

# **SCALLOP FISHERMEN'S ASSOCIATION of TASMANIA Inc**

## **Food Safety Management Plan for the Tasmanian and Bass Strait Central Zone Scallop Fisheries**

*Revised 2 May 2022*

Being relatively small and highly variable seasonal fisheries that open from June/July until November/December each year there are only limited resources available through the industry and SFAT to obtain samples and deliver them to a testing laboratory and to pay the high costs for testing.

Whilst our clear objective is to ensure our scallops are always safe for human consumption we also need to regularly review our food safety procedures and the costs involved to ensure that fishermen, processors and the SFAT can continue to be economically viable now and into the future.

Taking all factors into account this therefore is a brief history of past food safety testing arrangements and proposed management arrangements in both jurisdictions for the coming seasons and until this document is updated.

### **Pre-season surveys**

Pre-season surveys in both jurisdictions are carried out generally between April and June each year when NRE Tas Wild Fisheries Management Branch issue survey permits to fishermen to look for scallops across a wide area from generally King Island east about to Storm Bay. In the AFMA managed Bass Strait Central Zone preseason surveys are mostly carried out under a planned program of specifically identified areas where scallops are known to have existed in previous years.

As any landed survey scallops can be from very large and different areas in the one harvesting trip it had previously not been considered appropriate to food test these scallops until open areas are formally declared by NRE Tas or AFMA and when seasonal harvesting starts.

Historically PST has not been an issue around Tasmania for scallops until well after a formal scallop season commences in approx. June or July.

However the unexpected elevated toxin levels off the north east and east coast of Tasmania in April, May and June in 2016 have changed the approach we must now adopt for pre-season survey scallops.

An assessment of toxin results from other shellfish producers has resulted in the following toxin risk table being the current position as at late June 2016 and considered to be still relevant –

*Tasmanian and Bass Strait scallop fisheries -*

<u>Scallop Area</u>	<u>Risk Factor</u>	<u>Tasmanian Survey Areas</u>
East Coast	High	4 and 5
North East Coast	High	2 and 3 (includes Flinders Island)
North West Coast	Low	1
South East Coast	Low	6
Bass Strait	Low	

Since 2012 the east and north east coasts of Tasmania have experienced regular Harmful Algal Bloom (HAB) events and DPIPWE - Biosecurity Tasmania regarded these areas to be at high risk to biotoxins.

In responses to these change in risk profile Tasmanian pre-season survey scallops will be sampled and laboratory tested for biotoxins.

Biotoxin test results will be advised to the relevant fishermen and/or processors by SFAT as soon as results become available along with any appropriate advice on the suitability or otherwise of the held product for human consumption.

If we become aware of any test result for PST, AST or DST that may have a bearing on our survey product quality we will of course take appropriate action as detailed in this plan.

### **Season openings**

When a season is formally declared open scallops are harvested mostly over a period of one to three days (dependant on the quantities harvested and the distance to the unloading port) and are then landed at a certified port into a vehicle that travels directly to the processing premises.

Scallops are processed to meats with roe attached within 24 to 48 hours and are then sold fresh to wholesalers, retailers and the general public. This means that in most cases the laboratory results of food safety samples that are taken at the port of landing or from the processor may generally not be available until well after the fresh product is sold and likely consumed.

In order to prevent any food safety issues and recalls of product an industry precautionary approach is needed when sample test results become available. Voluntary industry closures of scallop areas have been effective in recent years and whilst not popular within the industry they are always an option depending on the circumstances.

Significantly laboratory test results from nearby oyster and mussel farms can be a good indicator for the presence of PST, AST or DST in Tasmanian scallop waters if needed.

## Tasmanian State Scallop Fishery

This fishery is managed by NRE Tas Wild Fisheries Management Branch and generally only operates in discrete open harvesting areas with most waters closed each season. Under *Fisheries (Scallop) Rules 2010* licenced fishermen cannot “deploy or use a scallop dredge in State waters that are less than 20 metres deep” unless authorised under a specific permit.

In previous years our food safety testing regime has been as follows bearing in mind that the SFAT only lodges scallops for testing that are landed in Tasmania and processed in this state.

**Metals** We have lodged samples (12 whole shells) at Analytical Services Tasmania, New Town immediately samples can be obtained from each new and approved harvesting open area. This was an annual test only for the standard suite: As, Cd, Co, Cr, Cu, Fe, Mn, Ni, Pd and Zn plus Hg.

As sample testing for metals over the last five years and more has shown only low and acceptable background levels in Tasmanian waters and as survey harvesting in particular can be over very large areas we intend to discontinue metals testing unless issues are brought to our attention.

**E.coli** We have previously lodged samples (12 whole shells) at the Public Health Laboratory, New Town every two months for each open area. Prior to 2013 E.coli tests were lodged monthly from each open area but the then TSQAP Manager changed this to every two months in 2014 as the testing seemed excessive and in her opinion could be eliminated after 2014 if results were acceptable as expected. Results are generally <0.3 MPN/g. Over many years there have been no test result outside of the acceptable standards.

We therefore in future will not test for E.coli in offshore waters and may only test scallops taken in inshore waters (inside 1nm of the coastline) as may be appropriate. At best we are currently testing normal naturally occurring background levels which have been proven to be of no risk and because of the distance offshore in the fishery under normal circumstances we are most unlikely to encounter shore generated pollution. Scallops cannot normally be harvested commercially in waters under 20 metres in depth anyway. Should an unusual flood event or sewerage spill occur for instance then additional testing for E.coli may be necessary depending on the location and magnitude of the event.

**Paralytic Shellfish Toxin (PST), Amnesic Shellfish Toxin (AST) and Diarrhetic Shellfish Toxin (DST)** We will lodge samples (minimum of 12 scallop meats with roe attached – to be homogenised) for PST, AST and DST testing on a monthly, fortnightly or weekly basis to Analytical Services Tasmania at New Town, Tasmania as per this food safety management plan. Historically AST and DST test results (domoic acid) for scallops over the last few years have all been very low or negative.

We will continue testing for these toxins in preseason survey scallops and on a monthly and then if necessary on a fortnightly or weekly basis for each declared open area that is being harvested based on test results or information from other sources. If we are made aware that biotoxins are present in Tasmanian waters then we may increase the sampling to a maximum of weekly. All tests would be initially for the presence or otherwise of PST, AST and DST and if necessary a full confirmation test of the same sample will follow. If we become aware of the presence of biotoxins in an area then testing may be increased as appropriate.

During 2013 one east coast PST scallop result was 0.4mg/kg (maximum level is 0.8mg/kg) and a short-term voluntary industry closure was put in place as a precautionary measure especially given the high PST level in nearby farmed mussels.

During scallop season 2015 a PST level of 0.55mg/kg was recorded at White Rock on 28 September and a voluntary industry closure of the open area was implemented as a precautionary measure. A scallop sample taken just a few weeks later showed the PST level in the same area at 2.7mg/kg so the closure was well justified.

In season 2015 there were also positive PST levels identified in the Circular Head scallop area (up to 0.22mg/kg).

In March 2016 a test of mussels from Mercury Passage resulted in an unprecedented and excessive test result for DST (0.29mg/kg) and in April a preseason survey scallop sample from north of White Rock recorded a PST level of 0.27mg/kg.

In 2017 four preseason scallop samples were all negative for PST, AST and DST.

The Tasmanian scallop fishery did not open in 2016, 2017, 2018 or 2019 due to insufficient commercial quantities being available.

There was a limited fishery in 2021 for just a few days east of Flinders Island with no PST present and AST at 0.77mg/kg.

Preseason surveys in the Tasmanian scallop fishery will go ahead in April/May 2022.

Separately if opportunistic surveys are conducted under permit at any time during the year no scallops can be retained.

All laboratory test results are copied by the laboratories to ShellMAP for technical assessment and timely advice is given to scallop industry members if an issue arises.

### **Bass Strait Central Zone Scallop Fishery**

This fishery is managed by AFMA and generally operates within the whole of Bass Strait but with some specified areas closed each season. The BSCZSF is located mostly out to 20 nautical miles off the Tasmanian and Victorian coastlines but off north east Flinders Island

and small Bass Strait islands must be a minimum of at least 3 nautical miles from the coast or baselines.

In previous year scallop seasons our food safety testing regime was as follows bearing in mind that the SFAT only lodges scallops for testing that are landed in Tasmania and processed in this state.

**Metals** Previously tested as for Tasmania above. A few years ago we received a slightly higher than normal result for cadmium from one scallop sample harvested in central Bass Strait. Later tests were normal which created a lot of internal discussion about whether the regulatory level for cadmium was even appropriate.

Apart from this one exception sample testing for metals over the last five years and more has shown only low and acceptable background levels in both Tasmanian and Bass Strait waters so we will not be testing for metals in the remote Bass Strait fishery unless issues are brought to our attention.

**E.coli** Previously tested as for Tasmania above. All Bass Strait waters are a long way from any possible land-based pollution source and there have been no laboratory test results from Bass Strait waters outside of acceptable limits over the last six years or more. We therefore will not regular test for E.coli in Bass Strait waters which are a minimum of 3nm offshore. Should an unusual flood event or sewerage spill occur for instance that impacts on the Bass Strait harvesting areas then additional testing for E.coli may be necessary depending on the magnitude and location of the event.

**PST, AST and DST** Tested as for Tasmania above. One isolated PST result from central Bass Strait in 2013 was just under the maximum at 0.7mg/kg and a short-term voluntary industry closure resulted. All AST results for instance have been in the order of negative or one compared to the maximum of 20 mg/kg.

We intend to continue testing on a monthly and then if necessary fortnightly or weekly basis based on test results or information from other sources. If we are made aware that PST for instance is present in Tasmanian, Bass Strait or Victorian waters then we may increase the sampling to a maximum of weekly. All recent AST and DST results for scallops have been negative or very low.

During season 2015 there were PST levels up to 0.22mg/Kg recorded in scallops taken east of King Island in Bass Strait but no closures were necessary.

The only significant PST result in season 2016 was a 0.12mg/Kg screen tested for scallops harvested in late May east of King Island.

In season 2017 all fourteen biotoxin test results were negative.

During season 2018 we lodged 10 samples all from east of King Island with two positive results for PST of 0.18 and 0.11 mg/kg and two positive AST results of 0.21 (viscera included sample) and 0.11 mg/kg. All DST tests were negative.

In season 2019 we lodged 8 samples and all were negative for biotoxins. We also tested once for E.coli and metals with both these results being satisfactory.

For season 2020 all PST results were negative from 11 samples and with low levels of AST from 0.16 to 1.8mg/Kg. We also tested once for E.coli and metals with both these results being satisfactory.

During season 2021 from 10 samples all PST results were negative and AST results varied from 0.59 to 1.9 mg/Kg. We also tested one load from Victorian state waters that was landed in Tasmania with satisfactory results.

All laboratory test results are copied by the laboratories to ShellMAP for inclusion in the biotoxin news (meat and roe only) at their discretion. NRE Tas provides advice to the SFAT Executive Officer as required.

### **Scallop Sampling**

To ensure a consistent approach to obtaining scallop samples from both Tasmanian and Bass Strait waters the following persons are authorised under this plan to arrange samples and to lodge them with relevant testing laboratories –

Bob Lister (as a representative of the SFAT) and Julian Harrington (as the CEO of TSIC or his staff under his direction). If these persons are not available or for NRE Tas reasons James Parkinson (NRE Tas Scallop Manager) or his delegate are also authorised to carry out this role.

### **Exporting scallops**

This Food Safety Management Plan refers to scallops which are processed for sale to the domestic Australian market as meat with roe attached. As there may be whole scallops exported in the shell out of Tasmania or Victoria in addition to meat and roe testing we will as necessary also sample and test the whole scallop (meat, roe and viscera) at the same time from the same vessel/processor where possible to achieve a parallel representative result.

If scallops are to be exported overseas then the specific requirements of the receiving country will need to be addressed in conjunction with the Department of Agriculture and Water Resources in Canberra.

### **Primary Production and Processing Standards (Tasmania)**

Those businesses or persons involved in the primary production of seafood including catching and processing of scallops are required to be accredited under the Tasmanian Primary Produce Safety (Seafood) Regulations 2014 and must have a food safety program subject to annual audit. This accreditation imposes mandatory obligations on producers to control food safety hazards occurring in the primary production of the food supply chain before the product enters the food retail and service sector.

The contact for PPPS is Karen Loone, Acting Program Manager (Primary Produce Safety), Biosecurity Tasmania, NRE Tas, 13 St Johns Avenue, New Town, Tasmania. Phone 0418 131 213. Email – Karen.Loone@nre.tas.gov.au

## **Food Safety Management arrangements for this season and beyond**

### **Actions to be taken**

For all the above reasons we do not see any need to continue with expensive regular metals or E.coli testing in both fisheries except for E.coli in approved close inshore waters unless unusual flood events for example occur which may impact on water quality.

The SFAT will monitor other industry biotoxin results and maintain our regular testing of scallops in both fisheries for PST), AST and DST as detailed above. This will involve testing preseason survey scallops as well as in-season scallops. The objective is to mitigate the risk of scallops that exceed international toxin levels entering the food chain.

### ***Harvesting in Season***

For the Bass Strait Central Zone the two main harvesting areas are generally east of King Island and generally north of Flinders Island. Both areas are mapped with survey data and scallop densities and the latest information and details will be shown on the AFMA website. Whilst the whole of the BSCZ may be open for harvesting, except for discrete closure areas, due to previous successful preseason surveys the main fishing effort will most likely be in the two areas identified by AFMA above.

A Tasmanian season is possible subject to the results of preseason surveys.

### ***Sampling Procedures***

All scallop samples will be clearly identified with a unique sample number and an enclosed sample lodgement sheet will include details of the sample to be tested. Sampling may commence during the preseason survey period and at the start of the season (weather and sample availability permitting) and this monthly sampling period will be reviewed regularly dependant on results advised by the testing laboratory. The minimum period between sampling will be weekly with a maximum of monthly subject always to the practicalities of obtaining the sample and weather permitting.

Under the new Boundy testing regime carried out by Analytical Services Tasmania all biotoxin tests will be done to the confirmation stage.

If whole shells are to be exported overseas the sample for testing will comprise meat, roe and viscera.

If a processor/s does not require meat, roe and viscera samples tested for export purposes then this sampling and testing will not occur. Any exports of whole scallops that are

undertaken when sampling of whole scallops has been discontinued will require processors to comply with the Notice issued by DAWR: IAN 2016-08.

### ***Closing a harvesting area***

Exceedance of the regulatory limits for biotoxins will result in NRE Tas closing the harvesting area and issuing a classification notice to that effect. The regulatory limit applies to meat and roe results only. For an elevated but under the regulatory limit biotoxin level SFAT may need to inform NRE Tas Wild Fisheries or AFMA of the risks involved in leaving the fishery open, consider closing a specific fishery area/s on a voluntary industry basis or suggest holding product harvested from high risk areas as a precaution pending the laboratory test results.

If scallop meat with roe PST levels exceed 0.5mg/Kg or results from AST and DST are over 50% of the maximum permitted levels, ie over 10mg/Kg for AST or over 0.1mg/Kg for DST, then we will seek the support of active fishermen and processors to close a scallop harvesting area or to hold product on a voluntary industry and precautionary basis in order to ensure that our product is always safe for human consumption. We also wish to avoid any possible recall and destruction of product and all the food safety and unpleasant issues associated with such an unfortunate event.

For whole scallops, ie meat, roe and viscera, when there is a test result over 0.6mg/Kg for PST and over 50% of the maximum limits for AST and DST, industry, NRE Tas and DAWR will be notified by SFAT and there will be a voluntary cessation of packing whole scallops for selling on the domestic market and in preparation for export.

### ***Recall of product***

If meat and roe samples exceed the maximum limit permitted for biotoxins it may be necessary to execute processor recall protocols and in this instance SFAT will work with the relevant authorities to assist in accessing the necessary information.

### ***Reopening Criteria***

Given the remoteness of the Bass Strait scallop beds and many Tasmanian open areas after a voluntary industry closure we will take a minimum of two meat and roe samples from different sections of the open bed on the same day and if both those sample results are below 0.5mg/Kg for PST and under 50% of the regulatory limit for AST and DST we may reopen that bed. This will apply if the closure was a voluntary industry and precautionary closure.

The reopening criteria for whole scallops, ie meat, roe and viscera, will be similarly under 0.5mg/Kg for PST and under 50% of the regulatory limits for AST and DST.

Where a non-voluntary closure has been made in Tasmanian or Bass Strait due to biotoxin results being over the regulatory limit then two samples need to be taken of the meat with

roe on (and another of whole scallops if appropriate) a minimum of one week apart and both tests must be under the stated criteria in this plan for a voluntary closure.

### **Notifications**

The SFAT maintains contact details for fishermen and processors and in the event of a voluntary industry closure, full closure or reopening all active industry persons involved in the fishery will be contacted accordingly along with AFMA, NRE Tas and DAWR.

### **Maximum Food Safety limits for scallops**

For the record –

PST maximum limit is 0.8mg/Kg

AST maximum limit is 20mg/Kg

DST maximum limit is 0.2mg/Kg.

### **Payment for collection of samples and laboratory testing**

The costs for collecting samples and food safety testing of scallops are currently met as follows –

For Tasmanian State Waters - from the industry funded Tasmanian Scallop Research Trust Account administered by NRE Tas.

For Bass Strait Central Zone - by the Tasmanian industry funded Scallop Fishermen's Association of Tasmania Inc despite there being benefits to AFMA, fishermen and processors who may not contribute financially to the SFAT. Attempts to encourage AFMA to fund food safety tests which benefit all BSCZ concession holders in Tasmania and Victoria has not been successful.

### **Annual Review**

Within 30 days of a season closure SFAT will report directly to NRE Tas the following;

- all sample submissions including dates, times, locations and results,
- any variation of routine sampling and reasons,
- any communication and notification to variation in routine sampling, and
- any additional information requested by DPIPWE from time to time.

This report will be supplied to the Primary Produce Safety Program (NRE Tas) and sent to [Karen.Loone@nre.tas.gov.au](mailto:Karen.Loone@nre.tas.gov.au) .

This Food Safety Management Plan for Scallops will be reviewed when necessary and possibly before the start of any scallop season and circulated as may be appropriate to NRE Tas, AFMA and DAWR as well as to SFAT scallop industry members.

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