CONDITIONAL MANAGEMENT PLAN (CMP)

BETWEEN THE:

Canadian Food Inspection Agency (CFIA), Fisheries and Oceans Canada (DFO), Environment Canada (EC),

and industry partners:

Mac's Oysters Ltd., Taylor Shellfish Canada ULC

FOR THE MANAGEMENT OF THE CONDITIONALLY APPROVED SHELLFISH HARVEST AREA AND THE HARVESTING OF SHELLFISH IN SOUTHWESTERN BAYNES SOUND, BRITISH COLUMBIA

Effective August 1, 2011 Plan Expiry Date: April 30, 2012

TABLE OF CONTENTS

1	DUR	ATION OF THE CONDITIONAL MANAGEMENT PLAN	3
2	DEFI	NITIONS	3
3.	INTR	ODUCTION	4
4	PURF	POSE AND SCOPE	4
5	BACI	GROUND	
6	CON	DITIONALLY APPROVED AREA DESCRIPTION (HARVESTING PLAN)	
0.	61 A	rea Description (General)	0
	6.1 A	onditional Area (Harvest) Boundaries	0
	6.2 C	hellfish Fisheries (Including Aquaculture) within the CMP Area	/ 0
7	CPIT	EPIA FOR OPENING AND CLOSING THE CONDITIONAL AREA	10
7.	71 Ir	itial Opening of the Conditional Area	10
	7.1 II. 7.2 C	losing the Conditional Area	10
	7.2 C 7.2 D	a Opening the Conditional Area	10
0		e-Openning the Conditional Area	10
о.	Q 1 C	r Lino And TESTINO	12
	0.1 3	Despensibility for Someling to Do Open Sections	12
	0.1.1	Water Someling and Selection of Ovelified Water Somelars	12
	8.1.2 0.1.2	Shallata da Sampling and Selection of Qualified Water Samplers	12
	8.1.3 0.1.4	Shellstock Sampling and Selection of Qualified Shellstock Samplers	12
	8.1.4	Continuous Routine Sample Monitoring of Areas	12
	8.1.5	Submission of Samples to the Laboratory	13
	8.1.0	Description of Sampling Locations	15
	8.2 T	esting	16
	8.2.1	Selection of an Appropriate Laboratory	16
~	8.2.2	Methodology	16
9.	MON	ITORING RAINFALL, RECORDING AND REPORTING DATA	16
	9.1 R	ainfall Monitoring	16
	9.2 R	eporting	17
	9.2.1	Rainfall Reporting	17
	9.2.2	Laboratory Reporting of Sample Results	17
	9.3 R	ecords	17
	9.3.1	Rainfall Records	17
	9.3.2	Records of Closing and Re-Opening	18
	9.3.3	Other Records	18
10.	AUD	ITING AND ANNUAL REPORTING	18
11.	AME	NDMENT AND TERMINATION	18
12.	ROLE	ES AND RESPONSIBILITIES	19
13.	Appe	ndices	20
	13.1 A	PPENDIX I - Marine Water Sampling Protocols from Shellfish Growing Areas for	r
	Bacteriolo	ogical Analysis	20
	13.2 A	PPENDIX II - Guideline for Shellstock Collection for Microbiological Analysis	23
	13.3 A	PPENDIX III - Contact Information for CMP Participants	25
	13.4 A	PPENDIX IV - Summary of Section Monitoring and Sampling Requirements	27
	13.5 A	PPENDIX V - Forms	28
	13.6 A	PPENDIX VI - Roles and Responsibilities	31

1. DURATION OF THE CONDITIONAL MANAGEMENT PLAN

This Conditional Management Plan (CMP) shall come into force on August 1, 2011, expire on April 30, 2012 and is subject to each participant signing this CMP prior to it coming into force.

2. **DEFINITIONS**

Approved Area - The classification of a shellfish growing area which has been approved by the shellfish control authority for growing or harvesting shellfish for direct marketing. The classification of an Approved area is determined through a sanitary survey conducted by the shellfish control authority in accordance with Chapter 2 of the Canadian Shellfish Sanitation Program (CSSP) Manual of Operations. An Approved shellfish growing area may be temporarily placed in the closed status when a public health emergency, resulting from for instance, a hurricane or flooding, is declared.

Comprehensive Survey – The detailed evaluation and assessment of all environmental factors including actual and potential pollution sources which affect the water quality in a Shellfish Growing Area.

Conditional Management Plan - An agreement signed by relevant parties for the management of shellfish in conditionally classified areas

Conditionally Approved Area - The classification of a shellfish growing area which has been determined by the shellfish control authority to meet approved area criteria for a predictable period. The period is conditional upon established performance standards specified in a conditional management plan.

Conditionally Restricted Area - The classification of a shellfish growing area which has been determined by the shellfish control authority to meet, at a minimum, the restricted classification criteria for a predictable period. The period is conditional upon established performance standards specified in a conditional management plan.

Most Probable Number (MPN) - The MPN is a statistical estimate of the number of bacteria per unit volume and is determined from the number of positive results in a series of fermentation tubes.

Pacific Region Interdepartmental Shellfish Committee (PRISC) - Committee established under the Canadian Shellfish Sanitation Program (CSSP) to provide input and advice to area/regional Department of Fisheries and Oceans (DFO), Environment Canada (EC), Canadian Food Inspection Agency (CFIA) and the Chair of the National Interdepartmental Shellfish Committee (ISC) on matters pertaining to the classification of Shellfish Growing Areas, management of microbiological, chemical or biotoxin contamination and management of Shellfish resources in the Pacific Region.

Prohibited Area - The classification of a shellfish growing area determined by the shellfish control authority where shellfish harvesting for food purposes is not permitted.

Shellfish - All edible species of oysters, clams, mussels and scallops (except for scallop adductor muscle) either shucked, in the shell, fresh or fresh frozen or whole or in part. For the purposes of marine biotoxin control predatory gastropod molluscs shall also be included.

Shellfish Control Agency - The departments or agencies of the Government of Canada that are signatories to the interdepartmental Memorandum of Understanding which is found in Appendix V of the CSSP Manual of Operations, and that have the responsibility to provide reasonable assurance that shellfish are safe for human consumption.

Shellfish Growing Area - An area which supports or could support live shellfish.

Status - Describes whether shellfish harvest is permitted and is independent of the classification of the area¹

Open Status - Any classified area where shellfish harvest is authorized.

Closed status - Any classified area where shellfish harvest is not authorized.

¹Open and closed status differs from openings and closures made pursuant to a prohibition order issued under the Management of Contaminated Fishery Regulations. For example, a Restricted area in the Open Status is limited to the harvest of shellfish by special licence for depuration or relay.

Trigger Event – Condition(s) which, if exceeded, require the conditionally managed area to be closed to shellfish harvest.

3. INTRODUCTION

The Canadian Shellfish Sanitation Program (CSSP) is delivered by three federal institutions: the Canadian Food Inspection Agency (CFIA), Fisheries and Oceans Canada (DFO), and Environment Canada (EC). The Canadian Shellfish Sanitation Program (CSSP) provides reasonable assurance that molluscan shellfish are safe for consumption, thus supporting the shellfish industry and providing confidence for Canadians and export markets. This Conditional Management Plan (CMP) between CSSP federal partner institutions, Mac's Oysters Ltd. and Taylor Shellfish Canada ULC (hereafter referred to as "the Parties") outlines the roles and responsibilities of the signatories for monitoring rainfall, and the roles and responsibilities of the signatories in the event of rainfall in an amount exceeding the triggers defined in this CMP.

This CMP does not affect legal requirements existing under federal or provincial statutes. For greater certainty, where there occurs a deposit of a deleterious substance out of the normal course of events in water frequented by fish, or a serious and imminent danger thereof, the person that causes or contributes to the deposit (or danger thereof) has a legal obligation to report such occurrences to a *Fisheries Act* inspector *or to any other person or authority as is prescribed by regulation* under subsection 38 (4) of the *Fisheries Act*, namely the *Deposit Out of the Normal Course of Events Notification Regulations*.

4. PURPOSE AND SCOPE

This CMP provides enhanced management of the bivalve molluscan shellfish harvest waters in southwestern Baynes Sound.

Full cooperation of the Parties is required to achieve rainfall monitoring, notification of federal partner institutions and the shellfish processing industry when rainfall triggers have been exceeded, and for necessary response actions to ensure continued food safety of harvested bivalves, including closure of the conditionally approved area. This initiative

is a result of the CSSP requirements related to Conditional Area Management (refer to CSSP Manual of Operations, a copy of which is located at

http://www.inspection.gc.ca/english/fssa/fispoi/man/cssppccsm/cssppccsme.shtml). Conditional Area Management will be supplemented by Hazard Analysis Critical Control Points (HACCP) controls implemented by the registered fish processing establishments that process the bivalve molluscan shellfish.

The area described in Part 6 of this CMP is currently classified under a Systematic Random Sampling Regime (SRS). Starting in fiscal year 2009/2010, EC initiated intensive sampling in Baynes Sound according to an SRS regime, which included the requirement of 15 sample sets in the first year of sampling. Sampling requirements in subsequent years starting in fiscal year 2010/11 onwards are 6 sample sets per year randomly distributed as per the guidelines set forth in the "NSSP 2007 Sec IV Chap II .07 Systematic Random Sampling Monitoring Strategy, National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish 2007, Section IV." The guidance documents for a Systematic Random Sampling Monitoring Strategy was used to ensure proper procedures were considered when transitioning from Adverse Pollution Condition sampling (APC) to an SRS sampling program.

5. BACKGROUND

The CSSP Manual of Operations outlines the authorities (statutes and regulations), policies, procedures, and activities governing the control of shellfish growing areas, and the harvesting, processing and distribution of shellfish.

Shellfish harvest areas that are subject to intermittent microbiological contamination may be classified as Conditionally Approved or as Conditionally Restricted Areas (see Chapter 2 of the CSSP Manual). The CSSP allows a shellfish growing area to be classified as "Conditionally Approved" if the following conditions are met:

- When placed in open status, the area meets all of the requirements of an Approved area.
- Conditions which will result in the area reverting to closed status are as follows:
 - o easily identified by routine measurement and reporting; and
 - predictable and/or controllable.

The closure of this Conditionally Approved area is dependent on the level of rainfall and/or season. The harvesting of bivalve molluscan shellfish or removal of wet stored bivalves is permitted only when the Conditionally Approved area is in open status. Harvesting or removal of wet stored bivalves at any other time is prohibited unless authorized by DFO under special licence as prescribed under the *Management of Contaminated Fisheries Regulations (MCFR)*.

This Management Plan describes the procedures to be followed for the opening and closing of Conditionally Approved areas in southwestern Baynes Sound to harvesting of bivalve shellfish by describing the boundaries of the Conditionally Approved areas, the conditions under which closure and re-opening will normally be recommended, and the responsibilities of each party as outlined in Appendix VI of this document and in the

memorandum of understanding between CFIA, DFO and EC in Appendix V of the CSSP Manual of Operations.

6. CONDITIONALLY APPROVED AREA DESCRIPTION (HARVESTING PLAN)

6.1 Area Description (General)

Under the conditions described in this plan, shellfish harvesting may occur in the conditionally classified harvest areas located on the Vancouver Island side of southwestern Baynes Sound, portions of Subareas 14-8 and 14-15 of Pacific Fisheries Management Area (PFMA) 14, from the log sort, north of Union Point, to a point of land approximately 700 metres north of the mouth of McNaughton Creek, including all marine waters to the centre of Baynes Sound (Figure 1).



Figure 1 - Overview of the Baynes Sound Conditional Management Plan Area.

6.2 Conditional Area (Harvest) Boundaries

The following are identified as Conditionally Approved Areas in this Management Plan:

Section A: The waters and intertidal foreshore of Baynes Sound inside a line commencing at a point on the Vancouver Island shore at the end of the access road at the log sort north of Union Point at 49° 36.01' north latitude and 124° 53.41' west longitude, thence easterly seaward to 49° 36.01' north latitude and 124° 52.72' west longitude, thence southeasterly to a point mid-channel at 49° 33.31' north latitude and 124° 51.72' west longitude (off Denman Point), thence southeasterly to a point off Base Flats at 49° 31.54' north latitude and 124° 49.71' west longitude, thence southwesterly to a point on land at 49° 31.34' north latitude and 124° 50.25' west longitude (NAD 83) (Figure 2).



Figure 2 - Section A of the Baynes Sound Conditional Management Area.

Section **B**: The waters and intertidal foreshore of Baynes Sound from a northern boundary starting at Base Flats at a position 49° 31.34' north latitude and 124° 50.25' west longitude, extending northeasterly to 49° 31.54' north latitude and 124° 49.71' west longitude, thence southeasterly to a position at 49° 30.71' north latitude and 124° 47.97' west longitude, thence southwesterly to a position 49° 30.34' north latitude and 124° 48.40' west longitude at Ship Point (NAD 83) (Figure 3).



Figure 3 - Section B of the Baynes Sound Conditional Management Area.

Section C: The waters and intertidal foreshore of Baynes Sound inside a line commencing at the northern point of Ship Point at a position 49° 30.34' north latitude and 124° 48.40' west longitude, thence northeasterly to a position 49° 30.71' north latitude and 124° 47.97' west longitude, thence southeasterly to a position 49° 28.47' north latitude and 124° 44.95' west longitude, thence southeasterly to a point on the Vancouver Island shore at 49° 27.74' north latitude and 124° 45.47' west longitude (NAD 83) (Figure 4).



Figure 4 - Section C of the Baynes Sound Conditional Management Area.

6.3 Shellfish Fisheries (Including Aquaculture) within the CMP Area

Fisheries and Aquaculture

Significant bivalve shellfish harvest takes place within the Conditionally Approved areas under the Baynes Sound CMP. There are numerous productive shellfish aquaculture tenures as well as First Nations harvest areas for food, social and ceremonial purposes (FSC), recreational fishing opportunities, and potentially wild commercial clam and commercial geoduck fishing areas. Licensed depuration and relay fisheries may take place in Baynes Sound within and adjacent to the Conditionally Approved areas.

Fishery Management

Commercial bivalve fisheries (wild and aquaculture) as well as First Nations FSC and recreational fisheries operate year round in Baynes Sound when the status of the Conditionally Approved area under the CMP is open. When a Conditionally Approved

area is closed by Prohibition Order, commercial bivalve harvest (wild and aquaculture) may be approved by EC and CFIA and authorized by licenses issued by DFO under the *Management of Contaminated Fisheries Regulations* for plant depuration (clams) or relay (oysters).

7. CRITERIA FOR OPENING AND CLOSING THE CONDITIONAL AREA

7.1 Initial Opening of the Conditional Area

The Conditionally Approved Area described in Part 6 of this CMP may open for shellfish harvesting when this CMP has been signed by all parties named herein, and the result of a comprehensive survey by EC indicates compliance with the bacteriological and sanitary requirements of an Approved Area.

7.2 Closing the Conditional Area

Following the initial opening described in 7.1, the conditions which trigger the reporting responsibilities set out in paragraph 9.2.1., in respect of the conditional areas (Sections A,B,C) described in Part 6 of this CMP are as follows:

Section A: Rainfall exceeds 35.0 mm, over a 24 hour period as recorded at the Comox Airport weather station (1000 to 1000, Pacific Standard Time (PST) or 1100 to 1100 Pacific Daylight Time (PDT).

Section B: Rainfall exceeds 40.0 mm over a 24 hour period, recorded at the Mud Bay weather station operated by Taylor Shellfish Canada ULC (0800 to 0800, local time).

Section C: Between May 1 and December 31, when rainfall exceeds 40.0 mm over a 24 hour period, recorded at the Mud Bay weather station operated by Taylor Shellfish Canada ULC (0800 to 0800, local time).

As per the definition of a Conditionally Approved area, exceedance of the rainfall triggers as described above indicates that the affected shellfish growing area(s) no longer meet(s) the approved criteria, and therefore constitutes a recommendation from EC and CFIA to close the Conditional area(s). Recommendation for a closure based on the standards set out in this CMP may constitute sufficient reason for the Regional Director General of DFO to believe that fish are contaminated pursuant to s.3(1) of the Management of Contaminated Fisheries Regulations. If the RDG finds that it is sufficient reason, a closure will be issued for the affected Conditional area(s).

Additionally, if there is shown to be a presence of marine biotoxins exceeding the CSSP standard, the Sections may close under the marine biotoxin monitoring program (see Appendix III to the Fish Products Standards and Methods Manual on the CFIA website at http://www.inspection.gc.ca/english/fssa/fispoi/man/samnem/app3e.shtml)

7.3 Re-Opening the Conditional Area

A recommendation to reopen a conditionally approved area which is in the closed status will not be made by EC and CFIA until:

• The bacteriological quality of the water during verification sampling has again met the Approved area standard: the median or geometric mean fecal coliform

Most Probable Number (MPN) of the water for all verification samples collected in that Section as outlined in Table I in Part 8.1.6, does not exceed 14/100 mL, and not more than 10 % of the samples exceed a fecal coliform MPN of 43/100 mL, for a five-tube decimal dilution test; and

• The bacteriological quality of the shellfish meets the standard: n five (5) shellstock samples, only one (1) fecal coliform result may exceed 230 MPN/100 g, and no result may exceed 330 MPN/100 g.

Note: Because there are only two water sampling stations in Section B, there will only be two water quality results for verification. Because of the number of stations, no water quality result may exceed 14 FC/100 ml MPN prior to opening.

When water or shellstock samples representing a Section are collected, they must be collected over a one day verification period. Verification sampling requirements are outlined in Table IV in Appendix IV.

To reopen areas closed by a rainfall trigger exceedance as described in Part 7.2:

- A minimum of one water and one shellfish sample shall be collected from the stations prescribed in Part 8.3 of this plan, no earlier than on the second day (48 hours) after the trigger has been exceeded and reported by fax and/or e-mail as per the reporting requirements outlined in Part 9.2.2.
- If, during the process of verification sampling, either water or shellstock fails to meet the prescribed standards of that Section, only the failed item is required to be re-sampled. Whichever item fails to meet the prescribed standard, be it water or shellstock, shall have all prescribed stations for either the water or shellstock in that Section re-sampled.
- If verification sampling has been conducted after a trigger event but the Section has not yet returned to open status, should another trigger event occur during the process of reopening the Section, re-sampling of both water and shellstock will be required. Verification samples taken after the initial trigger is exceeded are no longer deemed representative due to changes in water quality resulting from a subsequent trigger event.

Recommendation for reopening based on the standards set out in this CMP may constitute sufficient reason for the Regional Director General of DFO to believe that fish are not contaminated pursuant to s. 3(1) of the Management of Contaminated Fisheries Regulations. If the RDG finds that it is sufficient reason, the closure for the affected conditional area(s) will be revoked.

8. SAMPLING AND TESTING

8.1 Sampling

8.1.1 Responsibility for Sampling to Re-Open Sections

Industry shall be responsible for all verification sampling and all associated analysis costs for re-opening an individual Section. Only those samplers trained on an annual basis may perform verification sampling.

Section A – Mac's Oysters Ltd. is responsible for sampling water and shellstock from the sample stations identified in Table I for Section A following a rainfall trigger, as per the re-opening conditions in Part 7.3 and the sampling guidelines in Appendices I and II.

Section B – Mac's Oysters Ltd. is responsible for sampling water and shellstock from the sample stations identified in Table I for Section B following a rainfall trigger, as per the re-opening conditions in Part 7.3 and the sampling guidelines in Appendices I and II.

Section C – Taylor Shellfish Canada ULC is responsible for sampling water and shellstock from the sample stations identified in Table I for Section C following a rainfall trigger, as per the re-opening conditions in Part 7.3 and the sampling guidelines in Appendices I and II.

8.1.2 Water Sampling and Selection of Qualified Water Samplers

Detailed instructions for marine water sampling from shellfish growing areas for microbiological analysis can be found in Appendix I to this plan.

All water samplers designated by industry must receive training by the EC Scientific Authority and meet acceptable methodologies in sample collection, preservation and transportation methodologies and applicable quality control requirements. Subsequent training sessions and auditing functions will be provided by EC at no cost once per year. Literature guides and references will be provided to the approved samplers (Appendix I).

8.1.3 Shellstock Sampling and Selection of Qualified Shellstock Samplers

Detailed instructions for shellstock sampling for microbiological analysis can be found in Appendix II to this plan.

All samplers designated by industry must receive training by the CFIA Scientific Authority and found to be acceptable in sample collection, preservation and transportation methodologies and applicable quality control requirements. Subsequent training sessions and auditing functions will be provided by CFIA at no cost once per year. Literature guides and references will be provided to the qualified samplers (Appendix II).

8.1.4 Continuous Routine Sample Monitoring of Areas

In addition to the verification monitoring previously outlined, monitoring is required to confirm that the Approved classification criteria are being met when the area is in the open status (CSSP Manual of Operations Ch 2.3.3). This Conditional Management Plan is based on the effects of rainfall events and as such, a minimum of five (5) water samples shall be collected during the period when the area is in the open status.

As noted in Part 4, the area is classified using the Systematic Random Sampling (SRS) regime. Under the requirements of an SRS regime, EC will be sampling Baynes Sound six times per year during the period when the area is in open status. This will include all sample stations in Sections A, B and C as identified in Table I and Figure 5 in Part 8.1.6 of this document. EC and industry will monitor water quality at specific sites used for depuration to assess the suitability of these sites when the area is in closed status. This will include certain Restricted harvest areas and Conditionally Approved harvest areas in closed status. Ongoing assessment of the suitability of the rainfall triggers may be completed by EC through periodic sampling performed during rainfall events which may come close to or exceed the prescribed trigger of a given Section.

8.1.5 Submission of Samples to the Laboratory

Water and shellstock samples must be submitted to an *ISO/IEC 17025: 2005* accredited laboratory adhering to the criteria for sample collection outlined in Appendices I and II, respectively.

8.1.6 Description of Sampling Locations

Table I outlines the stations chosen for the purposes of verifying water and shellstock. These station locations have been deemed most representative of the water quality of the specified Section.

Station Name	Station Description	Water Sample Site	Shellstock Sample Site
	Section A – Sampled by Mac's Oysters Ltd.		
BS036	Middle of bay just north of Union Point 49° 35.82'N and 124° 53.12'W	~	~
BS099	South tip of spit at Union Bay off most northerly dolphins 49° 35.25'N and 124° 52.99'W	~	
BS102	Off culvert buried in grass on North side of oyster plant 49° 34.19'N and 124° 52.60'W	~	~
BS 104	Off grey rest stop outhouse building with phone booth 49° 32.99'N and 124° 52.08'W	~	
BS 108	Base Flats, off the eighth telephone pole counting from the south 49° 31.56'N and 124° 50.24'W	~	~
Se	ction B – Sampled by Mac's Oysters Ltd. or Pacific Northwest S	hellfish Co.	Ltd.
BS 143	Fanny Bay, ~300 m off shore from small brown shed (align Mac's Oysters and Ship Point) 49° 30.74'N and 124° 49.56'W	~	~
BS 175	Fanny Bay, southwest corner of longline lease 103996 49° 30.37'N and 124° 48.95'W	~	~
	Section C – Sampled by Taylor Shellfish Canada UL	С	
BS 116	Ship Peninsula, off dark green house with glass greenhouse north of cedar "A-frame" type house with stairs to beach 49° 30.21'N and 124° 48.05'W	~	
BS 118	Ship Peninsula, off large boulder on beach in front of large brown/beige house 49° 29.47'N and 124° 47.56'W	~	~
BS 121	Off cedar shake house with gray roof 49° 28.52'N and 124° 47.43'W	~	~
BS 144	Off southernmost intertidal tip of Ship Peninsula, approx. 500 m off shore 49° 29.07'N and 124° 47.02'W	~	
BS 158	Off first bay west of the most westerly tributary of Rosewall Creek 49° 27.96'N and 124° 45.46'W	~	~
BS 179	Mud Bay, outermost longline off middle of longline	✓	

Table I - Description of Sample Locations used for Verification Purposes.



Figure 5 - Map of Water and Shellstock Sample Stations.

8.2 Testing

8.2.1 Selection of an Appropriate Laboratory

All laboratories performing CSSP testing for regulatory purposes must be accredited to the international standard *ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories* by a recognized accrediting body. The laboratories scope of accreditation must include the analytical tests required by the EC or CFIA Scientific Authority.

8.2.2 Methodology

The laboratory shall analyse water samples for fecal coliform using the A-1 MPN method (referenced to the most current version of Standard Methods for the Examination of Water and Wastewater) and shellfish samples for fecal coliform using the APHA MPN method. Salinity may be determined using a refractometer.

Further information on laboratory procedures and requirements can be found in the CSSP Manual of Operations in Appendix I (refer to website link below):

http://inspection.gc.ca/english/fssa/fispoi/man/cssppccsm/cssppccsme.shtml

9. MONITORING RAINFALL, RECORDING AND REPORTING DATA

9.1 Rainfall Monitoring

Section A: Rainfall measured at the Comox Airport (YQQ) weather station (49°42.90' N 124°53.93' W) is taken to be representative of Section A. Meteorological observations are made every 6 hours based on the meteorological day, from 0600 to 0600 Greenwich Mean Time (GMT). Observations are immediately reported to the Environment Canada Weather Office, and subsequently posted online to EC's Climate Data Archive¹ where data are displayed in Pacific Standard Time (PST) for the 24 hour period of 2200 to 2200 (0600 to 0600 GMT). During Pacific Daylight Time (PDT), 0600 GMT corresponds to 2300.

Note that meteorological data may not be available through the climate data archive for several days following observation; thus, current rainfall data is obtained directly via personal communication from the weather station by Mac's Oysters Ltd. This data is verified for auditing purposes once it is posted internally to EC servers.

If a heavy rainfall event has occurred or is in progress, Mac's Oysters Ltd. will contact the Comox Airport weather station shortly after 1000 PST (1100 PDT) to obtain rainfall amounts measured during the last 24 hour period; this value is used to determine whether or not the rainfall trigger for Section A has been exceeded.

¹ <u>http://climate.weatheroffice.gc.ca/climateData/dailydata_e.html?timeframe=2&Prov=BC&StationID=155</u>

Sections B and C: Rainfall measured at the Mud Bay weather station (49°28.25' N 124°47.65' W) is taken to be representative of Sections B and C. Meteorological observations are made daily at 0800 local time by Taylor Shellfish Canada ULC. Rainfall for Sections B and C is therefore calculated for the 24 hour period of 0800 to 0800 local time.

Note: recent meteorological observations for Mud Bay are not readily available through the climate data archive; thus, current rainfall data must be obtained directly from Taylor Shellfish Canada ULC following the end of each month.

9.2 Reporting

9.2.1 Rainfall Reporting

When rainfall volume reaches the trigger levels outlined in 7.2 of this plan, Mac's Oysters Ltd. or Taylor Shellfish Canada ULC (as appropriate for the Section monitored) will immediately send a fax to DFO, to EC and to the CFIA (See Table II in Appendix III for a list of contact information). The fax to DFO will be followed by a phone call to ensure the information has been received.

Mac's Oysters Ltd. and/or Taylor Shellfish Canada ULC will also fax the Registered Processing facilities listed in Table III of Appendix III to notify them that rainfall for a particular Section has exceeded the specified trigger.

All fax notification regarding rainfall will be undertaken using the form (Figure 6) in Appendix V.

9.2.2 Laboratory Reporting of Sample Results

Upon determination of verification sample results, the laboratory performing the testing will fax and e-mail all water and shellstock results to Environment Canada and the Canadian Food Inspection Agency for review as outlined under Mac's Osyters Ltd. and Taylor Shellfish Canada ULC Roles and Responsibilities in Appendix VI.

9.3 Records

9.3.1 Rainfall Records

Section A: Rainfall measured at the Comox Airport (YQQ) weather station during the 24 hour period from 1000 to 1000 PST or 1100 to 1100 DST will be recorded by Mac's Oysters Ltd. on the form shown in Table V of Appendix V. Table V will be provided to Environment Canada and to the Canadian Food Inspection Agency on a monthly basis.

Sections B and C: Rainfall measured at the Mud Bay weather station for the 24 hour period from 0800 to 0800 local time will be recorded on the form shown in Table VI of Appendix V. Table VI will be provided to Environment Canada and to the Canadian Food Inspection Agency on a monthly basis.

9.3.2 Records of Closing and Re-Opening

Fisheries and Oceans Canada will maintain records of closing and re-opening of each Section. Fishery Notices can be found on the DFO website at <u>http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/fns/index.cfm?pg=search_options&lang=en&id=commercial</u>.

EC and the CFIA will keep records of recommendations made with respect to re-opening a section after sample results are received.

9.3.3 Other Records

EC will keep records of water sampling data, and field sheets for all water sampling be it for classification or verification purposes.

10. AUDITING AND ANNUAL REPORTING

Appendix IX (Sections 4a, 4d, and 4e) of the CSSP Manual of Operations states that a requirement of the CMP is auditing and annual reporting of compliance with the CMP. Therefore, following the expiry of the plan, DFO, CFIA, and EC will perform an audit on the management of the area under the CMP.

An annual report will be prepared by DFO, (or other agency by agreement with DFO), with input from EC, CFIA and other affected parties and the report will be presented to the Pacific Region Interdepartmental Shellfish Committee (PRISC) for review at the regional classification meeting. The report will outline the audit findings as described in Appendix IX of the CSSP Manual of Operations and any recommendations resulting from the audit.

11. AMENDMENT AND TERMINATION

The undersigned parties hereby agree with the contents of this Conditional Management Plan and are committed to its objective. If at any time in the future any one party fails to fulfill the requirements as set forth herein, the Conditional Management Plan becomes void. If the objective cannot be attained, recommendations will be made to reclassify the Conditionally Approved Area as closed to Shellfish harvesting. This CMP may be amended at any time subject to the written approval of all the parties.

Each Section (A, B or C) may be considered on its own. If a Section is found to be noncompliant with the conditions set out in this CMP, that section may be evaluated by the CSSP partners to determine whether the area classification or status will be changed, without changing the classification or status of the other Sections.

If the conditions set out in this CMP cannot be met, the CSSP partners will determine whether the area classification or status will be changed.

12. ROLES AND RESPONSIBILITIES

The roles and responsibilities of each signatory party are described in Appendix VI of this document and in the memorandum of understanding between CFIA, DFO and EC in Appendix V of the CSSP Manual of Operations.

13. APPENDICES

13.1 APPENDIX I - Marine Water Sampling Protocols from Shellfish Growing Areas for Bacteriological Analysis

EQUIPMENT REQUIRED

- sterile Nalgene 250 ml sample bottles with blank labels
- chart showing station locations and numbers
- coolers with bottle-sized partitions
- frozen freezer packs (no ice!)
- sample collection log sheets
- indelible, waterproof felt pens
- sampling rods
- pencils
- waterproof field note book
- watch
- armour cased field thermometer

MARINE WATER SAMPLING TECHNIQUE

1. Record Keeping

A. Labelling Sample Bottles

• With indelible, waterproof ink or grease pencil, label the sample bottle on paper label only: (DO NOT write on the lid or the bottle itself) with the following information:

Date [e.g. 2 Feb 2003] Time [e.g. 1430 hrs (use 24 hour format)] Station [e.g. QC041] Sampler Initials

- Refer to chart for proper station location and station number; and
- If a bottle is labelled incorrectly, the recorded time of sampling will assist in correctly numbering the sample.
- B. Field Log Sheets
- Field log sheets must be completed and be returned to EC following each sampling run.
- Field log sheets must include: date, time (use 24 hour format), station number or description, the name of the sampler, the weather conditions and sea state at the time of sampling, and the presence and the number of potential fecal pollution sources (e.g. types of birds, anchored vessels, marine mammals-sea lions/seals, etc); and

• The date, times, and station numbers in the field log sheets must match up with the date, times, and station numbers recorded on the bottles.

2. Sampling Procedures

Caution: All bottles provided by EC have been pre-sterilized. If you accidentally touch the inside of the bottle or lid, drop a bottle or a lid, or in any other way introduce cross-contamination, use a new bottle. In this case, put an "X" through the label of the discard bottle and put it in the cooler so that it's clear that the bottle is no longer sterile. All sample bottles will be reused so please don't throw any away.

- Label the bottle before approaching sample site. If sampling by boat, slowly approach foreshore until depth is approximately 1 m.
- Sample off bow to prevent re-suspended bottom sediments from entering bottle.
- Place bottle securely into sampling rod (if used).
- Carefully remove the sample bottle cap. Hold cap in manner to prevent contamination of inside surfaces. Do not put cap down. Remove cap only before collecting samples. Do not walk around with a bottle with its lid off. This may introduce contamination.
- Hold the bottle out at arms length (or use sampling rod), invert it and lower it into the water to a depth of approximately 6 inches; turn the bottle upright and allow it to fill to below the shoulder, remove bottle from water and pour off any excess water, and recap. If you suspect a sample is highly contaminated, make note of this on the bottle and in the field notes. The laboratory needs this information in order to run extra dilutions. Try to avoid getting any surface slime or algae inside the bottle.
- Place sample bottle upright in cooler. Note the time, and other information about the sample on the field log sheet.
- After the first water sample is collected, collect a second sample and label "T.C." (temperature control) and the number of the cooler (e.g. TC #1). Using the field thermometer, measure the ambient water temperature at the time of collection and record on TC bottle label. Record the time of TC collection on the field log sheet. The temperature of this bottle will again be recorded for QA/QC purposes when the cooler is delivered to the laboratory. Only one T.C. bottle per cooler is needed.

3. Transportation and Delivery

Caution: Time of sampling must be considered to provide the laboratory with samples during regular business hours. If this is not possible, prior arrangements must be made with the laboratory so that samples can be analyzed within 30 hours of collection. Please note, it is always preferable that samples be delivered to the laboratory as soon as possible (i.e. within 6 hours of collection).

- Store bottles upright in coolers at <10°C for transportation to laboratory. Ensure cooler lid is securely fastened after every sample.
- Samples should be delivered to the lab personnel within 6 hours after collection. This allows the laboratory sufficient time for analysis. Field notes must accompany the bottles.
- Measure temperature of Temperature Control upon arrival at laboratory.
- After delivering samples, take a few minutes to ensure all labels contain correct information. Lab staff may not be able to correctly interpret errors without the help of sampling personnel.
- When cooler is empty, rinse all interior surfaces with disinfectant provided by the laboratory.
- If samples are to be collected on consecutive days, the freeze packs must be refrozen each evening, and must be frozen solid before being placed in coolers before each sampling run. Ice of any form must not be used.

13.2 APPENDIX II - Guideline for Shellstock Collection for Microbiological Analysis

Shellfish Stations:

- Require a sufficient supply of oysters at the corresponding sampling location for a minimum of two weeks prior to any sampling.
- Shellfish may be collected from the nearest intertidal beach, as long as the collection site is within 125 meters of the sample station location, and within the boundaries of the corresponding section in the conditionally managed section.
- Deep water suspended oysters, for sampling purposes, must not be suspended deeper than typical grow-out depth for oysters.

Sample Supplies

- Cooler or Styrofoam box of a suitable size. Ensure it is clean and sanitized.
- New, large, heavy plastic bags (6 mil. gauge) for shellstock samples.
- New, disposable plastic gloves or clean plastic bags. Enough to use one pair of gloves or one bag per sub-sample.
- Sufficient frozen gel packs, ice or other coolant to cover bottom of container and keep sample between 0°C and 10°C during shipping.
- Sufficient newsprint, or dividers to prevent sample contact with coolant.
- Indelible ink felt pen for labelling sample bags and writing report
- Sampler Submission Form (see Annex I).

Sample Collection

- Collect the oysters at random from the beach, or from suspended containers within station distance parameters.
- Pre-label the sample bags with the time, date and sample location. Each subsample must be uniquely identified. If there is more than one sample site in the harvest area, ensure each sample site is noted.
- Complete the samplers report with date, time, station number, sampler, significant environmental conditions. Put the report in a second bag with the sample and tie closed.
- Collect enough shellfish to yield at least 250 grams of meat and liquor for each sub-sample. For oysters this means a minimum of 12-18 animals. Increase the number of animals if the shellfish are small.
- Aseptically collect each sub-sample unit. Collect the sample using a new pair of clean disposable gloves per sub-sample, or use a new, clean plastic bag inverted over your hand. Do not touch anything except the shellfish with the inside of the bag or with the clean gloves. Make sure that the bag you use for the sample is clean, heavy-duty, and puncture resistant. Do not overfill or puncture the sampling bags. Tie each sample bag securely at the top to prevent leakage.
- Complete the Sampler Submission Form and put it in a second bag with the sample and tie closed.
- Put the sample in a pre- refrigerated container as soon as possible.

Sample Transportation

- Samples submitted to laboratories for microbiological analysis must be transported in a manner that will preserve sample integrity from the point of collection to reception by the laboratory.
- Prepare a cooler by lining the bottom of the cooler with gel packs or ice. Enough coolant must be used to maintain a temperature range between 0 °C and 10 °C until arrival at the laboratory.
- Use newsprint to separate the coolant from the shellstock. This will minimize cold shock and keep the sample from freezing
- Place the sample bags in the cooler, and if necessary cover with a layer of newsprint, and more gel packs or ice.
- Samples must be delivered promptly, as they must be received and analyzed by the laboratory within 24 hours of sample collection between 0 and 10 °C. Before you ship, please ensure that the courier or delivery method guarantees the sample will be delivered within 24 hours of sample collection.

Ship the samples to a laboratory that meets the requirements set forth in Part 8.2.1.

13.3 APPENDIX III - Contact Information for CMP Participants

Table II - Contact Information for Reporting.

Name	Address	Telephone #	Fax #	E-mail
Ms. Kristen Kirby (CFIA)	#103-4475 Viewmont Ave, Victoria, BC V8Z 6L8	(250) 363-3850	(250) 363-0336	Kristen.Kirby@inspection.gc.ca
Mr. André Youssef (CFIA)	Suite 400 - 4321 Still CreekDrive,Burnaby , B.C. V5C 6S7	(604) 666-3737	(604) 666-4440	Andre.Youssef@inspection.gc.ca
Ms. Hanna Boehmer (CFIA)	Suite 400 - 4321 Still CreekDrive,Burnaby B.C. V5C 6S7	(604) 666-3578	(604) 666-1963	Hanna.Boehmer@inspection.gc.ca
Ms. Maria Surry (DFO)	3225 Stephenson Point Road Nanaimo BC, V9T 1K3	(250) 756-7192	(250) 756-7162	Maria.Surry@dfo-mpo.gc.ca
Mr. David Fogtmann (DFO)	148 Port Augusta Street Comox BC, V9M 3N6	(250) 339-3799	(250) 339-4612	David.Fogtmann@dfo-mpo.gc.ca
Mr. Bryce Gillard (DFO C&P)	148 Port Augusta Street Comox BC, V9M 3N6	(250) 339-2031	(250) 339-4612	Bryce.Gillard@dfo-mpo.gc.ca
Ms. Elysha Gordon (DFO)	3225 Stephenson Point Road Nanaimo BC, V9T 1K3	(250) 756-7192	(250) 756-7162	Elysha.Gordon@dfo-mpo.gc.ca
Mr. Tom Hlavac (DFO, C&P)	3225 Stephenson PointRoad.Nanaimo, BC, V9T 1K3	(250) 756-7159	(250) 756-7162	Tom.Hlavac@dfo-mpo.gc.ca
Mr. Tim Wenman (EC)	2645 Dollarton Hwy. North Vancouver, BC, V7H 1B1	(604) 903-4415	(604) 903-4423	Tim.Wenman@ec.gc.ca
Mr. Walter Hajen (EC)	2645 Dollarton Hwy. North Vancouver, BC, V7H 1B1	(604) 903-4475	(604) 903-4423	Walter.Hajen@ec.gc.ca
Sally Kew Mac's Oysters Ltd.	RR#1 Site7 C2, Fanny Bay, B.C. V0R 1W0	(250) 335-2129	(250) 335-2065	sally@macsoysters.com
Mr. Alex Munro (Taylor Shellfish Canada ULC)	PO Box 209, Union Bay, B.C. VOR 3B0	(250) 335-0125	(250) 335-1211	alexm@fannybayoysters.com

Plant Name	Fax Number					
Albion Fisheries Ltd (Vancouver)	604-875-0644					
Aquatec Seafoods Ltd.	250-339-4951					
Baynes Sound Oyster Co. Ltd.	250-335-0515					
Best Honour International Seafood Ltd.	604-231-3708					
Blundell Seafoods Ltd.	604-270-6513					
Canadian Pacific Seafood Ltd.	604-278-2512					
Clear Bay Fisheries Inc.	604-276-2213					
Cooper's Cove Oyster Farm Ltd.	250-642-4590					
Dunn's Oyster Company	250-335-2695					
Evening Cove Oysters Processing Ltd.	250-753-2274					
Evergreen International Foodstuffs Ltd.	604-253-0198					
Island Scallops Ltd.	250-757-8370					
Limberis Seafood Processing Ltd.	250-245-3603					
Mac's Oysters Ltd.	250-335-2065					
Moon Enterprises Inc.	604-270-8988					
Ocean Nova Seafood Canada Inc.	604-278-2512					
Pacific Northwest Shellfish Co. Ltd.	604-244-9937					
Pacific Rim Shellfish (2003) Corp.	604-687-5099					
Ronnie Trading Co.	604-272-5499					
Sea World Fisheries Ltd.	604-254-8899					
Stellar Bay Shellfish Ltd.	250-757-9305					
Taylor Shellfish Canada ULC.	250-335-1211					
Timothy Oyster Company Ltd.	250-245-9558					
Tri Star Seafood Supply Ltd.	604-273-2785					
Walcan Seafood Ltd.	250-285-3313					

Table III - List of Bivalve Molluscan Shellfish Processors to be notified in the Event of a Rainfall Trigger.

13.4 APPENDIX IV - Summary of Section Monitoring and Sampling Requirements

	Section A	Section B	Section C
Boundaries	Log sort north of Union Point to north side of Base Flats closure 14.4	Northern boundary of the Base Flats closure 14.4 to the northern tip of Ship Pt Peninsula	North end of Ship Point to most prominent point north of McNaughton Creek
Rainfall trigger	35.0 mm at Comox Airport weather station, year round	40.0 mm at Mud Bay weather station, year round	40.0 mm at Mud Bay weather station, May 1 to Dec 31
Rainfall monitored by:	Mac's Oysters Ltd.	Taylor Shellfish Canada ULC	Taylor Shellfish Canada ULC
Verification sample stations sampled by:	036*, 099, 102*, 104, 108* Mac's Oysters Ltd.	143*, 175* Mac's Oyster Ltd.	116, 118*, 121*, 144, 158*, 170. Taylor Shellfish Canada ULC
Water Sampling Frequency	Conducted by Environment Canada six times per year under an SRS regime	Conducted by Environment Canada six times per year under an SRS regime	Conducted by Environment Canada six times per year under an SRS regime
Water Sampling After a Rainfall Closure	No earlier than 48 hours after trigger exceedance and reporting by fax and/or e-mail - sampling of both water and shellstock are required but do not need to be sampled concurrently	No earlier than 48 hours - after trigger exceedance and reporting by fax and/or e-mail -sampling of both water and shellstock are required but do not need to be sampled concurrently	No earlier than 48 hours - after trigger exceedance and reporting by fax and/or e-mail -sampling of both water and shellstock are required but do not need to be sampled concurrently

Table IV - Summary of Section Monitoring and Sampling.

*Marine stations where shellstock samples must also be collected

13.5 APPENDIX V - Forms

Table V - Comox Airport Rainfall Data.

	January		F	ebruar	7		March			April			May			June			July			August		\$	eptembe	er		October		N	ovembe	r	D	ecembe	ar
	22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00
	to	to		to	to		to	to		to	to		to	to		to	to		to	to		to	to		to	to		to	to		to	to		to	to
	22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00		22:00	10:00
	Rainf	Rainf		Rainf	Rainf		Rainf	Rainf		Rainf	Rainf		Rainf	Rainf		Rainf	Rainf		Rainf	Rainf		Rainf	Rainf		Rainf	Rainf		Rainf	Rainf		Rainf	Rainf		Bainf	Rainf
Date	all	all	Date	all	all	Date	all	all	Date	əll	əll	Date	all	all	Date	all	all	Date	all	all	Date	all	all	Date	all	all	Date	all	all	Date	all	all	Date	all	all
1			1			1			1			1			1			1			1			1			1			1			1		
2			2			2			2			2			2			2			2			2			2			2			2		\square
3			3			3			3			3			3			3			3			3			3			3			3		
4			4			4			4			4			4			4			4			4			4			4			4		
5			5			5			5			5			5			5			5			5			5			5			5		
6			6			6			6			6			6			6			6			6			6			6			6		
7			7			7			7			7			7			7			7			7			7			7			7		
8			8			8			8			8			8			8			8			8			8			8			8		
9			9			9			9			э			9			9			9			9			э			э			9		
10			10			10			10			10			10			10			10			10			10			10			10		
11			11			11			11			11			11			11			11			11			11			11			11		
12			12			12			12			12			12			12			12			12			12			12			12		
13			13			13			13			13			13			13			13			13			13			13			13		
14			14			14			14			14			14			14			14			14			14			14			14		
15			15			15			15			15			15			15			15			15			15			15			15		
16			16			16			16			16			16			16			16			16			16			16			16		$ \longrightarrow $
17			17			17		<u> </u>	17			17			17			17			17			17			17			17			17	$ \longrightarrow $	$ \longrightarrow $
18			18			18			18			18			18			18			18			18			18			18			18		$ \longrightarrow $
19			19			19		<u> </u>	19			19			19			19			19			19			19			19			19		
20			20			20		<u> </u>	20			20			20			20			20			20			20			20			20		
21			21			21		<u> </u>	21			21			21			21			21			21			21			21			21		\vdash
22			22			22	<u> </u>	<u> </u>	22			22			22			22			22			22			22			22			22		\vdash
20			20			20			20			20			20			20			20			20			20			20			20		\vdash
24			24			24		<u> </u>	24			24			24			24			24			24			24			24			24		┝──┥
25			25			25		<u> </u>	25			25			25			25			25			25			25			25			25	$ \longrightarrow $	⊢ – –
20			20			20		<u> </u>	20			20			20			20			20	<u> </u>		20			20			20			20	$ \longrightarrow$	⊢ −−1
28			28			28			28			28			28			28			28			28			28			28			28	$ \longrightarrow $	<u> </u>
29			20			23		<u> </u>	29			29			29			29			23			29			29			29			29	$ \longrightarrow $	
30						30			30			30			30			30			30			30			30			30			30	$ \longrightarrow $	$ \longrightarrow $
31						31						31						31			31						31						31	$ \longrightarrow $	
Total																																		$ \rightarrow$	

Table VI - Mud Bay Rainfall Data Reporting Form.

	En	ivironn Inada	nent En Ca	vironne nada	ement																					STATION ID NUMBER STATION ID NAME	
_	Met	eorologica vice of Ca	al Ser nada du l	vice météo Canada	rologique				CI	ima	tol	ogia	al S	Sta	atic	n	Re	por	t				Code			Station:	
												80 77 8						-					4	1		Province:	BC
								Obe	on/or														3 18	La Ca	nad	la Monthi	
								Obs	erver															Ca	na		(eg March-04)
														Са	lendar								TIM	E OF			
	1	MOF	RNING OI	BSER VA	TION AT	8:00	LT	AFTERI	1000	BSERVA	TION AT	17:00	LT		Day	-						î	PRECIP	TATION			
	TEMPE	RATU	RE (°C)	PRE	CIPITA	TION	-	TEMP	ERATU	RE (°C)	PRE	CIPITA	TION									Ě	(Calen	dar Day)			
D															3			÷	Ĵ	Î	- square	PALSO WITH			D		
Â						WATER EQUIV-	SNOWON						WATER EQUIV-	C Data	1				HINN			A. I.V.			A T		
E	MAX	MIN	AFTER RESET	RAIN (mm)	SNOW (cm)	ALENT (mm)	GROUND (whole cm)	MAX	MIN	AFTER RESET	RAIN (mm)	SNOW (cm)	ALENT (mm)						ALLY MEY	MEY	A MARK	TUBL	BEGAN	ENDED	E	RE	MARKS
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16 1.		18	19	20	21	22	23	24	25	26		
1								<u> </u>						Щ											1	AM	PM
2					<u> </u>		<u> </u>	┨────				—		\vdash	-	-									2	AM	PM
3		_		-	<u> </u>		-		-	2 0	-			\vdash	6	-	-				-				3	AN	PM
4			<u> </u>		<u> </u>		<u> </u>	╢───	<u> </u>	-	-			\vdash	-	╟─	_							<u> </u>	4 5	ANI	
6					<u> </u>					-							_								6	AM	PM
7											1 1				11						1	1			7	AM	PM
8								Î.		1															8	AM	PM
9																									9	AM	PM
10																									10	AM	PM
11											1														11	AM	PM
12											1					-					1				12	AM	PM
13			<u> </u>											$ \rightarrow$	_	┢									13	AM	PM
14			<u> </u>		<u> </u>		<u> </u>							\vdash	_	-									14	AM	PM
15				-	<u> </u>					2	-			\vdash		-	_							L	15	AM	PM
10				-	<u> </u>					s	-			\vdash		-						2			16	AM	PM
18			<u> </u>		<u> </u>		<u> </u>			-				\vdash	-+-		_								10	AM	PM
19														\vdash											19	AM	PM
20								1						\vdash											20	AM	PM
21								1																	21	AM	PM
22									1																22	AM	PM
23																									23	AM	PM
24)				24	AM	PM
25																									25	AM	PM
26																									26	AM	PM
27														\square											27	AM	PM
28							-				-				_							-			28	AM	PM
29			-		—		-		<u> </u>					\vdash	_										29	AM	PM
30			<u> </u>		<u> </u>		<u> </u>	╂────		-		<u> </u>		\vdash	-+-										30	AM	PM
1			-		<u> </u>			u		l	31 1	L		Ц		-	_								51	ANI I	
1			_	.			J							1	MEAN	+	-		Mean T	emp		()			1	RIVI	2304e-v20924NN

Urgent - Baynes Sound Conditional Management Plan Rainfall Notification

То:	Fax Number
DFO: Maria Surry or Elysha Gordon	250-756-7162
DFO: David Fogtmann	250-336-4612
CFIA: Kristen Kirby	250-363-0336
CFIA: Andre Youssef	604-666-4440
EC: Tim Wenman	604-903-4423
All Registered Molluscan Shellfish	Various numbers – See
Processors	CMP list in Appendix 3
From:	Fax Number

Date:	
Actual Rainfall	
Amount (mm):	

	Section	\checkmark	Trigger	Stop Harvest At:
Rainfall Advisory Check which	Section A (Comox Airport)		35 mm	1000 PST (1100 PDT)
section applies:	Section B (Mud Bay)		40 mm	0800 local time
	Section C (Mud Bay) May 1 to December 31 only		40 mm	0800 local time

This is an advisory to all Registered Processors that the rainfall at the afore-noted rainfall monitoring station has exceeded the trigger. As per the standards set out in the Conditional Management Plan, shellfish in the relevant Section are believed to be contaminated, and therefore DFO is being recommended to close that section to harvest as of the above noted time. As per the principles of HACCP, Registered Processors are advised to take appropriate action.

Section A: rainfall trigger in effect all year. Section B: rainfall trigger in effect all year. Section C: rainfall trigger in effect May 1 – Dec 31

Figure 6 - Form for Notification of Partners and Industry when Rainfall Trigger/s are exceeded.

13.6 APPENDIX VI - Roles and Responsibilities

Environment Canada (EC)

Contact: Mr. Tim Wenman Telephone: (604) 903-4415 Fax: (604) 903-4423

- Evaluate the verification water sample results as gathered by the qualified sampler and analysed by the approved laboratory and make recommendations to DFO and to the CFIA for returning a Section to open status if appropriate.
- ²2. Evaluate pollution sources in the Conditionally Approved area annually. The evaluation shall include the review of all data including all that relating to the Management Plan.
 - Review the marine water quality sampling data and make recommendations to the Pacific Region Interdepartmental Shellfish Committee (PRISC) regarding classification of the area.
- Act as Scientific Authority and audit water sample collection, transportation, preservation and analysis of water sample results.
- 5. Provide technical assistance and advice as required.
- Provide training to prospective qualified samplers in water sample collection, preservation and transportation and quality control methodologies as specified in Appendix I.
- Provide formats for data and quality control parameters as specified in the Appendix I to the approved laboratory.
- 8. Participate in an annual audit and audit report on the performance of the Management Plan for submission to the PRISC.
- Monitor elements of the Conditional Management Plan to ensure all aspects are being achieved.

Secondary Contacts:

Mr. Walter Hajen Telephone: (604) 903-4475 Fax: (<u>6</u>04) 903-4423

Mr. Lauren Moccia Telephone: (604) 903-4437 Fax: (604) 903-4423

Darren Goetze Executive Director, Water Quality Monitoring and Surveillance, Science and Technology Branch, EC

JUL 2 6 2011

Date

Canadian Food Inspection Agency (CFIA)

Contacts:	Mr. André Youssef
	Telephone: (604) 666-3737
	Fax: (604) 666-4440

Ms. Kristen Kirby Telephone: (250) 363-3850 Fax: (250) 363-0336

- Evaluate the verification shellfish sample results as gathered by the qualified sampler and analysed by the approved laboratory and make recommendations to DFO and to EC for returning a Section to open status, if appropriate.
- Review any meat sampling data and make any required recommendations to DFO regarding classification of the area.
- Monitor elements of the Conditional Management Plan to ensure all aspects are being achieved.
- Participate in an annual audit and audit report on the performance of the Management Plan for submission to the Pacific Region Interdepartmental Shellfish Committee (PRISC). Monitor elements of the Conditional Management Plan to ensure all aspects are being achieved.
- Act as Scientific Authority and audit shellfish sample collection, transportation, preservation and analysis.
- 6. Provide technical assistance and advice as required.
- 7. Provide training to prospective samplers in shellfish sample collection, preservation and transportation and quality control methodologies as specified in Appendix II.

Secondary Contact:

Ms. Hanna Boehmer Telephone: (604) 666-3598 Fax: (604) 666-1963

Kathryn Emmett Executive Director CFIA Western Operations

Date

DFO Fisheries Management Branch Conservation & Protection Directorate, South Coast Area

- Contact: Mr. Tom Hlavac Telephone: (250) 756-7159 Fax: (250) 756-7162
- 1. Post, patrol, and enforce shellfish closures in accordance with the Fisheries Act.
- 2. Maintain records of surveillance, enforcement and control activities including the Anumber of patrols, occurrences, and violations under the Fisheries Act.

5

Tom Hlavac Area Chief, Conservation and Protection

2011/5447/22

Date

DFO Fisheries Management Branch Resource Management, South Coast Area

Contact: Ms. Elysha Gordon or Ms. Maria Surry Telephone: (250) 756-7192 Fax: (250) 756-7162 Mr. David Fogtmann Telephone: (250) 339-3799 Fax: (250) 339-4612

- Upon receipt of notification by the Shellfish Industry, initiate action to place the sections described in Part 6.2 into closed status when triggers described in Part 7.2 are exceeded, or as recommended by EC and/or CFIA. Closures will be implemented as soon as practicable during business hours (0800-1630H, M-F), and on the next business day following weekends and holidays.
- 2. Maintain the closed status until advised by EC and CFIA that conditions as described in Part 7.3 are met.
- 3. Initiate action to revoke closures and place sections in open status as recommended by EC and/or CFIA. Openings will be initiated as soon as practicable during business hours (0800-1630H, M-F), and on the next business day following weekends and holidays. Note that openings may take up to 48 hours (exclusive of weekends and holidays), although every effort will be made to open in a shorter timeframe.
- 4. Advise CFIA, Environment Canada (EC), DFO Aquaculture Resource Management and shellfish harvesters of the closure and open status changes.
- 5. Participate in an annual audit and audit report on the performance of the Management Plan for submission to the PRISC.

Greg Thomas Area Chief, Resource Management, South Coast Area

	Fisheries & Oceans Canada
Date	South Coast Area
Date	202, 2 7 2011
	NANAIMO, B.C.

<u>DFO Fisheries Management Branch</u> Aquaculture Management Division, Aquaculture Resource Management

Contact:	Ms. Kerry Marcus	Ms. Tricia Spearing
	Telephone: (250) 754-0210	Telephone: (250) 754-0407
	Fax: (250) 754-0309	Fax: (250) 754-0391

- Ensure that shellfish aquaculture licensees, within the Conditional Management Plan Area in Baynes Sound, are aware of this Management Plan. A list of contacts is to be maintained and available for audit.
- 2. Undertake inspection and compliance checks on licensed operations during both closed and open periods to determine compliance to these terms and conditions of the aquaculture license. Any violations are subject to penalties provided for under the. *Fisheries Act.* The times and numbers of inspection and compliance checks, plus any actions, to be maintained in an office file for audit.

Andrew Thomson Director, Aquaculture Management Division

JUL 2 6 2011

Date

Mac's Oysters Ltd

Contact: Ms. Sally Kew Telephone: (250) 335-2129 Fax: (250) 335-2065

A. Rainfall Monitoring and Notification

- Mac's Oysters will obtain daily rainfall data (1000 to 1000 PST, 1100 to 1100 DST) from Comox Airport (YQQ) weather station for Section A as described in part 9. The rainfall records are to be kept on file and submitted to the Victoria CFIA office and the North Vancouver Environment Canada office on a monthly basis using the form specified in Appendix V, and the contact info in Appendix III.
- When daily rainfall exceeds 35.0 mm at Comox Airport, Mac's Oysters Ltd. will contact DFO Resource Management by fax. Confirmation of receipt by DFO must be obtained by telephone. Fax notification must use Figure 5 in Appendix V of this CMP.
- 3. Mac's Oysters will fax the listed shellfish processors when the rainfall exceeds 35.0 mm at the Comox Airport Weather Station to advise them that shellfish in Section A are believed to be contaminated and a recommendation has been made to DFO to close the area to harvest.
- 4. Mac's Oysters Ltd. will provide vessels and samplers who have met the training requirements of EC and CFIA, to collect water and shellfish samples pursuant to this CMP.
- B. Sample Collection, Preservation and Transportation
- 1. Water and shellfish samples will be collected from each sample site listed in Part 8 -using methodologies as described in training programs conducted by EC and CFIA, as per Appendices I and II.
- Water and shellfish samples will be submitted to a laboratory meeting the conditions set forth in Part 8.2.1 and any and all data taken after a rainfall closure for the purposes of verification will be faxed directly from the laboratory to Environment Canada at (604) 903-4423 and the Canadian Food Inspection Agency at (604) 666-4440 and (250)-363-0336. Data should also be emailed to <u>Tim.Wenman@ec.gc.ca</u>, to <u>Walter.Hajen@ec.gc.ca</u>, to <u>Lauren.Moccia@ec.gc.ca.to</u>
- <u>Andre. Youssef@inspection.gc.ca</u>, and to <u>Kristen.Kirby@inspection.gc.ca</u>
 Associated water and shellfish verification analysis costs will be the responsibility of Mac's Oysters Ltd., or by other arrangement.

for Mac' Øysters Ltd.

26/11

36

Taylor Shellfish Canada ULC

Contact: Mr. Alex Munro Telephone: (250) 335-0125 Fax: (250) 335-1211

A. Rainfall Monitoring and Notification

- 1. Taylor Shellfish Canada ULC. will obtain and record daily rainfall data from the weather station on their property for Sections B and C. All rainfall data is to be recorded on a 24 hour basis (0800 to 0800 local time) with observations. The rainfall records are to be kept on file and submitted to the Victoria CFIA office and the North Vancouver Environment Canada office on a monthly basis.
- 2. When daily rainfall exceeds 40.0 mm at Taylor Shellfish Canada ULC., Taylor Shellfish Canada ULC will contact DFO Resource Management by fax. Confirmation of receipt by DFO must be obtained by telephone. Fax notification must be made using the form specified in Appendix V, and the contact information in Appendix III.
- 3. Taylor Shellfish Canada ULC will fax the listed shellfish processors when rainfall exceeds 40.0 mm at the Taylor Shellfish Canada ULC rainfall station to advise them that shellfish in Section B are believed to be contaminated and a recommendation has been made to DFO to close the area to harvest.
- 4. Taylor Shellfish Canada ULC will fax the listed shellfish processors when rainfall exceeds 40.0 mm May 1, to December 31 at the Taylor Shellfish Canada ULC rainfall station to advise them that shellfish in Section C are believed to be contaminated and a recommendation has been made to DFO to close the area to harvest.
- 5. Taylor Shellfish Canada ULC will also provide vessels and samplers who have met the training requirements of EC and CFIA, to collect water and shellfish samples pursuant to this CMP.
- B. Sample Collection, Preservation and Transportation
- 1. Water and shellfish samples will be collected from each sample site listed in Part 8 using methodologies as described in training programs conducted by EC and CFIA, as per Appendices I and II.
- Water and shellfish samples will be submitted to a laboratory meeting the conditions set forth in Part 8.2.1 and any and all data taken after a rainfall closure for the purposes of verification will be faxed directly from the laboratory to Environment Canada at (604) 903-4423 and the Canadian Food Inspection Agency at (604) 666-4440 and (250)-363-0336. Data should also be emailed to <u>Tim.Wenman@ec.gc.ca</u>, to <u>Walter.Hajen@ec.gc.ca</u>, to <u>Lauren.Moccia@ec.gc.ca.to</u>
- <u>Andre Youssef@inspection.gc.ca</u>, and to <u>Kristen.Kirby@inspection.gc</u>.
 3. Associated water and shellfish verification analysis costs will be the responsibility of Taylor Shellfish Canada ULC, or by other arrangement.

for Taylor Shellfish Canada ULC

Date (______ 28, 2011