SCHEDULE 1

Regulation 2

DEFINITIONS FROM THE WATER FRAMEWORK DIRECTIVE

"Coastal water" means surface water on the landward side of a line, every point of which is at a distance of one nautical mile on the seaward side from the nearest point of the baseline from which the breadth of territorial waters is measured(1), extending where appropriate up to the outer limit of transitional waters.

"Groundwater" means all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"Inland water" means all standing or flowing water on the surface of the land, and all groundwater on the landward side of the baseline from which the breadth of territorial waters is measured.

"Lake" means a body of standing inland surface water.

"River" means a body of inland water flowing for the most part on the surface of the land but which may flow underground for part of its course.

"Surface water" means inland waters, except groundwater; transitional waters and coastal waters, except in respect of chemical status for which it shall also include territorial waters.

"Transitional waters" are bodies of surface water in the vicinity of river mouths which are partly saline in character as a result of their proximity to coastal waters but which are substantially influenced by freshwater flows.

SCHEDULE 2

Regulation 3

SURFACE WATERS IDENTIFIED IN ENGLAND AND WALES

PART 1

Surface Waters in England(2)

Allonby South	Amble Links	Anderby	
Anstey's Cove (Torquay)	Askam-in-Furness	Babbacombe	
Bamburgh Castle	Bantham	Beachlands Central	
Beachlands West	Beacon Cove	Beadnell	
Beer	Bembridge	Berrow North of Unity Farm	
Bexhill	Bigbury-on-Sea North	Bigbury-on-Sea South	
Birling Gap	Bispham	Blackpool Central	
Blackpool North	Blackpool Sands	Blackpool South	

⁽¹⁾ The relevant baseline, for the purposes of this definition and the definition of "inland water", is that from which the breadth of the territorial sea is measured and is established by section 1 of the Territorial Sea Act 1987 (c.49) and the Territorial Waters Order in Council 1964 (1965 III, p.6452A).

Further details of the location and extent of a bathing water in England are available on request by contacting the Department for Environment, Food and Rural Affairs, Bathing Waters Team, Area 3D Nobel House, 17 Smith Square, London SW19 3JR.

Blue Anchor West Blyth South Beach Bognor Regis (Aldwick)
Bognor Regis East Botany Bay (Broadstairs) Bournemouth Alum Chine

Bournemouth Boscombe Pier Bournemouth Durley Chine Bournemouth Fisherman's

Walk

Bournemouth Hengistbury Bournemouth Pier Bournemouth Southbourne

West

Bovisand Bowleaze Cove Bracklesham Bay

Breakwater Beach (Shoalstone) Brean Bridlington North Beach

Bridlington South Beach Brightlingsea Brighton Central

Brighton Kemptown Broadsands Broadstairs (Stone Bay)
Broadstairs (Viking Bay) Bude Crooklets Bude Sandy Mouth

Bude Summerleaze Budleigh Salterton Burnham Jetty

Caister Point Calshot Camber

Carbis Bay Porth Kidney Sands Carbis Bay Station Beach Cawsand

Cayton Bay Challaborough Chapel Porth

Chapel St Leonards Charlestown Charmouth West

Christchurch Avon Beach Christchurch Bay Christchurch Friar's Cliff

Christchurch Higheliffe Castle Christchurch Mudeford Church Cove

Sandbank East

Church Ope Cove Clacton Clacton (Groyne 41)
Clacton Beach Martello Tower Cleethorpes Clevedon Beach

Cleveleys Colwell Bay Colwick Country Park (West

Lake)

Combe Martin Combesgate Beach, Compton Bay

Woolacombe

Constantine Bay Cotswold Country Park and Coverack

Beach

Cowes Crackington Haven Crantock

Crimdon Crinnis Golf Links Crinnis Leisure Centre
Cromer Croyde Bay Danes Dyke, Flamborough

Dartmouth Castle and Sugary Dawlish Coryton Cove Dawlish Town

Cove

Dawlish Warren Daymer Bay Deal Castle

Dovercourt Downderry Druridge Bay North

Druridge Bay South Dunster North West Duporth
Durdle Door East Durdle Door West Dymchurch
East Looe East Runton Eastbourne

Eastney Eastoke Exmouth

Eypemouth Felixstowe North Felixstowe South

Felpham Filey Fistral

Flamborough South Landing Fleetwood Folkestone

Formby Fraisthorpe Frensham Great Pond Frinton Goodrington Gorleston Beach

Gorran Haven (Vault) Gorran Haven Little Perhaver Great Western

Great Yarmouth North Great Yarmouth Pier Great Yarmouth South

Gurnard Gyllyngvase Hampstead Heath (Ladies

Pond)

Hampstead Heath (Men's Pond) Hampstead Heath (Mixed Harlyn Bay

Pond)

Hartland Quay Hastings Haverigg
Heacham Hemsby Herne Bay
Herne Bay Central Highcliffe Hillhead
Hive Holland Hollicombe
Holywell Bay Hope Cove Hornsea

Hove Humberston Fitties Hunstanton Main Beach

Hunstanton (Old Hunstanton) Hythe Ilfracombe Hele
Ilfracombe Tunnels Beach Ilfracombe Wildersmouth Ingoldmells South
Instow Jaywick Joss Bay (Broadstairs)

Kennack Sands Kimmeridge Bay Kingsand
Ladram Bay Lancing, Beach Green Lee-on-Solent
Leigh Bell Wharf Lepe Leysdown
Littlehampton Littlestone Low Newton

Lowestoft (North of Claremont Lowestoft (South of Claremont Lulworth Cove

Pier) Pier)

Lusty Glaze Lyme Regis Church Cliff Beach Lyme Regis Front Beach

Lynmouth Mablethorpe Town Maenporth

Margate Fulsam Rock Margate The Bay
Marsden Marske Sands Mawgan Porth
Meadfoot Meols Middleton-on-sea
Milford-on-sea Mill Bay Millendreath

Milford-on-sea Mill Bay Millendreath
Minehead Terminus Minnis Bay (Birchington) Minster Leas

Morecambe North Morecambe South
Moreton Mothecombe Mother Ivey's Bay

Mounts Bay Heliport Mounts Bay Marazion Mounts Bay Penzance

Mounts Bay Wherry Town Mundesley Ness Cove
Newbiggin North Newbiggin South Newhaven
Norman's Bay Oddicombe Pagham
Paignton Paignton Sands Par

Pendower Pentewan Perranporth Penhale Sands

Perranporth Village End Perranuthnoe Pevensey Bay
Plymouth Hoe East Plymouth Hoe West Poldhu Cove
Polkerris Polstreath Polurrian Cove

Polzeath Poole Branksome Chine Poole Canford Cliffs Chine
Poole Harbour Lake Poole Harbour Rockley Sands Poole Sandbanks Peninsular

Poole Shore Road Beach Porlock Weir Porth

Porthallow Porthcothan Porthcurnick
Porthcurno Porthgwidden Porthleven West
Porthluney Porthmeor Porthminster
Porthoustock Porthpean Porthtowan
Portland Harbour Castle Cove Portland Harbour Sandsfoot Portmellon

Castle

Portreath Portwrinkle Praa Sands East
Praa Sands West Putsborough Ramsgate Sands
Ramsgate Western Undercliffe Readymoney Redcar Coatham
Redcar Granville Redcar Lifeboat Station Redcar Stray
Reighton Ringstead Bay Roan Head

Robin Hoods Bay Rock Roker - Sunderland
Runswick Bay Ryde Salcombe North Sands

Salcombe South Sands
Saltburn
Sandgate
Sandown
Sandsend
Sandwich Bay
Sandy Bay
Saunton Sands
Scarborough North Bay
Scarborough South Bay
Sea Palling
Seaburn – Sunderland
Seaford
Seagrove

Seaham BeachSeaham Hall BeachSeahouses NorthSeascaleSeaton (Cornwall)Seaton (Devon)

Seaton Carew Centre Seaton Carew North Seaton Carew North Gare

Seaton Sluice Seatown Selsey
Sennen Shaldon Shanklin

Sheerness Shell Bay North Sheringham

Shoebury East Sidmouth Jacobs Ladder Shoeburyness

Sidmouth Town Silecroft Silloth

Slapton Sands Monument Skegness Skipsea

Slapton Sands Torcross South Shields Southend Chalkwell Southend Jubilee Southend Three Shells Southend Thorpe Bay

Southend Westcliff Bay Southport Southsea

Southwick Southwold The Denes Southwold The Pier St Annes St Annes North Spittal St Bees St Helens St Leonards

St Margaret's Bay St Mary's Bay (Devon) St Mary's Bay (Kent)

St Mildreds Bay (Westgate) Staithes Stokes Bay

Studland Knoll House Sutton-on-Sea Swanage Central

Swanpool Tankerton Teignmouth Holcombe Teignmouth Town The Serpentine - Hyde Park The Towans (Godrevy) Thurlestone North

The Towans (Hayle) Thurlestone South

Tolcarne Torre Abbey **Totland Bay**

Towan Trebarwith Strand Trevaunance Cove

Trevone Bay Tunstall Treyarnon Bay

Tynemouth Cullercoats Tynemouth King Edwards Bay Tynemouth Long Sands North

Tynemouth Long Sands South Ventnor Wallasey

Walney Sandy Gap Walney West Shore Walney Biggar Bank

Walton Walpole Bay (Margate) Warkworth

Watcombe Watergate Bay Wells

Wembury West Bay (West) West Bay (Westgate)

West Beach, Whitstable West Kirby West Mersea West Wittering Westbrook Bay (Margate) Weston Main Weston-super-Mare Sand Bay Weston-super-Mare Uphill Westward Ho!

Slipway

Weymouth Central Weymouth Lodmoor Whitby

Whitecliff Bay Whitsand Bay (Sharrow) Whitley Bay

Widemouth Sand Wilsthorpe Winchelsea

Windermere, Fellfoot Windermere. Windermere, Lakeside YMCA Millerground

Landing

Withernsea Woolacombe Village Worthing

Yaverland

PART 2

Surface Waters in Wales(3)

Aberafan	Aberdaron	Aberdyfi	
Abereiddy	Aberffraw	Abergele (Pensarn)	
Abermawr	Aberporth	Abersoch	
Aberystwyth North	Aberystwyth South	Amroth Central	
Barafundle	Barmouth	Benllech	
Borth	Borth Wen	Bracelet Bay	
Broad Haven (Central)	Broad Haven South	Caerfai	
Castle Beach Tenby	Caswell Bay	Cemaes	
Church Bay	Cilborth	Clarach South	
Cold Knap	Colwyn Bay	Coppet Hall	
Craig Du Central	Criccieth	Dale	
Druidston Haven	Dyffryn (Llanendwyn)	Fairbourne	
Freshwater East	Freshwater West	Harlech	
Jackson's Bay Barry Island	Kinmel Bay (Sandy Cove)	Langland Bay	
Limeslade Bay	Little Haven	Llandanwg Central	
Llanddona	Llanddwyn	Llandudno North	
Llandudno West	Llanfairfechan	Llangrannog	
Llanrhystud	Lydstep	Manorbier	
Marine Lake, Rhyl	Marloes Sands	Morfa Dinlle	
Morfa Nefyn	Mwnt	New Quay Harbour	
New Quay North	Newgale	Newport	
Nolton Haven	Oxwich Bay	Pembrey	
Penally	Penbryn	Pendine	
Penmaenmawr	Poppit Sands	Port Eynon	
Porth Dafarch	Porth Neigwl	Prestatyn Central	
Pwllheli	Rest Bay	Rhosneigr	
Rhossili	Rhyl	Sandy Bay	
Sandy Haven	Saundersfoot	Silver Bay, Rhoscolyn	
Southerndown	St. Davids, Benllech	Swansea Bay	
Talybont	Tenby North	Tenby South	
Traeth Gwyn New Quay	Traeth Lligwy	Trearddur Bay	

⁽³⁾

Trecco Bay Tresaith Tywyn
West Angle Whitesands Whitmore Bay Barry Island
Wiseman's Bridge

SCHEDULE 3

Regulation 7

BATHING WATER PROFILES

Contents

- 1.—(1) Every bathing water profile must—
 - (a) contain a description of the physical, geographical and hydrological characteristics of—
 - (i) the bathing water; and
 - (ii) any other surface water in the catchment area of the bathing water where the surface water could be a source of pollution for the bathing water;
 - (b) identify and assess the causes of pollution that might affect bathing water quality and pose a risk to bathers' health;
 - (c) assess the potential for cyanobacterial proliferation;
 - (d) assess the potential for the proliferation of macro-algae or phytoplankton; and
 - (e) identify the location of the monitoring point.
- (2) The information in sub-paragraph (1)(a) and (b) must be detailed on a map whenever practicable.

Review

- **2.**—(1) Where a bathing water is classified as "poor", "sufficient" or "good" under regulation 11, the appropriate agency must review, and if necessary update, the bathing water profile, taking into account the nature and severity of the pollution which affects the bathing water and at the following minimum frequency—
 - (a) if classified as "poor", every two years;
 - (b) if classified as "sufficient", every three years; and
 - (c) if classified as "good", every four years.
- (2) Where there are significant construction works or infrastructure changes in or around a bathing water, the appropriate agency must review the bathing water profile before the start of the next bathing season.

SCHEDULE 4

Regulation 8

MONITORING ETC

PART 1

INTESTINAL ENTEROCOCCI AND ESCHERICHIA COLI

Location of monitoring point

- 1. The appropriate agency must—
 - (a) at every bathing water, locate the monitoring point where most bathers are expected; and
 - (b) subject to paragraph 7, where possible, take samples 30 centimetres below the water's surface and in water at least one metre deep.

Monitoring calendar

- 2.—(1) The appropriate agency must—
 - (a) establish a monitoring calendar for every bathing water before the start of every bathing season; and
 - (b) take samples at every bathing water no later than four days after the date specified in the monitoring calendar.
- (2) In relation to any abnormal situation, the appropriate agency—
 - (a) may suspend the monitoring calendar for the duration of the situation; and
 - (b) as soon as possible after the end of the situation, must take sufficient additional samples to replace those missing due to the suspension and to ensure that it has the minimum number required for the bathing water for the bathing season.

Frequency of monitoring

- 3. The appropriate agency must—
 - (a) take and analyse the first sample for every bathing season shortly before the start of that season; and
 - (b) take and analyse samples at intervals not exceeding one month, from every bathing water throughout the bathing water season.

Sampling equipment

- **4.**—(1) Subject to paragraph 7, the appropriate agency must only use sampling bottles which—
 - (a) have been—
 - (i) sterilised in an autoclave for at least 15 minutes at 121 degrees Celsius;
 - (ii) dry sterilised at no lower than 160 degrees Celsius and no higher than 170 degrees Celsius for at least one hour; or
 - (iii) irradiated by their manufacturer and not used previously;
 - (b) are of a size which allows sufficient water to be taken and analysed for the presence of intestinal enterococci and *Escherichia coli*; and
 - (c) are made of transparent and colourless material.

- (2) The appropriate agency must—
 - (a) use aseptic techniques to maintain the sterility of the sample bottles; and
 - (b) clearly identify every sample taken by marking in indelible ink the sample bottle and associated paperwork.

Storage and transport of samples before analysis

- **5.**—(1) Subject to paragraph 7, the appropriate agency must—
 - (a) at all times, protect every sample taken from exposure to light, and in particular, direct sunlight; and
 - (b) conserve every sample at a temperature of around 4 degrees Celsius between sampling and laboratory analysis.
- (2) In relation to any sample, if the interval between sampling and laboratory analysis is likely to exceed four hours, the appropriate agency must conserve the sample in a refrigerator.
- (3) The appropriate agency must ensure that the time between sampling and laboratory analysis does not exceed 24 hours and must use its best endeavours to keep this time as short as possible.

Reference methods of analysis

- **6.**—(1) Subject to paragraph 7, the appropriate agency must use the following reference methods of analysis—
 - (a) for intestinal enterococci, one of the following standards of the International Organization for Standardization—
 - (i) ISO 7899-1:1998 (water quality, detection and enumeration of intestinal enterococci, Part 1, miniaturized method, most probable number, for surface and waste water) as amended by Cor 1:2000, or
 - (ii) ISO 7899-2:2000 (water quality, detection and enumeration of intestinal enterococci, Part 2, membrane filtration method); and
 - (b) for *Escherichia coli*, one of the following standards of the International Organization for Standardization—
 - (i) ISO 9308-1:2000 (water quality, detection and enumeration of Escherichia coli and coliform bacteria, Part 1, membrane filtration method) as amended by Cor 1:2007, or
 - (ii) ISO 9308-3:1998 (water quality, detection and enumeration of Escherichia coli and coliform bacteria, Part 3, miniaturized method, most probable number, for the detection and enumeration of E. coli in surface and waste water) as amended by Cor 1:2000.

General provisions in relation to rules or reference methods of analysis

- 7. The appropriate agency—
 - (a) must have regard to the guidelines on the handling of samples for microbiological analyses given in Annex V to the Bathing Water Directive; and
 - (b) may use such rules or reference methods of analysis as it considers are substantively equivalent to those specified in this Schedule, where the appropriate agency has notified the appropriate Minister giving details of such rules and methods and their equivalence.

PART 2

CYNOBACTERIA

8. Where any bathing water profile indicates a potential for cyanobacterial proliferation, the appropriate agency must undertake appropriate monitoring at the bathing water at the frequency necessary to allow adequate management measures to be put in place in accordance with regulation 12.

PART 3

MACRO-ALGAE AND MARINE PHYTOPLANKTON

9. Where any bathing water profile indicates a tendency for proliferation of macro-algae or marine phytoplankton, the appropriate agency must undertake investigations at the bathing water to allow adequate management measures to be put in place in accordance with regulation 12.

PART 4

WASTE

10. The appropriate agency must undertake visual inspections at every bathing water at the frequency necessary to allow adequate management measures to be put in place in accordance with regulation 12.

SCHEDULE 5

Regulation 11

CLASSIFICATION

Standards

1. The appropriate agency must use the following standards for classification—

Standards for inland waters

Parameter	"Excellent"	"Good"	"Sufficient"
Intestinal enterococci ⁽¹⁾	200(2)	400(2)	330 ⁽³⁾
Escherichia coli ⁽¹⁾	500 ⁽²⁾	$1,000^{(2)}$	900 ⁽³⁾

- (1) Colony forming units per 100 millilitres ("cfu/100 ml").
- (2) Based upon a 95-percentile evaluation-see paragraph 2.
- (3) Based upon a 90-percentile evaluation-see paragraph 2.

Standards for coastal and transitional waters

Parameter	"Excellent"	"Good"	"Sufficient"
Intestinal enterococci ⁽¹⁾	100(2)	200(2)	185 ⁽³⁾
Escherichia coli ⁽¹⁾	250 ⁽²⁾	500 ⁽²⁾	500 ⁽³⁾

- (1) Colony forming units per 100 millilitres ("cfu/100 ml").
- (2) Based upon a 95-percentile evaluation-see paragraph 2.
- (3) Based upon a 90-percentile evaluation-see paragraph 2.

Methodology

- **2.**—(1) In this Schedule, "percentile value" is based on a percentile evaluation of the \log_{10} normal probability density function of microbiological data used for the assessment under regulation 10.
 - (2) The appropriate agency must derive a percentile value as follows—
 - (a) take the log₁₀ value of all bacterial concentrations in the data sequence to be evaluated or, if a zero value is obtained, take the log₁₀ value of the minimum detection limit of the analytical method used;
 - (b) calculate the arithmetic mean ("μ") of the log₁₀ values taken under paragraph (a);
 - (c) calculate the standard deviation (" σ ") of the \log_{10} values taken under paragraph (a);
 - (d) derive the upper 90-percentile point of the data probability density function from the following equation: upper 90-percentile = antilog ($\mu + 1.282 \sigma$); and
 - (e) derive the upper 95-percentile point of the data probability density function from the following equation: upper 95-percentile = antilog ($\mu + 1.65 \sigma$).

Classification

- **3.**—(1) At the end of every bathing season, the appropriate agency must classify a bathing water as "poor" if, in the set of bathing water quality data used, the percentile values for microbiological concentrations are higher than the "sufficient" standards set out in paragraph 1.
- (2) At the end of every bathing season, the appropriate agency must classify a bathing water as "sufficient" if—
 - (a) in the set of bathing water quality data, the percentile values for microbiological concentrations are equal to or lower than the "sufficient" standards set out in paragraph 1; and
 - (b) the bathing water is not classifiable as "good" or "excellent".
- (3) At the end of every bathing season, the appropriate agency must classify a bathing water as "good" if—
 - (a) in the set of bathing water quality data, the percentile values for microbiological concentrations are equal to or lower than the "good" standards set out in paragraph 1; and
 - (b) the bathing water is not classifiable as "excellent".
- (4) At the end of every bathing season, the appropriate agency must classify a bathing water as "excellent" if, in the set of bathing water quality data used, the percentile values for microbiological concentrations are equal to or lower than the "excellent" standards set out in paragraph 1.