

Bacteriological and Biotoxin sampling results for the Eastern IFCA district

Table 1. Designated bivalve mollusc production areas in the Eastern-IFCA district. Effective from the 3rd September 2018 (Food standards Agency, 2019).

| Production area | Classification Zone | Bed Name | Species | Class | Explanatory note |
|------------------------|---------------------|-----------------------|---------------------|-------|--------------------------------------------------------------------------------------------------------|
| The Wash - Boston | Zone 1 South | North Lays | <i>C. edule</i> | B-LT | |
| | Zone 2 East | Black Buoy | <i>C. edule</i> | B-LT | |
| | Zone 2 East | Toft | <i>Mytilus spp.</i> | B-LT | |
| | | Welland Wall | <i>Mytilus spp.</i> | B | Previously seasonal C, however 3 years of good progress has elevated bed classification to B all year. |
| The Wash – King’s Lynn | Zone 5 | Ouse Mouth | <i>C. edule</i> | B-LT | |
| | | | <i>Mytilus spp.</i> | B-LT | |
| | Zone 5 | Nene Mouth | <i>C. edule</i> | B-LT | |
| | | | <i>Mytilus spp.</i> | B-LT | |
| Brancaster | | Brancaster | <i>C. edule</i> | B-LT | |
| | | | <i>Mytilus spp.</i> | B-LT | |
| | | | <i>M. gigas</i> | B-LT | |
| | | Thornham ¹ | <i>M. gigas</i> | B-LT | |
| Blakeney | | South Side | <i>M. gigas</i> | B-LT | |
| | | Wells – The Pool | <i>Mytilus spp.</i> | B-LT | |
| Butley | | Butley Oysterage | <i>M. gigas</i> | B-LT | |
| Deben | | Girlings Hard | <i>Mytilus spp.</i> | B-LT | |
| | | | <i>O. edulis</i> | B-LT | |
| | | | <i>M. gigas</i> | B-LT | |
| | | Shottisham Creek | <i>Mytilus spp.</i> | B-LT | |
| | | | <i>M. gigas</i> | B-LT | |
| | | Spinny Marsh | <i>M. gigas</i> | B-LT | |
| | | Stonner Point | <i>M. gigas</i> | B-LT | |

². Thornham is now a declassified site as of January 2019.

Bacteriological Sampling – Bed Classification

Table 2. Classification criteria for harvesting areas (The Centre for Environment, Fisheries and Aquaculture Science (Cefas, 2019).

| Class | Microbiological standard | Treatment level |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A | 80% of results contain ≤ 230 <i>E. coli</i> /100g shellfish flesh, no results exceeding 700 <i>E. coli</i> /100g shellfish flesh. | None required (direct human consumption). |
| B | 90% of samples must be ≤ 4600 <i>E. coli</i> /100g shellfish flesh; all samples must be less than 46000 <i>E. coli</i> /100g shellfish flesh. | Depurate (using approved methodology in approved plant) <u>OR</u> relayed in an approved Class A relaying area <u>OR</u> EC approved heat treatment before being sold for human consumption. |
| C | All samples must not exceed ≤ 46000 <i>E. coli</i> /100g shellfish flesh. | Must be relayed (minimum of 2 months) in an approved Class B relaying area followed by treatment in an approved purification centre <u>OR</u> relaying for at least 2 months in an approved Class A relaying area <u>OR</u> after an EC approved heat treatment process. |
| D | Do not conform to at least class C. | Prohibited. |

Attached link reports a 5-year span of data collected during shellfish monitoring in The Wash for both *C. edule* and *M. edulis*, including microbiological results for individual harvesting beds: <https://www.cefas.co.uk/cefas-data-hub/food-safety/classification-and-microbiological-monitoring/england-and-wales-classification-and-monitoring/shellfish-monitoring-results>

Biotoxin Sampling

Table 3. Action levels of flesh, water toxic algae levels and methods of analysis (Food Standards Agency, 2019).

| | Flesh | Method of Analysis | Water | Method of Analysis |
|------------|-------------------------------------------|-------------------------------------------------|----------------------------------------------------------------|------------------------------------------------------------|
| ASP | >20 mg of domoic/epi-domoic acid/Kg flesh | High Performance Liquid Chromatography (HPLC) | Producing algae: Greater than or equal to 150,000 cells/Litre. | Utermöhl method (Light microscopy and electron microscopy) |
| DSP | Presence | Liquid Chromatography Mass Spectrometry (LC-MS) | Producing algae: Greater than or equal to 100 cells/Litre | |
| PSP | >800 micrograms STX/Kg flesh | High Performance Liquid Chromatography (HPLC) | Producing algae: Greater than 40 cells/litre | |

For biotoxin (ASP, DSP and PSP) and phytoplankton monitoring results see: <https://www.food.gov.uk/enforcement/monitoring/shellfish/ewbiotoxin>