

**Food Safety Management System
for
Live Tasmanian Farmed Bivalve Molluscs
OYSTER TEMPLATE V6.0 (March 2019)**

Changes to V5.0 (June 2016)

Page No. (V5.0 Jun 2016)	Section No. (V5.0 June 2016)	As per V5.0 (June 2016)	As per V6.0 (March 2019)
	FSMS Template		The current approved version of the template is V6.0 (March 2019). While systems developed using earlier versions remain valid and compliant, earlier versions must be updated to reflect the changes in the latest version.
	Acknowledgements	Acknowledgements	<p>Replace with –</p> <p>ACKNOWLEDGMENTS</p> <p>This document was developed through the assistance of the oyster industry, the Tasmanian Government and various independent consultants.</p> <p>The 2018 review was undertaken with the assistance of:</p> <p>Owen Hunt, DPIPWE (Primary Produce Safety) Karen Loone, DPIPWE (Primary Produce Safety) John Harkin, DPIPWE (ShellMAP) Hayden Dyke, Oysters Tasmania Sue Grau, Oysters Tasmania</p>
	Template Instructions	Template Instructions	<p>Replace with –</p> <p>Template instructions</p> <p>This document is a template and requires customisation by individual operators to meet their respective needs. Users of the documents should select the relevant parts/sections of the documents that are applicable to their operations (as part of their business's FSMS) and remove all irrelevant material. Removal of sections of the template may require the approval of the Department of Primary Industries, Parks, Water and Environment.</p>
	Version Changes	Version Changes	<p>Replace with:</p> <p>TSIC and the Product Integrity Branch of DPIPWE have approved amendments to the Food Safety Management System for Live Tasmanian Farmed Bivalve Molluscs OYSTER TEMPLATE V1.1 (March 2008), V2.0 (August 2009), V3.0 (Sept 2011), V4.0 (Oct 2012) and V5.0 (June 2016). The current approved version of the Template is V6.0 (March 2019). While systems developed using earlier versions remain valid and compliant, Users must adopt</p>

			<p>the current version or update previous versions in line with latest amendments.</p> <p>You are reminded to check the Product Integrity Branch's website (http://www.dpipwe.tas.gov.au) on a regular basis for update information and for the latest approved versions of the template. Details of significant amendments made as part of the annual review process will be listed and available on the Product Integrity Branch's website.</p>
	Contents Page	Contents Page	Update contents page when all amendments listed have been made.
2	1.3	Scope and Purpose	Replace the word program with Management System
8	2.3	HACCP Decision Tree.	Remove 2.3 Decision Tree
9	2.4	Hazard Analysis.	Update section number – Change Hazard Analysis section to 2.3
9	2.3	Hazard Analysis. – Step 1 Harvest	<p>Step 1 Harvest - Update the following:</p> <p>Column – Hazard – Correct spelling mistake ‘Microbiolal’ change spelling to Microbial</p> <p>Column – Cause – Add Vibrio Parahaemolyticus below Contaminated water.</p> <p>Column – Control Measure – Change references to TSQAP and Tasmanian Shellfish Quality Assurance Program to ShellMAP Add - Growers in Vibrio parahaemolyticus risk areas are to ensure compliance with the requirements of the Vibrio Control Plan (VCP) for the growing area.</p> <p>Column – Comments - Change references to TSQAP and Tasmanian Shellfish Quality Assurance Program to ShellMAP Change reference to DHHS to DPIPWE Add below existing text – For growers in Vibrio parahaemolyticus risk areas. Refer to your Vibrio Control Plan in Section 13 of this document.</p>
9	2.3	Hazard Analysis. – Step 2 Transport to Farm and Shore	<p>Column – Comment</p> <p>Row two – Add the following text below Support Program training - For growers in Vibrio parahaemolyticus risk areas. Refer to your Vibrio Control Plan in Section 13 of this document. –</p>
10	2.3	Hazard Analysis. – Step 3 Water (Input) (If necessary) Ice	<p>Column – Cause</p> <p>Text to be changed to - Not using water from a potable or approved source to wash oysters Or ice seafood</p> <p>Column – Control Measure – replace TSQAP with ShellMAP.</p>
11	2.3	Hazard Analysis. – Step 6 Storage Short Term (Optional)	<p>Column – Comments – row 2 – The cell is to read - For growers in Vibrio parahaemolyticus risk areas. Refer to your Vibrio Control Plan in Section 13 of this document.</p>
11	2.3	Hazard Analysis. – Step 6 Water (Input) (If necessary)	Column – Control Measures – Replace reference to TSQAP with ShellMAP

			<p>Column – Comments – Cell to have the following text - Potential to contaminate product .Water testing may be required.</p> <p>Note: A Wet Storage Authorisation must be obtained from the Primary Produce Safety Program and ShellMAP prior to commencing wet storage activities</p>
11	2.3	Hazard Analysis. – Step 6 Ice (Input) (If necessary)	Column – Control Measures – Replace reference to TSQAP with ShellMAP
11	2.3	Hazard Analysis. – Step 7 Despatch Non-refrigerated Transport	<p>Column – Comments – Row 1 - Cell to have the following text For growers in Vibrio parahaemolyticus risk areas.</p> <p>Refer to your Vibrio Control Plan in Section 13 of this document.</p>
13	2.5	HACCP Table	Update section number – Change HACCP Table section to 2.4
13	2.4	HACCP Table – Step 1 Harvest	<p>Column – Control Measure – Row 1</p> <p>Replace reference to TSQAP with ShellMAP</p> <p>Insert the following text below existing text – For growers in Vibrio parahaemolyticus risk areas. Refer to your Vibrio Control Plan in Section 13 of this document.</p> <p>Column – Monitoring – Row 1- Replace reference to TSQAP with ShellMAP.</p> <p>Column – Records – - Row 1</p> <p>Replace reference to TSQAP with ShellMAP</p> <p>Insert the following text below existing text – For growers in Vibrio parahaemolyticus risk areas. Refer to your Vibrio Control Plan in Section 13 of this document.</p> <p>Column – Control Measures – Row 2</p> <p>Replace reference to TSQAP with ShellMAP</p> <p>Column – Records – Row 2</p> <p>Replace reference to TSQAP with ShellMAP</p> <p>Column – Critical Limit – Row 3</p> <p>Cell to have the following text – Full compliance with the conditions of the relay authorisation. Stock relocated from restricted or closed growing areas must be in open waters for a minimum of 14 days before harvest Biotoxin closed area 60 days. or sewage spill closed area 21 days</p> <p>Column – Records – Row 3</p> <p>Cell to have the following text - ShellMAP notifications Harvest records (dates)</p>

			<p>Stock relocation records ShellMAP relay authorisation</p>
14	2.4	HACCP Table – Step 2 Water	<p>Column – Control Measure – Cell to have the following text – Use ShellMAP approved water source or potable water to wash product and shellfish contact surfaces</p> <p>Column Monitoring – Cell to have the following text – What Seawater is approved How Refer to ShellMAP Where In office When Prior to harvesting Who Manager</p> <p>What Water is potable or ShellMAP approved water. How Water treatment results or laboratory test results Where Packing shed When Prior to washing Who Manager</p> <p>What Town water How Review results of TasWater water testing and notifications of poor water quality. Where In office When Monthly or as available Who Manager</p> <p>Columns – Corrective Action and Records Replace reference to TSQAP with ShellMAP</p>
15	2.4	HACCP Table – Step 4 Storage Short Term (Optional)	<p>Column – Control Measure Insert the following text under existing text -</p> <p>For growers in <i>Vibrio parahaemolyticus</i> risk areas. Refer to your <i>Vibrio</i> Control Plan in Section 13 of this document.</p> <p>Column – Critical Limit – The cell to have the following text –</p> <p>Oysters must be brought under effective temperature control, at or below 10°C within 24 hours of harvest (Time of harvest is the time when the first oysters are removed from the water) Once chilled must stay in cool chain</p> <p>For growers in <i>Vibrio parahaemolyticus</i> risk areas. Refer to your <i>Vibrio</i> Control Plan in Section 13 of this document.</p> <p>Column – Records – The cell is to have the following text –</p> <p>Cool storage time and temperature records Harvest records. For growers in <i>Vibrio parahaemolyticus</i> risk areas.</p>

			Refer to your Vibrio Control Plan in Section 13 of this document
15	2.4	HACCP Table – Step 4 Storage Wet Storage (Optional)	Columns – Step, Control Measure, Monitoring, Corrective Action and Records– Replace TSQAP with ShellMAP
15	2.4	HACCP Table – Step 4 Ice (Optional)	Column – Control Measure – Replace TSQAP with ShellMAP
16	2.4	HACCP Table – Step 5 Despatch – Refrigerated Transport	<p>Column – Control Measure – Cell to contain the following text – Product into cool chain in a timely manner (for product that hasn't already entered cool chain) For growers in Vibrio parahaemolyticus risk areas. Refer to your Vibrio Control Plan in Section 13 of this document.</p> <p>Column – Critical Limit – cell to have the following text – Oysters must be brought under effective air temperature control, at or below 10°C ambient within 24 hours of harvest For growers in Vibrio parahaemolyticus risk areas. Refer to your Vibrio Control Plan in Section 13 of this document.</p> <p>Column – Corrective Action – The following text is to be used under the heading 'Immediate' – Ensure time from harvest to delivery is sufficient to comply with product time/temperature specifications For growers in Vibrio parahaemolyticus risk areas. Refer to your Vibrio Control Plan in Section 13 of this document.</p>
16	2.4	HACCP Table – Step 5 Despatch – Non-refrigerated Transport	<p>Column – Control Measure – The cell is to have the following text – Product into cool chain in a timely manner (for product that hasn't already entered cool chain) For growers in Vibrio parahaemolyticus risk areas. Refer to your Vibrio Control Plan in Section 13 of this document.</p> <p>Column – Corrective Action – The following text is to be used under the heading 'Immediate' – Ensure time from harvest to delivery is sufficient to comply with product time/temperature specifications Who Manager/Supervisor For growers in Vibrio parahaemolyticus risk areas. Refer to your Vibrio Control Plan in Section 13 of this document.</p>
18	2.6	Validation of CCP Table	Update section number – Change Validation of CCP Table section to 2.5
18	2.5	Validation of CCP Table – Step - Harvest	<p>Critical Limit cell to contain the following text - Do not harvest when water closed or when open status conditions not present For growers in Vibrio parahaemolyticus risk areas. Refer to your Vibrio Control Plan in Section 13 of this document.</p> <p>Validation Details cell - Replace TSQAP with ShellMAP</p>
18	2.5	Validation of CCP Table – Step – Water or Ice (Input)	Validation cell to contain the following text – ASQAP Manual 3.1.1, 3.1.2, & 3.1.3

			ASQAP approved seawater or potable water for wash down
18	2.5	Validation of CCP Table – Step – Seal and Labelling	Validation cell to contain the following text – Legal requirement, Australia New Zealand Food Standards Code, Standard 1.2.2. ASQAP Manual 7.2
18	2.5	Validation of CCP Table – Step – Short Term Storage (Optional)	Critical Limit cell to have the following text – Oysters must be brought under effective temperature control, at or below 10°C within 24 hours of harvest (Harvest time is the time that the first oysters are removed from the water) Once chilled must stay in cool chain For growers in Vibrio parahaemolyticus risk areas. Refer to your Vibrio Control Plan in Section 13 of this document. Validation cell – Change the ASQAP Manual reference to 7.1
18	2.5	Validation of CCP Table – Step – Refrigerated and Non-refrigerated Transport	Validation Details cell to have the following text – ASQAP manual reference 7.1
18	2.5	Validation of CCP Table – Step – Wet Storage	Validation Details cell to have the following text – ASQAP Manual 8.3 Disinfection study required on set-up and must be approved by ShellMAP and the DPIPWE Primary Produce Safety Program.
19	3.0	Staff Training	Insert the following additional dot point. <ul style="list-style-type: none"> • Use of monitoring equipment.
21	4.1	Oyster Premises Personnel & Premises Cleaning Procedures	Personal Hygiene Under the heading ‘General’ the text is to be replaced with the following: <ul style="list-style-type: none"> • All personnel must comply with the relevant sections of the health and hygiene standards for the Australia New Zealand Food Standards Code, Standard 3.2.2, the specifics of which are set out in this document. Under the heading ‘Hygiene practices for all staff and contractors. Dot point two is to have the following text: <ul style="list-style-type: none"> • Staff are required to wash their hands and forearms as necessary when contaminated, before commencing work and after eating, drinking, smoking, or using toilet. . If untreated tank water is used to wash hands non-rinse hand sanitiser must be used by all oyster handlers after washing and drying their hands and prior to commencing work. Dot point 4 is to have the following text: <ul style="list-style-type: none"> • Spitting, smoking or eating in production areas is strictly prohibited Under the heading ‘Monitoring’. Dot point one is to have the following text:

			<ul style="list-style-type: none"> Supervisors shall ensure that the above practices are observed at all times by all persons entering their work area. <p>Delete dot point three</p>
23	4.2	Oyster Harvesting Procedure	<p>Under the heading ‘Procedure’ First Paragraph – Replace TSQAP with ShellMAP</p> <p>Third Paragraph, first sentence – Replace the word ‘should’ with ‘must’</p> <p>Fourth paragraph – is to have the following text: If in doubt, contact ShellMAP Manager – 03 6165 3085 or (AH) 0429 401 994</p> <p>Last sentence – Replace TSQAP with ShellMAP</p> <p>New sections are to be added to the bottom of section 4.2 – The following sections are to be added: Vibrio Control Plan (VCP)</p> <p>Harvest and Hold</p> <p>Biotoxin Closures</p> <p>Environmental Closures</p> <p>Under the heading ‘Relay Controls’ – The text is to be replaced with the following: You must obtain a Relay/Receive Authorisation from ShellMAP if you are sending or receiving stock from a restricted or closed growing area Stock relocated from a restricted or closed growing area must be held in open waters for a minimum of 14 days. If the stock is received from a biotoxin closed area it must be held for a minimum of 60 days. Stock may be released for sale earlier if biotoxin meat sampling is conducted (Contact the ShellMAP for further information) If stock is received from an area that has been closed due to a sewage spill it must be held for a minimum of 21 days.</p> <p>Note: It is recommended that a relay authorisation is obtained even if you do not intend to send or receive from a closed growing area. In doing so you will be able to ensure that relaying activities are lawful at all times, even if the area is temporarily closed.</p>
24	4.3	Washing, Grading and Packing	<p>Under the heading ‘If washing dirty oysters’ – Replace TSQAP with ShellMAP.</p> <p>New text to be added to the bottom of section 4.2 – The following is to be added: Vibrio Control Plan (VCP)</p>

			For growing areas with a high <i>Vibrio parahaemolyticus</i> risk, please refer to section 13 of this document for additional harvest controls specific for your growing area.
25	4.5	Storage	<p>First paragraph, the text in the sentence in brackets – Change the ASQAP reference to ‘section 8.3’.</p> <p>New text to be added at the bottom of section 4.5 – The following is to be added: Vibrio Control Plan (VCP)</p> <p>For growing areas with a high <i>Vibrio parahaemolyticus</i> risk, please refer to section 13 of this document for additional harvest controls specific for your growing area.</p>
27	4.9	Product Traceability and Integrity	First Paragraph – Replace ‘Permits’ with ‘Authorisations’
27	4.10	Recall Procedure	<p>Second paragraph, second dot point – Change TSQAP to ShellMAP.</p> <p>The DPIPWE contact details under the heading ‘List of Government Contacts’ are to be changed to the following:</p> <p>Owen Hunt</p> <ul style="list-style-type: none"> • Owen.hunt@dpipwe.tas.gov.au (BH) 03 6165 3091 (AH) 0418 131 214 <p>Karen Loone</p> <ul style="list-style-type: none"> • Karen.loone@dpipwe.tas.gov.au (BH) 03 6165 3248 (AH) 0418 131 213
29	4.11	Calibration and test equipment	<p>Delete the following text: Temperature monitoring procedure Prior to taking the temperature, the probe is checked to ensure it is cleaned. If not, it is cleaned with warm water and a mild detergent and dried with a clean cloth. If core temperature is required follow the steps below:</p> <ul style="list-style-type: none"> • Once clean, the probe is sanitised using an alcohol swab or hot water at >77°C. • The probe is then allowed to air dry without touching anything. • The temperature of the product is then taken by inserting into the item and allowing it to stabilise before reading the temperature • After each temperature measurement the probe is cleaned and re-sanitised as above. • After use the probe is cleaned and stored in a safe and clean area. <p>Under the heading ‘Salinity Meters/Refractometer/Hydrometer. The following changes are to be made: Dot point one – Replace TSQAP with ShellMAP Dot point three – Replace the text with the following:</p> <ul style="list-style-type: none"> • Hydrometers –Inspect for evidence of card slips. If the card has slipped, and the hydrometer is no longer

			<p>suitable for use. If you use a hydrometer, a calibrated thermometer must be used.</p> <p>Under the heading 'Water treatment system' the following changes are to be made: In both dot point one and two – delete 'as per' and replace with 'maintained according to'.</p>
New Section		New Section – 4.12 Equipment and Facilities Maintenance	<p>Insert the following new section –</p> <p>4.12 Equipment and Facilities Maintenance</p>
32	5.1	Good Manufacturing Practices Checklist	<p>The following sections of the table are to be updated:</p> <p>Glass Lights – the cell is to have the following text: All glass lights in storage and packing areas must be covered, or shatterproof globes are to be used.</p> <p>Hand Washing Facilities – The cell is to have the following text: Liquid soap and paper towel to be available in amenities and production area Signs located in manufacturing and amenities area indicating hand washing after toilet use and prior to contact with product – this includes hand washing upon entry into production area. If untreated/tank water is used for washing hands, non-rinse hand sanitiser must be available at the hand washing facilities for use after hands have been dried.</p>
34	7.0	Purchasing	<p>The following text from this section is to be deleted:</p> <p>A probation period exists for all new suppliers. To become an Approved Supplier there must be evidence that the supplier has, on three separate occasions, met the requirements as detailed in Supplier Specifications (Form 10).</p> <p>Inspection of food safety and quality critical goods and services</p> <p>Sourced from an Approved Supplier</p> <ul style="list-style-type: none"> • Random inspection of these goods and services must take place against predetermined criteria or specifications. The frequency of inspection will depend on the risk of something going wrong and the importance of the material to the food safety and quality of the end product (ie the oysters). • The minimum frequency of inspection shall be documented. <p>Sourced from anyone else.</p> <p>Recording inspection</p>
35	8.0	Verification Schedule	<p>Table - Activities directly related to HACCP Plan</p> <p>Under the column 'Record Source'</p> <ul style="list-style-type: none"> - Replace TSQAP with ShellMAP in all applicable cells - Replace 'faxes' with 'e-mails' <p>Table – Additional Verification Activities</p>

			<p>Under the row 'HACCP Review', column 'Description' the cell is to have the following text: Verify HACCP plan is appropriate and current. http://dpiwwe.tas.gov.au/biosecurity-tasmania/product-integrity/food-safety/seafood/live-tasmanian-farmed-bivalve-molluscs-food-safety-system.</p> <p>Under row 'Meat Quality', column 'Documentation' – replace TSQAP with ShellMAP.</p>
40	10.1	Document Control and Reference Information	<p>Update the following cells in the table: First row, column heading 'Updates issued by/available from – Change the website link to the following - http://dpiwwe.tas.gov.au/biosecurity-tasmania/product-integrity/food-safety/seafood/live-tasmanian-farmed-bivalve-molluscs-food-safety-system</p> <p>First row, column heading 'Current Version' – change the version to March 2019.</p> <p>Third row, Current Version column – Change version to 2016 (March)</p> <p>Row eight, first column – Replace TSQAP with ShellMAP.</p> <p>Row eight, third column – The cell is to have the following text: ShellMAP Manager, 6165 3085 0429 401 994</p>
54	Form 13	Food Safety Internal Audit Checklist	<p>Replace TSQAP with ShellMAP in the following sections of the form: Page 2 - HACCP Plan (Contd) – sixth section.</p> <p>Page 3 – HACCP Plan (Contd) – seventh section.</p> <p>Under the heading 'Records and Important Information' – Sections six and eight</p>
58	Form 14	Staff training Record	Update the bottom of the form to reflect the changes
63	Form 17	Monthly Maintenance Checklist	Update the form to reflect the changes
69	12.0	Wet Storage	<p>Under the heading 'Wet Storage Water Quality' – Replace TSQAP with ShellMAP in the following dot points: Dot point two, three and sixteen</p> <p>Replace TSQAP with ShellMAP in the second last paragraph at the bottom of the form</p>
New Section	New Section	New Section - 13.0 Vibrio Control Plan	Insert the following new section: 13.0 Vibrio Control Plan
72	13	Glossary of Terms	Change section number to Section 14
72	14	Glossary of Terms	Definition for 'Withdrawal' to be changed to the following: Is carried out for reasons of a quality defect that does not pose a risk to public health and safety or before an official Recall product maybe withdrawn from the transport system. If the product has been delivered to the customer a recall will be required.