleconference
 - *Establish working parties:*
 - To define extent and ramifications of problem
 - To determine initial quarantine or restrictive zones
 - To establish effects of outbreak and proposed actions on intrastate and interstate trade
6. **Prepare an action list** of key staff to be circulated to all members as soon as possible after the meeting
 7. **Prepare a telephone number list** including after-hours numbers
 8. **Industry liaison**
 - List and confidentially inform key industry contacts
 - Consider policy and need for industry meetings and extension
 - Industry members to be invited to attend a meeting for briefing and consultation following the initial meeting (teleconference if necessary)
 9. **Activate** field operations as necessary
 10. **Other business**
 11. **Next meeting**

Explanatory notes

Introductions

The incident management coordinator or his/her delegate will:

- identify him/herself as the person in charge and responsible for any decisions made with regard to the incident;
- make all necessary introductions;
- provide a brief overview of why those present have been called to the meeting;
- explain the ground rules for running the incident management team:
 - Ensure that the chain of communication is clear. For instance, a nominated manager should be given the responsibility of liaising with the lead agency executive and the executive director. The nominated manager must brief the executive promptly, so that extra demands are not placed on the incident management coordinator or other operational staff, diverting them from their task. This does not empower the nominated manager to act as a public spokesperson on the issue.
 - At the end of each item, nominate somebody to 'action' the item. Keep the action list, which will form the summary of the meeting.
 - Outline the use of action lists. Each incident management team member will be expected to keep his/her action list up to date.

Situation report

A situation report should preferably be prepared and distributed prior to the meeting (email/fax). This will give attendees time to assess the problem and may form the basis of any ministerial briefing notes, other reports or media releases.

A situation report should typically include the following items: an overview, location of infested sites [including map and grid reference(s)], situation at each infested site – *eg* pest density and distribution, estimate of likely duration of infestation, information on pest identification and likely source of pest, information on possible pest range in Australian waters, results of preliminary tracing / other investigations, actions taken to date, resources assigned, consideration on eradicability

Categorise incident

Categorise the incident so that all lead agency personnel clearly understand the priority to be given to it. Categories may range from incidents requiring no further resources or reporting after the emergency, to those requiring priority over other tasks from all staff.

4 of 6

The incident management team will regularly review the need for :

- adequate surveillance and monitoring to detect pest spread
- the incident management team to be upgraded to an SPCHQ (once the pest emergency is confirmed).
- (as the SPCHQ) - an emergency response to be terminated and/or changed to an ongoing management and control program.

In summary:

- Respond rapidly.
- Estimate the scale of the incident (or likely scenario).
- Agree to commit resources to its management (rarely will too many resources be committed for too long — in practice, human resources are usually underestimated).
- Estimate how long these emergency resources will be required, and when the level of response is to be reviewed.
- Ensure that all necessary approval and communication processes are addressed.

Incident management team appointments

The incident management coordinator or delegate will nominate individuals to act in the incident management team.

Even in small incidents, dedicate a number of people to do allocated tasks. Always allow for the incident management coordinator to be provided with an assistant if required.

Legislative requirements

An incident management team member will need to ensure that all actions are in accordance with the relevant legislation. Where appropriate and necessary, draft ministerial declarations of proclamations, or regulations.

Chemicals such as fungicides and herbicides may require urgent registration for use outside their current registration.

Explain the need for this action in the ministerial briefing, and recommend a departmental and ministerial course of action.

5 of 6

Cost centre

If the incident is likely to require extra resources, appoint an administration officer and establish a cost centre.

Briefing note for the Minister's office

The ministerial briefing should include all essential elements and sensitive issues, and estimate of the cost of the incident. The briefing note may form the basis of the media release and also provide the basic information for internal and external circulation lists. Inform key contacts about the incident confidentially. A list of key contacts should be considered at the initial meeting, in anticipation of a public announcement by the minister. Persons should only be informed on this basis if they agree not to take any action until a media release has been made.

Extension material/directives to lead agency staff

Keep all staff involved in the incident, as well as other lead agency staff, informed with dated and numbered information updates (eg 'Incident Update #2'). A memo indicating the priority of this project (the 'incident') and the degree of cooperation required by various staff should be issued under the name of the *executive director*.

It is important that staff be reminded that any information or knowledge of the incident that they might have, which has not been made public through media releases etc, must remain confidential.

It may be desirable to have extension material available for distribution both to staff and to the public as quickly as possible. An acceptable timeframe is two to three days. The extension material should describe the problem in words and graphics, explain the significance of the problem and say what is required of both affected and unaffected stakeholders. It should also contain contact details.

Media release

A media release will be required for any incident, and must be screened by at least the communication coordinator. In some cases it may not be issued immediately but will be kept for release as required.

Create a distribution list, or lists for situation reports and other extension material

Table a distribution list for development at the meeting. Taskforce members will then have the opportunity to check and update it.

Where possible, compile and maintain lists of key contacts in government and industry in advance. The lead agency should keep a record of where to obtain relevant mailing and contact lists. These separate distribution lists should normally include:

- a circulation list of taskforce members, the executive and the minister's office for confidential briefings;
- an internal distribution list for staff and others acting in the interests or under the direction of the department/agency; and

6 of 6

-
- an external distribution list for other stakeholders and people with an interest in the incident.

In general, coordinators should not rely solely on e-mail distribution of information to key players, but should also distribute fax/hard copies to ensure that the information reaches the target readership.

Develop an initial agenda or checklist of tasks for each manager and operational unit, incorporating this agenda and adding further detail to the foregoing items.

Action list

Prepare an action list to be circulated to all taskforce members as soon as possible after the end of the meeting.

Telephone numbers

Create a list of key staff telephone, fax and mobile numbers and distribute it to relevant switchboards and staff.

Next meeting

Hold meetings regularly and as required, but keep them brief. Use action plans as the basis of the agenda for future meetings.

Appendix 6 Guidelines for Preparing an Emergency Eradication Operational Response Plan

A GUIDE to the structure and content of an **emergency eradication operational response** (EEOR) plan follows. The sub-headings may be regarded as a checklist to aid in the development of an EEOR plan and the plan may not necessarily need to refer to all items listed in the sub-headings. The amount of detail required will depend on the nature, stage and scale of the emergency response.

An EEOR plan submitted for approval by the NMG should ideally address the core components marked with an asterisk (*). Other components may be developed, and their approval sought, in accordance with a timetable agreed by CCIMPE. Budget items for which indicative estimates should be provided are outlined below (see items denoted ^^).

1. Status Report on Suspect Pest*

Overview
Status of pest identification
Number, location and size of infested sites of infested sites

1.4 Estimated pest density in infested sites

Likely source of introduction
Estimated size of immediate area susceptible to infestation

Estimated potential invasion range within Australia

Action taken to date

Feasibility of eradication

2. Proposed Response Activities* (containment and eradication strategies)

2.1 Eradication (if appropriate)

2.1.1. Eradication procedures for infested sites

2.1.2. Disposal

2.2 Quarantine and movement controls on potential vectors

2.2.1 Restricted area

2.2.2 Control area

2.3 Inspection, disinfestation and clean-up procedures for potential vectors

2.4 Surveillance, tracing and pest identification

2.4.1 Local, regional, interstate

2.4.2 Resources for surveillance, tracing and identification

2.4.3 Notifications (industry associations, port authorities, community groups, other relevant parties)

2.5 Situation Reports (preparation and dissemination)

3. Public relations *

3.1 Lead responsibility for liaison with media

3.2 Port authorities, industry and community liaison (incl. hotline)

4. Operational Pest Control Centre (OPCC) *

4.1 OPCC site

4.2 Equipment

4.3 Operations

4.3.1 Pest investigations/surveillance

4.3.2 Restricted area movement and security

4.3.3 Infested site operations

4.3.4 Other field operations

4.4 Technical

4.4.1 Invasion biology

4.4.2 Public relations

4.4.3 Technical specialists

4.4.3 Liaison

4.5 Resources

4.5.1 Induction for incoming staff

4.5.2 Administration (accommodation, meals, transport etc)

4.5.3 Emergency services liaison

4.6 Forward command post (if necessary)

5. State Pest Control Headquarters (SPCHQ) *

5.1 Structure, management and staffing

5.2 Technical Support

5.2.1 Industry liaison

5.2.2 Public Relations

5.2.3 Legal Support

5.2.4 Invasion biology and other specialist support

5.3 Operations

5.3.1 Tracing, surveillance, movement controls

5.3.2 Mapping and information systems

5.4 Resources

5.4.1 Administration

5.4.2 Emergency services liaison

6. Information Systems and Management

6.1 Register of infested, suspect and dangerous contact sites

6.2 Control centres information management

6.2.1 Message forms and log sheets

6.2.2 Files

6.2.3 Personnel

6.2.4 Information Boards

6.2.5 Staff information briefings

7. Additional Research and Information Needs

8. Accounting Procedures

9. Monitoring of Cost-effectiveness of an EEOR plan

^^ N.B. Indicative budget items for each proposed response activity:

- Staffing
 - 7.3 Permanent staff
 - Volunteers/emergency services personnel
 - Contract personnel
- Operating Expenses
- Compensation (if appropriate)

Appendix 7 Interim Trigger List of Introduced Marine Pests

CRITERIA

**Necessary and sufficient information to justify including a species on the trigger list
(all four need to be satisfied)**

1. Demonstrable invasive history; **AND**

-
2. Demonstrable impact in native or invaded ranges on:
 - economy;
 - environment;
 - human health; or
 - amenity; **AND**
 3. Inferred as likely to have major impacts in Australia based on the available data and characteristics of Australian environments and marine communities; **AND**
 4. One or more relevant translocation vectors must be operating

Necessary and sufficient information to justify removing species from the trigger list (any one needs to be satisfied)

1. Scientific, empirical data show that impacts overseas are less than previously thought.
2. Scientific, empirical data show that impacts in Australia are likely to be less than previously thought.
3. Already is or becomes widely distributed in Australia.

Interim List

Species*	Common Name	Native Distribution	Introduced Distribution
<i>Aurelia aurita</i>	Moon Jelly	Northern Hemisphere	Hawaii
<i>Caulerpa taxifolia</i> Aquarium strain	Marine Algae	Native strains circumtropical	Invasive 'hybrid' in Mediterranean Sea
<i>Cyanea</i> spp.	Lion's Mane Jelly	Northern Hemisphere	?
<i>Dreissena bugensis</i>	Quagga Mussel	Europe	North America
<i>Eriochir sinensis</i>	Chinese Mitten Crab	North West Pacific	Europe; West North America
<i>Mnemiopsis leidyi</i>	Comb Jelly	Western Atlantic	Black Sea; Mediterranean
<i>Mytilopsis sallei</i>	Black Striped Mussel	Caribbean	Hong Kong; India; Singapore; [Darwin, NT]
<i>Pfiesteria piscicida</i>	Dinoflagellate	North West Atlantic	?? (proposed as introduced to N America)
<i>Potamocorbula amurensis</i>	Asian clam	North West Pacific	North East Pacific (SF Bay)
<i>Rapana venosa</i>	Gastropod	North West Pacific	North West Atlantic (Chesapeake Bay)
<i>Sargassum muticum</i>	Asian Seaweed	North West Pacific	North West Pacific; England
In Australia, but not widespread			
<i>Asterias amurensis</i>	Northern Pacific Seastar	North West Pacific	Tasmania, Victoria
<i>Codium fragile</i> spp. <i>tomentosoides</i>	Broccoli weed, Dead man's fingers	North East Pacific	Tasmania, Victoria
<i>Musculista senhousia</i>	Asian Date or Bag Mussel	North West Pacific, South Asian Seas	Tasmania, Victoria, Western Australia
<i>Undaria pinnatifida</i>	Undaria Seaweed "wakame"	North West Pacific	Tasmania, Victoria

* Note that this list is currently limited to marine and estuarine species.

Appendix 8 Eligible Costs

The following information outlines the costs eligible for reimbursement during an emergency operation. These are based on established principles from the AUSVETPLAN emergency management structure.

Key Costs Eligible for Reimbursement

- Salaries or wages [and associated costs (payroll tax, superannuation etc.)] for staff recruited by the organisation to assist directly with the eradication will be eligible for reimbursement.
- After a period of three (3) months from the commencement of an emergency eradication operational response, fifty percent (50%) of salaries and/or wages costs subsequently incurred due to backfilling of personnel engaged in the emergency response will be eligible for reimbursement.
- Allowances for staff employed in the introduced marine pest emergency will be eligible for reimbursement
- Overtime incurred directly as a result of the introduced marine pest emergency will be eligible for reimbursement.
- Operating expenses directly incurred in the eradication program will be eligible for reimbursement.
- Essential equipment required to meet the immediate operational needs of the lead response agency, will be eligible for reimbursement. Such equipment shall be sold or valued at the time that funding arrangements are concluded and the proceeds of any sale or equivalent valuation, are to be distributed to the Commonwealth, all States and the Northern Territory in the same proportion as contributions actually made by each entity. Any variation to this procedure is subject to the approval of all participating agencies.

Key Costs NOT Eligible for Reimbursement

- Salaries or wages of staff who are, or would be, employed by the responsible Commonwealth, State or Territory organisation, irrespective of the introduced marine pest emergency are **not** eligible for reimbursement.
- Capital expenditure on major items such as motor vehicles or buildings will **not** be eligible for reimbursement.
- All stores and equipment purchased with funds which have been subsequently reimbursed via the interim cost-sharing arrangements shall be sold or valued at the time that funding arrangements are concluded and the proceeds of any sale or equivalent valuation, will be distributed to the Commonwealth, all States and the Northern Territory in the same proportion as contributions actually made by them. Any variation to this procedure is subject to the approval of all participating agencies.

3.2.3 *Restricted movement provisions / draft proclamation (and map if other than entire State/Territory)*

3.3 Tracings

3.4 Surveillance

4 DISCUSSIONS/CONCLUSIONS OF CCIMPE *Chair/Representatives*

5 MOVEMENT AND TRADE ISSUES

5.1 Intrastate - outside Restricted/Control Areas

5.2 Interstate

5.3 International

6 ADMINISTRATIVE ARRANGEMENTS

6.1 Additional staff/resources

6.2 Estimates of cost

7 NOTIFICATION TO INDUSTRY/INTERNATIONAL SECTORS

1. State

2. National

7.4 International

8 MEDIA RELEASE

Affected jurisdiction

8.1 Local

8.2 State

8.3 National

9 RECOMMENDATIONS TO NATIONAL MANAGEMENT GROUP

Chairperson

9.1 Advice of the occurrence of the pest

9.2 Feasibility and mechanisms for emergency response

9.3 Invoking the Commonwealth/States interim cost-sharing agreement

10 OTHER BUSINESS

11 NEXT MEETING

12 CLOSE