



Title of meeting:	Safety in the Community Portfolio Decision Meeting
Date of meeting:	14 July 2023
Subject:	Sampling plan in relation to the shellfish production areas within Portsmouth waters
Report by:	Director of Culture, Leisure, and Regulatory Services
Wards affected:	All
Key decision:	No
Full Council decision:	No

1.0 Purpose of report

1.1 The purpose of this report is to advise the Cabinet Member for Safety in the Community of the current situation with regard to the sampling plan and responsibilities placed upon Regulatory Services (RS) in respect to live bivalve molluscs (shellfish).

2.0 Recommendations

2.1 **RECOMMENDED that the Cabinet for Safety in the Community:**

- i. Recognises the importance of our work in monitoring the health of the shellfish population within our harbours and the benefits of such.
- ii. Approves the resources (financial and staffing) within RS that are required to provide a continuation of the sampling programme.
- iii. Approves **Option 3** and the continuation of these activities.

3.0 Background

3.1 RS is the Portsmouth Port Health Authority (PPHA or '*competent authority for official controls*'). Part of the varied responsibilities of the PPHA is to carry out monthly bacteriological sampling of approved shellfish production areas in both Portsmouth and Langstone harbours.

3.2 The results obtained by the PPHA are used by the Food Standards Agency (FSA) to classify the production areas according to the *E.coli* levels in the shellfish flesh to ensure they meet the health standards laid down in EC Regulation 2019/627.



- 3.3 The classification protocol laid out in EC Regulation 2019/627 determines the areas where shellfish can be collected from and how the shellfish have to be treated after harvesting to ensure that they are safe to eat.
- 3.4 This assessment results in the classification of shellfish ('A', 'B', 'Long Term B' and 'C') which determines the level of treatment (e.g. purification, relaying, cooking) required before safe human consumption of the fish. Marine biotoxins which are produced by certain types of phytoplankton (marine algae) can accumulate in the tissues of filter feeding shellfish.
- 3.5 The consumption of shellfish which are contaminated with these biotoxins can lead to illness, ranging from sickness and diarrhoea to more serious conditions which could require hospital treatment. Certain concentrations of toxins (depending on the specific biotoxin) can be lethal. Shellfish are considered a high-risk food. The sampling frequency and location are determined and regularly reviewed by CEFAS (Centre for Environment Fisheries and Aquaculture Science).
- 3.6 EC Regulation 2019/627 also requires a monitoring programme of classified shellfish production areas to be established, as part of PPHA official controls, to check for the possible presence of marine biotoxins in the shellfish flesh. This sampling protocol is defined in the legislation and requires monthly sampling at a minimum of ten occasions over 12 months.
- 3.7 The PPHA is additionally responsible for implementing procedures in the event that contamination levels in shellfish beds exceed certain levels. The actions taken vary from further investigation of potential causes to the closure of the shellfish production areas depending on contamination levels.
- 3.8 The PPHA are responsible for informing industry and Local Action Group (LAG) members of the results and enforcement of control measures such as issuing Temporary Closure Notices (TCN) and temporary downgrades and regulation of Food Business Operators in their local area. We coordinate the LAG and Local Action Plan (LAP) for our area. The documented plan is referred to as the SLAP (Shellfish Local Action Plan).
- 3.9 The responsibility for classification or reclassification of a production area remains with the FSA in conjunction with Centre for CEFAS.
- 3.10 The economic value of the current classified areas is difficult to calculate. There are approximately 50 locally registered vessels operating within the PPHA area. The information provided by Southern Inshore Fisheries & Conservation Authority (SIFCA) with regard to catch landed in the Portsmouth water areas estimates the total amount to be approximately 70 Tonnes per annum. The estimated commercial value of these products being -Circa. £750,000.



3.11 Sanitary Surveys are required under EC Regulation 2019/627 relating to official controls on shellfish intended for human consumption. The surveys are intended to provide a thorough assessment of microbiological pollution sources in the harbours. Once the sources are located, they enable the development of the most representative sampling plan, identify appropriate production area boundaries and the most representative monitoring points (RMP) [i.e., where the PPHA are required to sample] for all shellfish production areas.

3.12 The end product microbiological criteria specified in EU Regulation 2073/2005 must be met. The production area will be classified as A, B or C, with A as the least and C as the most contaminated. The level of treatment required to remove contamination from the shellfish after harvesting depends on this classification. If contamination levels are consistently so high that a class C cannot be achieved, then harvesting from the area may be prohibited. The standards that must be achieved and the level of treatment required for each classification are:

Class A - Shellfish can be harvested for direct human consumption if the end product standard requirements are met.

Class B - Shellfish can be supplied for human consumption after one of three processes. The options are:

- purification in an approved establishment.
- relaying for at least one month in a classified Class A relaying area.
- an EC approved heat treatment process.

Class C - Shellfish can only be sold for human consumption after completing one of three possible processes. These processes are:

- relaying for at least two months in an approved class B relaying area followed by treatment in an approved purification centre.
- relaying for at least two months in an approved class A relaying area.
- after an EC approved heat treatment process.

Prohibited areas - Shellfish from areas with consistently prohibited level results must not be subject to production or be harvested.

3.12 Within the PPHA area the areas listed below in **Table 1** have classifications. These being species specific for that area. The classification for the beds are listed - B-LT refers to a Long Term (LT) classification (Stable compliance over 5 Years +). Further information and examples of the areas that are classified for commercial harvesting are detailed within **Appendix 1**.



Table 1

Harbour	Location	Species	Classification
Langstone Harbour	South East Langstone Harbour	<i>M. mercenaria</i> (Hard clam)	B-LT
Langstone Harbour	Langstone Channel	<i>O. edulis</i> (Native oyster)	B
Langstone Harbour	Langstone Channel	<i>C. gigas</i> (Pacific oyster)	B
Portsmouth Harbour	East Harbour	<i>M. mercenaria</i> (Hard clam)	B-LT
Portsmouth Harbour	West Harbour	<i>M. mercenaria</i> (Hard clam)	B-LT
Portsmouth Harbour	West Harbour	<i>O. edulis</i> (Native oyster)	B-LT
Portsmouth Harbour	West Harbour	<i>C. gigas</i> (Pacific oyster)	B-LT
Portsmouth Harbour	Fareham Lake	<i>M. mercenaria</i> (Hard clam)	B
Portsmouth Harbour	East Harbour	<i>O. edulis</i> (Native oyster)	B-LT
Portsmouth Harbour	East Harbour	<i>C. gigas</i> (Pacific oyster)	B-LT

4. Sampling costs

4.1 The samples are obtained on 12 occasions - one batch of samples per month across two days. The existing sampling plan entails 9 x samples of shellfish (flesh), 2 water samples and 1 x biotoxin sample being collected from agreed points across the Portsmouth waters. The collection is provided via a contract with a local fisherman, additionally RS is required to pay for specific suite of analysis for the E.Coli count. Costs are summarised in **Table 2** below.

Table 2

Collection contract - annual cost	£ 16,409.28
Laboratory Analysis £65.21 x 9(samples) = £586.89 per month (x12)	£ 7,042.68
PPHA Officer time (£80 per hour) 2 days (14 hours per month) = £1120.00 per month (x12)	£ 13,440.00
Grand total	£36,891.96 per year

4.2 The planning, collection and processing of the samples requires officer time equivalent to 2 working days each month.



- 4.3 The contract for the collection includes labour costs (2 crew required) and fuel for the vessel. The costs have increased from the previous year in the region of 10 % (inflationary costs). The laboratory costs have also increased by a similar figure. This is expected to continue to rise each year for the foreseeable future.
- 4.4 The PHA have been in contact with other Authorities (including Canterbury and Fareham Councils) through regional groups that have duties to undertake shellfish sampling. It is widely accepted that the sampling programme is costly and time consuming.

5 Recommendation

5.1 Options:

Option 1: No longer support the shellfish sampling plan.

Option 2: Reduce the number of samples obtained per year (8 /10 per year).

Option 3: Continue with the existing sampling plan as per the recommendation.

5.2 Option 1 - Implications

- 5.2.1 The FSA require a minimum of 8 monthly sample results to maintain a B or C area classification and a minimum of 10 monthly sample results are required to maintain 'A' classification.
- 5.2.2 The expectation is that local authorities will plan to sample each bed every month as this build's contingency should any sample fail to be admissible, or sampling not take place due to unforeseeable circumstances (for example staff sickness, tide, or weather considerations).
- 5.2.3 Any reduction in sampling below the minimum requirement for the existing classification is likely to result in the area being de-classified by the FSA as to do otherwise could compromise the integrity of the control. A reduction in sampling below 10 samples per year over the most recent three-year dataset means that the site cannot be considered for any upgrade to classification A regardless of the water quality indicated.
- 5.2.4 If the shellfish beds were declassified, commercial harvesting would no longer be permitted. This would have an adverse effect financially on the local fishermen. In turn, this may also lead to illegal harvesting within these areas. With the beds not having monitoring undertaken there would be an increased risk to public health.
- 5.2.5 The current budget used for shellfish sampling purposes (£37K) could be used to reinvest in the service to improve the provision of services.



5.2.6 A further consideration is regard to the potential positive impact that allowing the beds to be unharvested would bring. With an increased population of Bivalve molluscs in the harbours this could lead to a positive impact on the water quality.

5.2.7 Bivalves filter algae and organic matter from the water column which can significantly improve water quality by reducing the turbidity (a measure of the amount of suspended material in the liquid). They are also known to remove excess nutrients from water, particularly nitrogen which at high levels can promote algal blooms.

5.3 **Option 2 - Implications**

5.3.1 As stated above, a minimum of 8 samples results are required per year (for B & C classification). The number could be reduced slightly from 12 to 8 per annum. The bulk of the cost with regard to sampling being the contract with the fisherman to obtain the samples. The contract could be renegotiated to the reduced number (potentially 30% reduction). The laboratory analysis costs would also be reduced. This would provide a saving of £2,347. In doing so there would be less data available on the bed conditions and there would be no contingency. Dropping below the required 8 samples could then lead to declassification.

5.3.2 The existing arrangement is also utilised at present to obtain seawater samples within the harbours. This is to gather additional data for the bathing water reporting. If the shellfish sampling was no longer being carried out, the method for obtaining these samples would need to be reviewed. If the harbour sampling for seawater quality were to continue, then extra costs may be incurred using an alternative contractor for this purpose.

5.4 **Option 3 - No change**

5.4.1 Continuation of the support for the sampling plan that is dictated by CEFAS. This enabling the classification of the beds by the FSA and the commercial harvesting to continue.

6 **Consultation requirements**

6.1 If Option 1 was to be implemented (to cease the sampling programme) then various parties would need to be consulted:

FSA (Food Standards Agency)

The Food Standards Agency is the Central Competent Authority (CCA) with overall responsibility for the microbiological monitoring programme in England and Wales

CEFAS (Centre for Environment Fisheries and Aquaculture Science)



The Government's Marine science experts that coordinate the shellfish sampling programme on behalf of the FSA

SIFCA (Southern Inshore Fisheries and Conservation authority)

Manage the exploitation of sea fisheries resources within their district.

LHB (Langstone harbour board)

The Langstone Harbour Board is the statutory Harbour authority, local lighthouse authority, and pilotage authority for Langstone Harbour. It is in charge of safety and navigation and has responsibilities for the conservation of the natural environment.

Local fisherman

Approx - 50 registered in Portsmouth

7.0 Integrated impact assessment

7.1 The IIA is attached as **Appendix 2**.

8.0 Legal implications

8.1 If the duty of sampling were not to be followed and the beds declassified, then this is likely to lead to an increase in the illegal harvesting of shellfish. The products harvested would potentially end up in the food chain. With no monitoring being carried out the shellfish would represent a significant risk to health.

8.2 Illegal harvesting from areas without monitoring and classification is a major concern in other areas. There has been a recent multi agency operation in the Chichester harbour in an attempt to tackle the issue involving Chichester District Council, Sussex Police, the Food Standards Agency, National Food Crime Unit, Inshore Fisheries and Conservation Authority, and the Gangmaster Labour Abuse Authority, working together to tackle suspected harvesters and any businesses taking the illegal harvested products.

8.3 If the Council was not to fulfil its duty with regard to the sampling this could also lead to legal challenge from the interested parties within the fishing industry.

9 Director of Finance's comments

9.1 The continued activities proposed within this report will be funded from the existing service portfolio budgets, as approved by Full Council.

10. Director's comments

It is recognised that the harvesting of shellfish for supply into the food chain requires specific controls due to the nature of the product and the inherent



risks to public health. The areas within our Portsmouth waters that have classification provide a substantial income for the industry. Through continuation of the sampling programme, it supports industry by providing the legally required basis and necessary controls to allow harvesting to continue and safety in the food chain. The close working with agency partners such as the FSA, CEFAS and SIFCA must continue to ensure protection for the harbour habitat and monitor the sea resources.

I support the recommendation for Option 3 to Continue with the existing sampling plan as per the recommendation.

Signed by: Stephen Baily, Director of Culture Leisure, and Regulatory Services

Appendices:

Appendix 1	CEFAS classification maps 1a - Example of CEFAS classification Map for Langstone harbour - M.mercenaria 1b - Example of CEFAS classification map for Langstone harbour - O.edulis 1c - Example of CEFAS classification map for Langstone harbour - C.gigas 1d - Example of CEFAS classification map for Portsmouth harbour - M.mercenaria 1e - Example of CEFAS classification Map for Portsmouth harbour - O.edulis 1f - Example of CEFAS classification Map for Portsmouth harbour - C.gigas
Appendix 2	Integrated Impact Assessment

Background list of documents: Section 100D of the Local Government Act 1972

The following documents disclose facts or matters, which have been relied upon to a material extent by the author in preparing this report:



Title of document	Location
CEFAS (Centre for Environment Fisheries and Aquaculture Science) - Shellfish classification and microbiological monitoring	https://www.cefasc.co.uk/shellfish
FSA (Food Standards Agency) - Shellfish classification	https://www.food.gov.uk/shellfish-classification
Carcinus Ltd - Water Quality Assessments	Shellfish Hygiene - Water Quality Assessments – Carcinus Ltd
MMO (Marine Management Organisation) - UK Sea Fisheries statistics 2021	UK Sea Fisheries Statistics 2021
Chichester District Council webpage - Chichester harbour	https://www.chichester.gov.uk/article/36856/Operation-Pearl-targets-illegal-harvesting-of-shellfish-in-Chichester-Harbour
Sussex express webpage - Illegal harvesting at Chichester harbour	https://www.sussexexpress.co.uk/news/people/chichester-district-council-launch-operation-pearl-to-target-illegal-shellfish-harvesting-3817292
FSA Guidance document	Guidance for Local Action Groups
CEFAS - Bivalve cultivation site location criteria document	techrep136.pdf (cefasc.co.uk)
Native Oyster Network	https://nativeoysternetwork.org

The recommendations set out above were approved/ approved as amended/ deferred/ rejected by the Cabinet Member for Safety in the Community on 14 July 2023.

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Signed by: Councillor Ian Holder, Cabinet Member for Safety in the Community