Vessel Management Plan (VMP)

Deepwater Factory Trawler over 28m

August 2009 • Version 4.0 •

Company Name:
(*Type in here*)

Vessel Name:
(*Type in here*)

DeepWater Group
Sustainable Oceans • Sustainable Fisheries

Contents

Purpose and Rationale

Purpose

The purpose of the Vessel Management Plan (VMP) is to ensure that:

1. Seabird mortalities are mitigated by reducing seabird interactions with deepwater factory trawlers (with a MFish registered length of 28m and over)
2. Your vessel has robust, documented seabird interaction mitigation procedures in place, including:
    a. Having at least **two Seabird Scaring Devices on board**, one deployed at all times, and,
    b. Managing offal discharge by **not discharging offal during hauling or shooting operations**, and
    c. where possible, holding all discharge **while there is trawl gear in the water, or, batching offal discharge**
3. Your vessel is actively involved in seabird mitigation and offal control method improvements through ongoing observation, information gathering and review processes
4. Information regarding unusual levels of seabird interactions is provided in real time to help incident management.

Rationale

Seabirds are attracted to offal and discards from the vessel or whole fish in the trawl net. Once attracted, they are at risk of fatal injury or drowning.

Offal management is the primary method to reduce the number of, and risk to, seabirds in the two danger areas around your vessel.

These two areas are:

1. **The warps**; in particular where they enter the water and birds collide with them.
    a. Mandatory mitigation devices serve to scare seabirds away from the warp danger area
    b. Ceasing, reducing or controlling offal discharge while warps are in the water will also greatly reduce interactions.
2. **The trawl net**; when it is on or near enough to the surface for birds to become caught (some birds can dive below the surface to enter a net).

Net captures occur during both shooting and hauling of the net It is important that you eliminate offal discharges before and during both hauling and shooting and that you properly clean the net before shooting to reduce the risk of net captures. Minimising the amount of time the net is on the surface will also reduce this risk.

The Deepwater Group Ltd (DWG) seabird management practices are summarised in *Appendix 2: the 10 Commandments for Saving Seabirds*. Your crew should be familiar with these basic seabird mitigation principles.

Reporting

Vessel Action (Trigger Points)

If, in any 24 hour period you:

- **capture 3 or more large birds** (eg albatrosses), or
- **capture 5 or more small birds** (eg petrels, prions, shearwaters), or

if, in any 7 day period you:

-**Capture 10 or more of any species**, you must:

a. Record the seabird interactions, and any other relevant information in the **Bridge Log** and

b. Report to your **onshore Vessel Manager** promptly and

c. **Reassess** your seabird mitigation, offal control and net cleaning effectiveness and

d. *Wherever appropriate*, **take additional steps** to mitigate risk and

e. **Complete** the mandatory *MFish: Non-Fish/ Protected Species Catch Return* form:

   i. Identify seabird type captured

   ii. Use the species code or the type code supplied by MFish as listed here:

   XAL - Albatrosses (Unidentified)
   XXP - Petrels, Prions and Shearwaters (Unidentified)
   XHG - Shags (Unidentified)
   XLA - Gulls and Terns (Unidentified)
   XPG - Penguins (Unidentified)

   iii. Record any leg band numbers on the form

f. Meet your legal requirements. **Return the *MFish: Non-Fish/ Protected Species Catch Return* form to MFish** with the vessel's *MFish: Trawl Catch Effort and Processing Return* form at the end of the trip.

Onshore Vessel Manager Action

Your **onshore Vessel Manager** must notify the **DWG Seabird Liaison Officer** within 24 hours of trigger breaches so that any follow-up deemed necessary can be carried out.

DWG Contacts

Phone:	03 545 7020	Fax:	03 545 7021
Email:	dwg@fishinfo.co.nz	Post:	PO Box 1460, Nelson 7010.

After Hours contacts

John Cleal	021 305 825	john.fvms@xtra.co.nz or
Richard Wells	021 457 123	richard@fishinfo.co.nz

Vessel Management Plan Procedure Form

Company Contact Details	**Company Name**	**Contact Person**		**Address**	
	Phone	**Mobile**		**Email**	
Vessel Details	**Name of Vessel**	**Vessel Type (tick type in box)**		**MFish Registered Number**	**Call Sign**
		H&G Trawler			
		Fillet Trawler			
		Surimi Trawler			
Designated Person or Vessel Manager	**Name**	**Area of Responsibility**			
		- Supply of mandatory and other mitigation equipment - Briefing of crew - Supply of MFish seabird identification and type codes - Management of VMP compliance - Auditing and review of the VMP onboard systems and corrective actions - Reporting to MFish and DWG			
	Position				
Vessel Master (or duly delegated staff/ crew onboard) (see *Vessel Master's Responsibilities and Vessel Responsibilities*)	**Name**	**Area Responsible for**			
		- Ensuring on-board compliance with VMP - Crew briefing and awareness - Ensuring correct seabird identification and reporting procedures are followed - Constantly monitor and adjust mitigation and offal control requirements to suit fishing operations, conditions and risk to seabirds - Record events as per VMP procedures			
	Position				

This vessel is using the following mandatory bird scaring devices:

Seabird Scaring Devices *Appendix 1: Mandatory Seabird Scaring Device Specifications* ***Personalise to suit your vessel and delete items that don't apply.***	**Item**		**Location**	**Details**
	A	Tori Lines	Stern, outside port and starboard warps *(delete if none used)*	Installed and managed in compliance with MFish regulations /Gazette notices
	B	Bird Baffler a. 2 Boom, or b. 4 Boom *(delete either a or b)*	Stern quarters, port and starboard *(delete if none used)*	Installed and managed in compliance with MFish regulations /Gazette notices
	C	Warp Deflector	On port and Starboard warps *(delete if none used)*	Installed and managed in compliance with MFish regulations/Gazette notices
		Other	*(delete if none used)*	*Record description and use.*

This vessel is using the following offal management procedures and equipment:

Procedures and Equipment
(See *Offal Management* for details)
Delete this section if you have a meal plant and or mincing system

Item	Location	Details
Batching Offal: Tanks, bins, Dolabs, augers, conveyors etc. *(Choose what you will use, delete others)*	Deck and factory deck	1. Have the capacity to hold all offal, fish waste and whole discards during the tow and discharge when the net is on the deck *(delete if you cannot)* 2. Batch discharge at (list the vessels/holding *interval time between batches when towing*) ??? minutes/hour intervals when towing 3. Store offal and fish waste (into) *tank, bins, conveyors, auger etc*) list what you use for storage holding capacity is approx ? kg capacity (*list your holding capacity*) 4. Stop discharging offal and fish waste during hauling & shooting periods when the net is near to or on surface. (The period defined on page 11) 5. At times in the squid fishery offal & fish waste volumes are lower during the season hold offal & fish waste as long as practicable Document contingency plans and / or contingency equipment (see *Contingency Procedures and Equipment*)

Procedures and Equipment
(See *Offal Management* for details)
Delete this section if you don't have a fish meal plant

Item	Location	Details
Fish Meal Plant *(delete if not applicable)*	Below factory deck	1. To fishmeal ALL offal, fish waste and whole discards, capacity to meal all waste when fishing (discharge any fish waste when the gear is on deck) *(delete if no, use clause 2A and 2B)* 2. If the fishmeal plant does not have the capacity to fishmeal all offal, fish waste and whole discards during high processing volumes hold/store and batch discharge excess volume by
	Factory deck	A. Batch discharge at (*(list the vessels/holding interval time between batches when towing)* ? minutes/hour intervals when towing B. When Batch discharging the vessel is Storing offal and fish waste (into) *tank, bins, conveyors, auger etc)* list what you use for storage holding capacity is approx ? kg capacity *(list your holding capacity* 3. Stop discharging offal and fish waste during hauling & shooting periods when the net is near to or on surface. (The period defined on page 11)
Hasher *(delete if not applicable)*	Factory deck	Hash all offal and discards before mealing. Increases the amount of species to meal. Hashing offal and waste normally discarded. *(delete if no)*

	Squid Season		Document contingency plans and / or contingency equipment if meal plant fails (see *Contingency Procedures and Equipment*.)

This vessel is using the following offal management procedures and equipment:

Procedures and Equipment
(See *Offal Management* for details)
Delete this section if you don't use mincing as your main offal control system

Item	Location	Details
Mincer (for main offal overboard discharge)	Factory deck	1. Mince all offal, fish waste and whole discards and discharges/pumps continuously or as the water and mince volumes trigger the auto pumping system to engage during fishing *(delete if no, use clause 3 A and B)* 2. Pumping system can be stopped, during hauling & shooting periods when the net is on or near to the surface (the period defined on page 11) *(delete if no)* 3. The vessel minces and batch discharges offal and fish waste: C. Batch discharge at (*list the vessels/holding interval time between batches when towing)* ? minutes/hour intervals when towing *D.* Storing offal and fish waste into (tank, bins, conveyors, auger etc) *list what you use for storage*. Holding capacity is approx*?* kg capacity *(list your holding capacity above)* If mincer fails document your holding/batching contingency plans and / or contingency equipment (see *Contingency Procedures and Equipment*.)

Procedures and Equipment
All vessels require this section
(See *Offal Management* for details)

Item	Location	Details
Chutes and Conveyors	Factory deck	Modify and maintain chutes and conveyors in good condition to reduce accidental spillage to the floor.
Fish: Non quota species discards	Deck and factory deck	Any damaged fish or non-quota fish quantified then discarded from deck will be discarded in a manner that minimises the risk of the discards tracking back under the warp wires and not when the net is on the surface. Best discharged when the net is on deck.
Sump pumps	Factory deck	Pumps used to clear water from the factory deck, may discharge pieces of offal accidentally lost to the floor
Open scuppers *(delete if not applicable)*	Factory deck	Minimise spillage of offal etc out of all scuppers. Use grating systems to stop volumes of offal before they reach the scuppers: where safe to do so.
Other *(delete if not applicable)*		Description and use.

This vessel is using the following offal contingency procedures and equipment:

Contingency Procedures and Equipment

(See *Offal Contingency Management and Fishing Operations* for details)

Delete section if not batching as main offal control

Item	Location	Details
Batching: tanks, fish cases, dolabs, conveyors, augers etc.	Factory deck *(Choose what you use, delete others)*	If the holding/batching equipment or procedures fail, we are able to use *(what equipment - ie, fish bins etc)* for batching until repaired or changes made. *(List equipment and procedures here)*
Offal control capacity	Factory Deck	Deploy additional mitigation if there is increased risk of seabird captures Have the capacity to hold and stop offal and fish waste discharging during hauling & shooting periods when the net is on or near to the surface. (defined on page 11)

This vessel is using the following offal contingency procedures and equipment:

Contingency Procedures and Equipment

(See *Offal Contingency Management and Fishing Operations* for details)

Delete this section if you don't have a fish meal plant

Item	Location	Details
Fish Meal Plant *(delete if not applicable)*	1. If meal plant is under service, all offal and discards are to be held in the meal plant hopper until repairs are complete. 2. If repairs cannot be made at sea, and the trip is to continue without the meal plant: a. Have the capacity to hold and stop offal and fish waste discharging during hauling & shooting periods when the net is on or near to the surface. (defined on page 11). (*Change as required).* b. Deploy additional mitigation if there is increased risk of seabird captures	
Hasher *(delete if not applicable)*	- If hasher fails & unable to effect repairs by-pass this machine and offal and fish waste can go straight to the meal hopper. Any species or material that cannot be fish mealed will be: - Stored on board and only discarded when not fishing or: - Must have the capacity to hold and stop offal and fish waste discharging during hauling & shooting periods when the net is on or near to the surface. (defined on page 11).	
Meal Plant Hopper *(delete if not applicable)*	- Use as buffer tank to allow for any short term maintenance or repairs	

Contingency Procedures and Equipment

Delete section if don't use mincing as main offal control system

Item	Location	Details
Mincer *(delete if not applicable)*	- Carry spare parts in the event of equipment failure If mincer cannot be repaired, be able to bypass the mincer and either ; *(Surimi processor may need to re-write this section again)* 1. Batch discard have the capacity to hold and stop offal and fish waste discharging during hauling & shooting periods when the net is on or near to the surface. (defined on page 11) (*delete if no)* 2. Batch discharge at (*list the vessels/holding interval time between batches when towing)* ? minutes/hour intervals when towing (*delete if no)* 3. Continuous discharge; report main offal control failure to the shore manager and Deploy additional mitigation if	

Contingency Procedures and Equipment ***All vessels require this section***		there is increased risk of seabird captures	
	Item	**Location**	**Details**
	Night Time Repairs	Repairs to factory offal equipment or fishmeal plant when possible should be carried out at night when discharges present less risk to seabirds	
	Offal control system failure (i.e. meal plant or mincing system failed)	Bridge	Notify: ASAP - shore/vessel manager

Vessel Management Plan Responsibilities

Your Vessel Responsibilities

Your vessel Master will:

- Deploy one or more of the mandatory mitigation devices.
- Deploy any other device(s) to best suit weather, fishing and processing conditions to minimise risk during periods of high seabird interactions or observed captures.
- Complete regular maintenance checks on mitigation gear to ensure compliance with specifications (see *Appendix 1*) and carry appropriate spares.
- Inspect warps regularly and ensure they are spliced using methods that do not leave sprags (ie, splices should be whipped).
- Ensure all appropriate (including factory) personnel are adequately trained.
- Ensure key crew are briefed on the VMP procedures and fully understand the actions required.
- Be aware that when the vessel is turning as this may expose a warp wire outboard of the hull in line with offal discharge and may (when birds are present) increase likelihood of warp strike.
- Be aware of seabird activity around the vessel and assess risks.
- Be able to identify increased numbers of (or risk of) seabird interactions with warps and nets and adjust procedures to minimise the risk at the time.
- Have a copy of *The 10 Commandments for Saving Seabirds* (see *Appendix 2*) posted on the Bridge
- Ensure correct reporting

Your vessel must:

- Not discharge offal and fish waste during hauling and shooting periods.

  This period is defined by the doors reaching the surface until the codend is on deck when hauling, and from when the cod-end is hauled off the deck until the doors are below the surface during shooting.

- Shoot and haul the net as quickly as practicable and always seek to minimise the time the net remains on the surface.
- Always clear net of stickers before shooting.
- Avoid mending the net while it lies on the surface, when there is a high risk of net captures.
- Note that net binding can be used to prevent captures observed to be occurring during shooting. Net binding consists of tying short lengths of rope at intervals down the length of the trawl's bigger netting and rope meshes. Held with slip knots, these pull apart when the force of the doors spread the net during shooting (contact DWG for their net binding instructions/procedures).

Your vessel must:

Follow at least two of the following offal management strategies:

All Vessels	1. Your vessel will manage and reduce all possible accidental factory floor offal and fish waste spillage to reduce offal being washed overboard through the scuppers or sumps AND follow **AT LEAST ONE OTHER** of the following strategies:
Hold	2. Have holding or fish-meal capacity to ensure all offal and fish waste is held onboard while fishing. Any discharges should occur when not fishing (i.e., when the trawl net is on the deck), **OR**
Batch	3. Hold and release at intervals (batch / discharge) during the tow if it is not possible to hold for the duration of the tow. When batching: **a)** **Always** stop offal and fish waste discharge when hauling and shooting (i.e., no offal and fish waste is be discharged when the trawl is near to or on surface). b) Maximise the holding/batching capacity in accordance with your vessel's processing and operational capabilities. c) The minimum best practice capacity for offal and fish waste to be held before discarding is 30 minutes. Your vessel should have the capability to maintain this batching volume to match freezing and processing capacities during fishing (factory wash sump pumps, scupper discharges, and mincer discharge systems are not included). d) Discharge a batch overboard as rapidly as possible. Five minutes is desirable; more than 10 minutes is too long. A rule of thumb is to hold for 30 to 60 minutes and discharge in 5 to 10 minutes, **OR**
Mince	4. Where possible stop offal and fish waste pumps from discharging during hauling and shooting periods if using mincers to discharge offal and fish waste as their main offal control system.

Offal Contingency Management

In addition to the vessel's main offal management system detailed in *Vessel Management Plan Procedure Form - Procedures and Equipment*, the vessel must document contingency equipment or procedures to manage risk in the event of equipment failure (*Vessel Management Plan Procedure Form - Contingency Procedures and Equipment*):

1. If the offal management system fails you should have contingency equipment and/or procedures to stop offal discharges from occurring when the net is on or near the surface when hauling and shooting.
2. Note that high catch rates of non-quota or Sixth Schedule of the 1996 Fisheries Act by-catch exceeding "normal" catch volumes (ie, large bag of spiky dogs) in which volumes may exceed the crews work rate to sort/hold and or batch the fish and or could affect the vessel's safety may require continuous discharging.
3. **This should be an exceptional event and the captain should alter his fishing practice to avoid a repeat and log the event in the Bridge Log.**
4. Record notable events in the Bridge Log.
5. Carry sufficient replacement parts for all equipment described in this VMP.

Use and Care of Seabird Scaring Devices

Use of Seabird Scaring Devices

To ensure best risk management for seabird mitigation and equipment failure, your vessel should have onboard two different types of mitigation device to:

1. Suit different weather and sea conditions (in suitable weather conditions, the tori line is the most effective device)
2. Be able to deploy a contingency device if the vessels main offal control system fails and there is an increased risk of seabird captures
3. Have a full back up of a mandatory device for risk management of total loss of device(s).

Care of Seabird Scaring Devices

Care of seabird mitigation devices should be on the following basis:

1. Have crew check your mitigation device(s) during the voyage to ensure they meet the regulations, are operating effectively and meet mandatory specifications (see *Appendix 1*).
2. Undertake careful repairs to failed or damaged equipment, checking repairs against specification.
3. Have ample spare parts in stock to replace broken or failed equipment.
4. Return to port if unable to deploy any mandatory mitigation devices.
5. Record events in **Bridge Log**.

Handling Live Seabirds

When, despite precautions, seabirds are incidentally captured and are still alive, you must immediately make every reasonable effort to ensure that birds are released alive:

1. Crew must attempt to remove seabirds from netting or meshes without either jeopardising the life of the bird or putting themselves at risk
2. Crew should always wear gloves, long sleeves and protective eyewear when handling seabirds, as they have sharp beaks and are capable of inflicting serious bites.
3. For birds entangled in the meshes it is best for one crew member to hold the bird with its wings firmly against its body, with head, neck and feet supported, while another crew member attends to the net meshes. If the bird has its head through the meshes, it's often easiest to peel the meshes back from the tail and over the head. This method can sometimes mean it is not necessary to cut the net meshes.

Offal Management Rationale

Offal Management Rationale

1. The holding time for batching of 30 minutes is based on reducing the risk of net captures during hauling and shooting times and allows your vessel to hold offal and fish waste during these times.
2. Discharging "batches" quickly during fishing (while towing) reduces the time offal and fish waste is in the water within the warp danger zone. The rate in which you get a 'batch" into the water and out beyond the warp danger zone is crucial to reducing the risk of warp strikes. Long discharge periods, even if after a long holding period, become equivalent to continuous discharge, as birds have time to congregate in the warp danger zone.
3. It is not recommended that your vessel holds offal and fish waste for a minimum of 30 minutes to a point where it takes much longer than 10 minutes to discharge unless discharge can occur while your vessel is not fishing.
4. Sea trials have shown that if you hold offal and fish waste and do not discharge for 4 hours or more, the numbers of seabirds around the vessel decreases, this reduces the overall risk of incidental capture.
5. If your vessel relies on batching for the main offal control measure, you should have equipment and systems to allow this process to be mechanically automated where possible. It is not ideal to manually handle large volumes of offal and fish waste.

Ideal Offal Control and Discharge procedures

Offal Management System	Storage Capacity	Shooting and Hauling Times	Action during Shooting and Hauling
Fishmeal plant	Full holding capacity	30 minutes	n/a
Fishmeal plant	Partial holding capacity	30 minutes	Hold discharge until gear is underwater or on deck, and maintain batching while towing
Discharge only	Varies	30 minutes	
Mincing system	n/a	30 minutes	Prevent mincer discharge while shooting and hauling if possible

Offal Manage-ment Systems

Standard	Offal Management System	Holding Capacity	Discharge
Best	Full capacity meal plant	All offal	Only discharge when gear is out of the water
Good	Batching Bin capable of 30+ minutes holding and emptied quickly	30 minutes	- Hold offal while shooting or hauling Discharge 30+ minutes of held offal in 5 (maximum of 10) minutes
	Mincing	30 minutes if possible	- Prevent mincer discharge while shooting and hauling if possible

Document Control

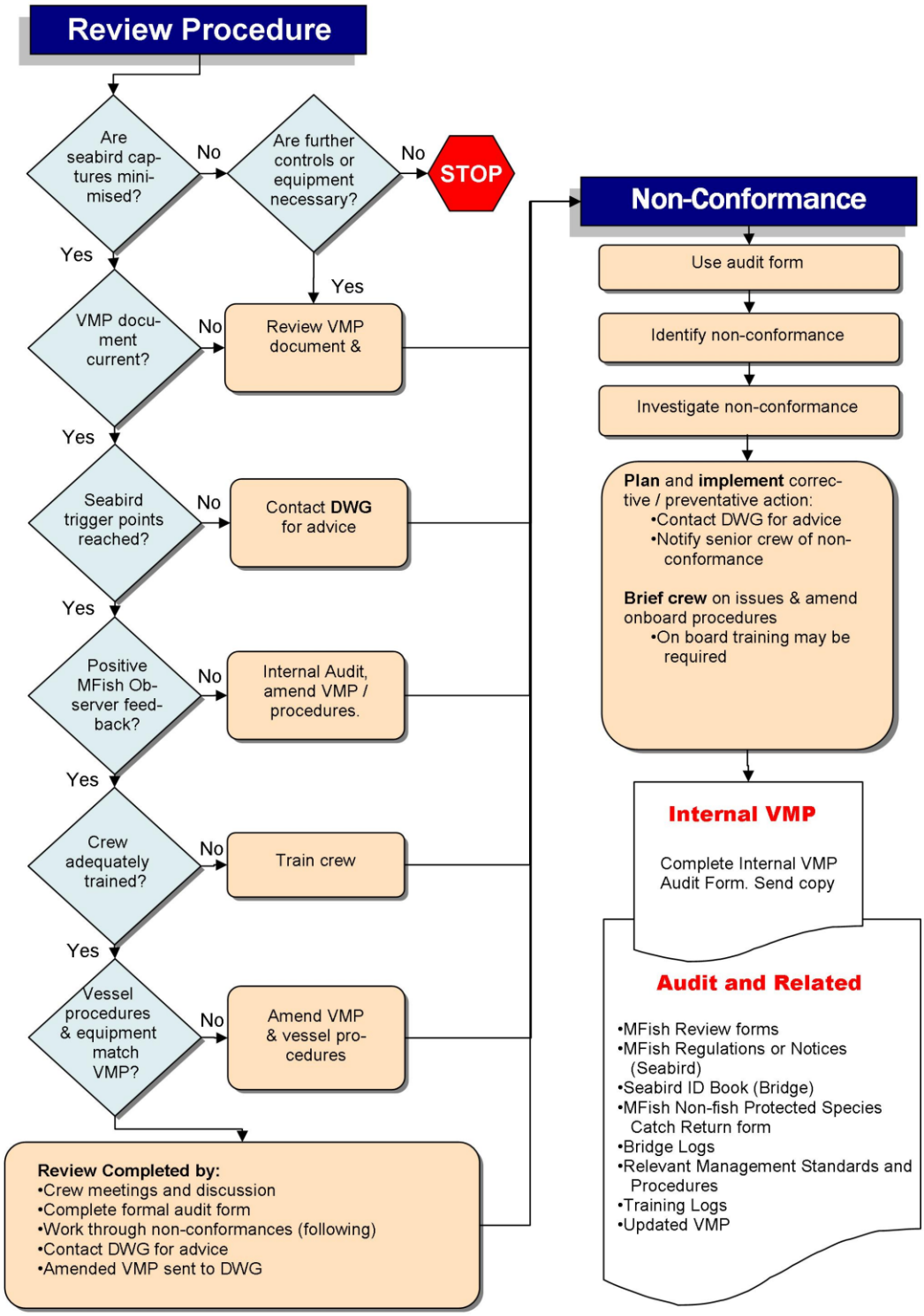
VMP Internal Audit

- You should seek advice as required from DWG at any time, however you must also regularly review your own VMP and its procedures.
- It is YOUR responsibility to ensure regular reviewing of your vessel's mitigation and offal control methods and adherence to this VMP.
- You must complete an **annual internal audit** of your VMP document and procedures, each year in August.
- The DWG require a copy of your audit documentation by 15 September.
- Use the flowchart and form on the following pages to complete the *Internal Vessel Management Plan Audit Form*
- MFish Observers will regularly check your adherence to your VMP. To understand what will be reviewed, a copy of the *MFish Observer VMP Review* is available in *Appendix 3*. This review form will be periodically updated by MFish and new versions will be made available to you at your annual VMP review.

VMP Internal Audit Procedure

1. In AUGUST each year you complete your *Internal Vessel Management Plan Audit Form* (see following *Internal Vessel Management Plan Audit Form*)
2. By September 15 each year, you forward the *Internal Vessel Management Plan Audit Form* to the **DWG**.

Internal Vessel Management Plan (VMP) Review



Internal Vessel Management Plan Audit Form

Name of Vessel	Auditor's Name	Review Date	Conforms?
			Yes / No

Item		Location / Subject	OK
Non-Fish Protected Species Catch Return	Bridge	Completed and being furnished to MFish as required (with copy to DWG)	☐
Trigger points	Bridge	Was a trigger point reached? If so did the captain report this to shore management? Did shore management contact DWG?	☐
Bridge Log	Bridge	Check that Bridge Log has been used for recording any mitigation equipment failure, notable interactions.	☐
MFish Observer Audit	MFish	MFish Vessel Management Plan Review audit form(s) received	☐
Mitigation Methods	Procedure	Check recorded equipment matches equipment being used and on board, check all mitigation gear is being maintained to the correct specification	☐
	Personnel	Check contingency plans are properly recorded	☐
Offal Control Methods	Procedure	Check recorded equipment matches equipment being used on board, check VMP procedures are followed	☐
	Personnel	Check contingency plans are properly recorded	☐
Corrective Actions taken	Previous Review Form	Check that previous corrective actions have been carried out	☐
Onboard Management	Bridge	Are officers and crew monitoring changing conditions and making changes to offal mitigation devices and methods when to risk to seabirds increases?	☐
Training	Personnel	Check crew in key positions are well aware of the VMP and its procedures and are maintaining equipment and onboard management systems to meet the VMP requirements	☐
Safety Hazard Management	Bridge	Have hazards associated with the equipment or procedures to adhere to the VMP, been assessed/ identified and crew advised	☐
Changes advised or details of non-conformance (comments) Contact DWG for advice:			

Auditor's Signature		Date Results Advised	
Return Form to Deepwater Group Ltd:	Post	PO Box 1460, Nelson 7040	
	Email	dwg@fishinfo.co.nz	
	Fax	03 545 7021	

Compliance

Vessel Operators and Captains

Must adhere to their VMP procedures and agreed best practice mitigation methods. It is expected that you and your crew will understand and comply with all regulatory requirements.

Hazard Management

Your vessel must operate a Hazard Management and Health and Safety plan under the Maritime NZ Safe Ship Management System to ensure the safety at sea of vessel and personnel.

While the over-riding principle is to ensure the safety of your crew and vessel, all reasonable care must also be taken to mitigate seabird captures.

Significant hazards (if any) arising from these procedures should be identified for all equipment and you must document these for your vessel. You must provide any crew training to ensure your crew is aware of the practices and procedures needed to safely use or deploy any equipment.

MFish Reporting Requirements

Required by law:

- MFish: Non-Fish/ Protected Species Catch Return is to be completed by the Master

Relevant regulations:

- Marine Mammals Protection Act 1978 and Fisheries (Reporting) Regulations 2001
- Fisheries Act 1996 and amendments
- Wild Life Act 1953 and amendments

Appendix 1: Mandatory Seabird Scaring Device Specifications

Introduction

This document acts as a reminder to vessel operators of the current specifications for seabird scaring devices issued in the circular Gazette notice of the 6th of April 2006 (Gazette No 33 pages 842 to 846).

Operators must refer to the appropriate MFish regulation and gazette circular for full details to ensure you comply with all regulatory requirements.

Below is simply the specification detail, for quick reference guide as to how to maintain and deploy these devices.

Vessel crew should check their seabird scaring devices against this specification at regular intervals during the trip.

Note that research has shown tori lines to be most effective at reducing seabird warp strikes. Warp deflectors and bird bafflers are less effective.

Seabird Scaring Device Definition

Seabird Scaring device means:

Paired Streamer (Tori) lines; Bird Baffler; Warp Deflector

Current allowable Specifications for the construction and deployment of the seabird scaring devices are issued for all vessels 28 m or greater in length that use a trawl net in the NZ EEZ, are required to carry and deploy one of the seabirds scaring devices.

The device must be deployed as soon as possible after shooting the net and shall remain deployed for as long as practicable prior to the net being hauled.

Bird Baffler

Two or more booms attached to the stern quarter of the vessel, with at least one boom attached to the starboard and port, stern quarters which are able to be lifted and lowed over the sides or stern of the vessel

- Each boom shall extend outwards not less than 4 m from the side or stern of the vessel
- Dropper lines shall be attached to the booms no more than 2 m apart
- Plastic cones, rods or other brightly coloured durable material shall be attached to the ends of the dropper lines
- The bottom of these cones, rods, lines and materials etc must be not more than 0.5m above the water line (in the absence of wind or swell)
- Lines and webbing may be attached between the dropper lines to prevent tangling

Paired Streamers (Tori Lines)

Two lines of a minimum of 8 mm in diameter shall be of a length so when deployed have an aerial extent of at least 10 metres behind the point at which the trawl warps enter the water (in the absence of wind or swell).

Streamer lines shall be attach to the port and starboard sides of the vessel from a point as close to 2 metres above the trawl blocks as practicable and as close to the stern as practicable. Streamer lines shall be attached either;

- **Between 1 to 3 m from the outside edge of the trawl blocks** on both sides; one a side arm if necessary: or
- **To a "boom and bridle" system** that allows the streamer lines to be adjusted on a horizontal plane in order to vary the distance between the streamer line attachment point and the outside of the trawl blocks and is positioned to ensure maximum protection of the trawl warps at all times.

An object shall be attached at the seaward end of each of the streamer lines. The object must have sufficient drag on the streamer line that it is taut behind the vessel at all times.

Branched streamers, each comprising of two strands of fluorescent red, yellow, orange or pink plastic tubing of a minimum of 3 mm in diameter, shall be attached no more than 5 meters apart commencing no more than 5 metres from the point of attachment of the streamer line to the vessel.

Each of the branched streamers must reach the sea surface in the absence of wind and swell. Branched streamer length will therefore vary depending vary depending on the height, **every branched streamer must be at least 1 metre in length**.

Each branched streamer shall be attached to the streamer line in a manner to prevent fouling of individual branched streamers on the main streamer line and to ensure vertical displacement of individual branched streamers to the water line in the absence of wind or swell.

Warp Deflector

Warp deflector is a weighty device fixed to each warp with clips or hooks, which allows for the device to slide up or down the warp freely and to stay aligned under each warp.

When set the backbone of the device must extend under the warps from a point not less than 4 metres behind the stern and extend as close as practicable to the point where the warps enter the water in the absence of wind or swell.

The backbone of the device shall be made of rope or metal and shall be fitted with **colourful durable material of no less than 300 mm in length**, woven or tied to the backbone at **spacing of no less than 250 mm apart** in a manner designed to create a visible deterrent.

Appendix 2: 10 Commandments for Saving Seabirds

DeepWater Group

Sustainable Oceans • Sustainable Fisheries

10 Commandments for Saving Seabirds

1. Ensure your vessel has a current Vessel Management Plan (VMP and that you are complying with it
2. Offal control is the key to minimising seabird captures, your VMP must stipulate how you are managing offal and fish discards
3. Ensure crew are aware of changing fishing and operating conditions and continual monitoring of offal discharges is maintained
4. Holding all offal onboard during fishing operations then discharging when the gear is on the deck is best risk mitigation, every endeavour should be taken to create the capacity to achieve this. As a minimum ensure all offal is held during hauling and shooting.
5. Manage carefully the accidental spillage of fish waste to the factory floor and hence continuously overboard. Once offal is on the floor it is too late, find ways to prevent this spillage.
6. Managing the use of the appropriate mandatory mitigation devices for the prevailing conditions is crucial; don't just "set and forget"
7. The tori line is proven to be the most effective mitigation device and every vessel should have and deploy this device whenever the conditions allow, use the legal alternatives when conditions demand
8. To reduce the risk of net captures, haul and shoot as quickly as practical and minimise time gear is on the surface for repairs and breakdowns
9. Remove all fish stickers from the net
10. **Report all captures** as legally required to MFish on the Non-fish / Protected Species Catch Return at the completion of the voyage and send a copy to the DWG. Be aware of reporting trigger points to the DWG in real time (ASAP) during the voyage.

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Appendix 3: MFish Observer VMP Review

Vessel Management Plan Review (Version 1- July 2007) VMP

1. Write the trip number ____ , observer code/s ____ and ____

and vessel name ____

2. Fill out this section while referring to the Vessel Management Plan (VMP).

		Y/N/U
Item 1.	Did a Vessel Management Plan exist that is specific to this vessel?	
Item 2.	Were key crew members aware of the VMP and its contents?	
Item 3.	Were key crew aware of the significance of seabird 'trigger' points?	

Did the vessel act in accordance with their VMP with regards to:

Item 4.	The deployment of seabird mitigation devices?	
Item 5.	The condition of the warps?	
Item 6.	Offal discharge during shooting or hauling?	
Item 7.	Minimising the time the net spent on surface?	
Item 8.	Removing stickers from the net prior to shooting?	
Item 9.	Offal discharge whilst actively fishing?	
Item 10.	Minimising offal discharge through sumps?	
Item 11.	How they managed seabird related equipment failures?	
Item 12.	Notable events being recorded in bridge log?	

3. Make a comment for each Item in Section 2 where you entered '**N**'or '**U**'.

Item No	

Item No	