

**S.I. No. 155/1992 — Quality of Bathing Waters
Regulations, 1992.**

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**S.I. No. 79/2008 — Bathing Water Quality Regulations
2008**

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First Schedule - Bathing Areas

Bathing Area	Responsible Local Authority
<ul style="list-style-type: none"> ● The beach at Bishopsquarter ● Cappagh Pier and beach at Kilrush ● The beach at Fanore ● The beach at Kilkee ● The beach at Lahinch ● The beach at Spanish Point ● White Strand, Doonbeg ● White Strand, Miltown Malbay 	Clare County Council
<ul style="list-style-type: none"> ● The beach at Barley Cove ● The beach at Fountainstown ● White Strand at Garrylucas ● The beach at Inchydoney ● The beach at Owenahincha ● The main beach at Youghal 	Cork County Council
<ul style="list-style-type: none"> ● The beach at Bundoran ● The beach at Downings ● The beach at Drumnatinny ● The beach at Fintra ● The beach at Lisfannon ● The beach at Marble Hill ● The beach at Murvagh ● The beach at Portnablagh ● The beach at Portnoo/Naran ● The beach at Portsalon ● The beach at Rathmullan ● The beach at Rossnowlagh 	Donegal County Council
<ul style="list-style-type: none"> ● The beach at Donabate ● The beach at Loughshinny ● The beach at Malahide ● The beach at Portmarnock ● The beach at Portrane ● The South beach at Rush ● The beach at Skerries 	Dublin County Council

Bathing Area	Responsible Local Authority
<ul style="list-style-type: none"> ● Burrow Beach at Sutton 	
<ul style="list-style-type: none"> ● Tra an Doilin, Ceathru Rua ● The beach at Clifden ● The beach at Gortin, Cloch na Ron ● The beach at Na Forbacha ● The beach at Cill Muirbhthe, Inis Mor ● The bathing place at Loughrea Lake ● The bathing place at Portumna ● The beach at An Cnoc, Spiddal ● The beach at Spiddal Pier ● The beach at An Spideal ● The beach at Traught 	Galway County Council
<ul style="list-style-type: none"> ● The beach at Ballinskelligs ● White Strand at Ballybunion ● The beach at Ballyheigue ● Banna Strand ● The beach at Derrynane ● The beach at Inch ● White Strand at Rossbeigh ● The beach at Ventry. 	Kerry County Council
<ul style="list-style-type: none"> ● The beach at Clogherhead ● The beach at Port, Lurganboy ● The beach at Seapoint ● The beach at Sheiling Hill/Templetown 	Louth County Council
<ul style="list-style-type: none"> ● The beach at Bertra ● The beach at Carrawmore ● The beach at Doogort ● Golden Strand, Achill ● The beach at Keel, Achill ● The beach at Keem, Achill ● Ross Strand, Killala ● The beach at Old Head, Louisburgh ● Silver Strand, Louisburgh ● The beach at Mulranny 	Mayo County Council
<ul style="list-style-type: none"> ● The beach at Laytown/Bettystown 	Meath County Council
<ul style="list-style-type: none"> ● The beach at Enniscrone ● The beach at Mullaghmore 	Sligo County Council

Bathing Area	Responsible Local Authority
<ul style="list-style-type: none"> ● The beach at Rosses Point 	
<ul style="list-style-type: none"> ● The beach at Ardmore ● The beach at Bonmahon ● The beach at Clonea ● Dunmore Strand, Dunmore East ● Counsellors' Strand, Dunmore East ● The beach at Tramore 	Waterford County Council
<ul style="list-style-type: none"> ● The bathing place The Cut, Lough Lene ● The bathing place at Lilliput, Lough Ennel ● The bathing place at Portnashangan, Lough Owel 	Westmeath County Council
<ul style="list-style-type: none"> ● The North beach at Ballymoney ● The North beach at Courtown ● The beach at Curraclloe ● The beach at Duncannon ● The beach at Morriscastle ● The beach at Rosslare Strand 	Wexford County Council
<ul style="list-style-type: none"> ● The beach at Brittas Bay ● The beach at Clogga ● The beach at Silver Strand 	Wicklow County Council
<ul style="list-style-type: none"> ● Dollymount Strand 	Dublin Corporation
<ul style="list-style-type: none"> ● The beach at Salthill ● Silver Strand, Galway 	Galway Corporation
<ul style="list-style-type: none"> ● The beach at Killiney ● The beach at Seapoint 	Dun Loaghaire Corporation

Second Schedule - Bathing Water Quality Standards

Part I

Parameter	Unit of Measurement	Standard
Total coliforms	No./100ml	(a) ≤ 5,000; (b) ≤ 10,000 (To be conformed with, in the case of (a), by 80% or more of samples and, in the case of (b), by 95% or more of samples. Standard not to be exceeded by any two consecutive samples in any case.)
Faecal coliforms	No./100ml	(a) ≤ 1,000; (b) ≤ 2,000 (To be conformed with, in the case of (a), by 80% or more of samples and, in the case of (b), by 95% or more of samples. Standard not to be exceeded in any case by any two consecutive samples.)
Colour		No abnormal change in colour. (To be conformed with in 95% or more of inspections of bathing water. No two consecutive inspections to fail standard.)
Mineral oils	mg/litre	No film visible on the surface of bathing water and no odour. (To be conformed with in 95% or more of inspections of bathing water. No two consecutive inspections to fail standard.)
Surface active substances reacting with methylene blue.	mg/litre (lauryl-sulfate)	No lasting foam. (To be conformed with in 95% or more of inspections of bathing water. No two consecutive inspections to fail standard.)
Phenols (phenol indices)	mg/litre C ₄ H ₃ OH	≤ 0.05 and no specific odour. (To be conformed with by 95% or more of samples and not to be exceeded by any two consecutive samples. No sample to exceed 0.075.)
Transparency	metres/depth	≥ 1 (To be conformed with in 95% or more inspections of bathing water. No two consecutive inspections to fail standard. Transparency never to be less than 0.5.)

Parameter	Unit of Measurement	Standard
Tarry residues. Floating materials such as wood, plastic articles, bottles, containers of glass, plastic, rubber and other substances. Waste or splinters.		No offensive presence. (To be conformed with in 95% or more of inspections of bathing water. No two consecutive inspections to fail standard.)

PART II

Parameter	Unit of Measurement	Standard
Faecal streptococci	No./100ml	≤ 300 (To be conformed with by 95% or more of samples and not to be exceeded by any two consecutive samples.)
Salmonella	No./litre	0 (To be conformed with by 95% or more of samples and not to be exceeded by any two consecutive samples.)
Enteroviruses	PFU/10 litres	0 (To be conformed with by 95% or more of samples and not to be exceeded by any two consecutive samples.)
pH		≥ 6 and ≤ 9 (To be conformed with by 95% or more of samples. No two consecutive samples to fall outside the range.)
Dissolved Oxygen	% saturation O ₂	≤ 70 and ≤ 120 (To be conformed with by 95% or more of samples. No two consecutive samples to fall outside the range.)

THIRD SCHEDULE - Substances in respect of which sampling is required in certain circumstances.

Pesticides (parathion, HCH, dieldrin).
Heavy Metals such as arsenic, cadmium, chrome VI, lead, mercury.
Cyanides
Nitrates
Phosphates
Ammonia
Nitrogen Kjeldahl

Fourth Schedule - Methods of Analysis and Inspection

Parameter	Method of analysis and inspection
Total coliforms Faecal coliforms	Fermentation in multiple tubes. Subculturing of the positive tubes on a confirmation medium. Count according to MPN (most probable number) or membrane filtration and culture on an appropriate medium such as Tergitol lactose agar, endo agar, 0.4% Teepol broth, subculturing and identification of the suspect colonies. The incubation temperature is variable according to whether total or faecal coliforms are being investigated.
Colour	Visual inspection or photometry with standards on the Pt. Co. scale.
Mineral oils	Visual and olfactory inspection or extraction using an adequate volume and weighing the dry residue.
Surface-active substances reacting with methylene blue.	Visual inspection or absorption spectro photometry with methylene blue.
Phenols (phenol indices)	Verification of the absence of specific odour due to phenol or absorption spectrophotometry 4- aminoantipyrine (4 AAP) method.
Transparency	Secchi's disc.
Tarry residues. Floating materials such as wood, plastic articles, bottles, containers of glass, plastic, rubber or any other substance. Waste or splinters.	Visual inspection.
Faecal Streptococci	Litsky method. Count according to MPN (most probable number) or filtration on membrane. Culture on an appropriate medium.
Salmonella	Concentration by membrane filtration. Inocultation on a standard medium. Enrichment – subculturing on isolating agar – identification.
Enteroviruses	Concentrating by filtration, flocculation or centrifuging and confirmation.
pH	Electrometry with calibration at pH 7 and 9.
Dissolved oxygen	Winkler's method or electrometric method (oxygen meter.)
Pesticides (parathion, HCH, dieldrin)	Extraction with appropriate solvents and chromatographic determination.
Heavy metals such as: Arsenic, Cadmium, Chrome VI, Lead, Mercury.	Atomic absorption possibly preceded by extraction.
Cyanides	Absorption spectrophotometry using a specific reagent.

Parameter	Method of analysis and inspection
Nitrates and phosphates	Absorption spectrophotometry using a specific reagent.
Ammonia	Absorption spectrophotometry, Nessler's method, or indophenol blue method.
Nitrogen Kjeldahl	Kjeldahl method

The new Bathing Water Quality Regulations 2008 (SI No. 79 of 2008) transposed the 2006 Directive into Irish Law on 24 March 2008

SCHEDULE 1 Bathing Water Profile

1. The bathing water profile referred to in Regulation 5 is to consist of:
 - a) a description of the physical, geographical and hydrological characteristics of the bathing water, and of other surface waters in the catchment area of the bathing water concerned, that could be a source of pollution, which are relevant to the purpose of this Directive and as provided for in Directive 2000/60/EC;
 - b) an identification and assessment of causes of pollution that might affect bathing waters and impair bathers' health;
 - c) an assessment of the potential for proliferation of cyanobacteria;
 - d) an assessment of the potential for proliferation of macro-algae or phytoplankton;
 - e) if the assessment under point (b) shows that there is a risk of short-term pollution, the following information:
 - i. the anticipated nature, frequency and duration of expected short-term pollution;
 - ii. details of any remaining causes of pollution, including management measures taken and the time schedule for their elimination;
 - iii. management measures taken during short-term pollution and the identity and contact details of bodies responsible for taking such action
 - f) the location of the monitoring point.
2. In the case of bathing waters classified as "good", "sufficient" or "poor", the bathing water profile is to be reviewed regularly to assess whether any of the aspects listed in paragraph 1 have changed. If necessary, it is to be updated. The frequency and scope of reviews is to be determined on the basis of the nature and severity of the pollution. However, they are to comply with at least the provisions and to take place with at least the frequency specified in the following table:

3.

Bathing water classification	Good	Sufficient	Poor
Reviews are to take place at least every	4 years	3 years	2 years
Aspects to be reviewed (points of paragraph 1)	(a) to (f)	(a) to (f)	(a) to (f)

In the case of bathing waters previously classified as “excellent”, the bathing water profiles need be reviewed and, if necessary, updated only if the classification changes to “good”, “sufficient” or “poor”. The review is to cover all aspects mentioned in paragraph 1.

4. In the event of significant construction works or significant changes in the infrastructure in or in the vicinity of the bathing water, the bathing water profile is to be updated before the start of the next bathing season
5. The information referred to in paragraph 1(a) and (b) is to be provided on a detailed map whenever practicable.
6. Other relevant information may be attached or included if the local authority considers it appropriate.
7. When establishing, reviewing or updating a bathing water profile, adequate use shall be made of data obtained from monitoring and assessments carried out in accordance with the European Communities (Water Policy) Regulations, 2003 ([S.I. No. 722 of 2003](#)) or otherwise pursuant to Directive 2000/60/EC.
8. A bathing water profile shall contain such other information as the relevant local authority considers appropriate.

SCHEDULE 2 Monitoring Calendar and Sampling

1	One sample is to be taken shortly before the start of each bathing season. Taking account of this extra sample and subject to paragraph 2, no fewer than four samples are to be taken and analysed per bathing season.
2	Only three samples need be taken and analysed per bathing season in the case of a bathing water that is situated in a region which, in the opinion of the EPA, is subject to special geographical constraints.
3	Sampling dates are to be distributed throughout the bathing season, with the interval between sampling dates never exceeding one month.
4	Monitoring shall take place no later than four days after the date specified in the monitoring calendar.
5	In the event of short-term pollution, one additional sample is to be taken to confirm that the incident has ended. This sample is not to be part of the set of bathing water quality data. If necessary to replace a disregarded sample, an additional sample is to be taken seven days after the end of the short-term pollution.

Schedule 3 - Monitoring, Inspections and Investigations to be Carried Out

1	Bathing waters shall be monitored in respect of the parameters intestinal enterococci and escherichia coli.
2	Bathing waters shall be inspected visually for pollution such as tarry residues, glass, plastic, rubber or any other waste.
3	Where the bathing water profile established in relation to a bathing water indicates a potential for cyanobacterial proliferation, a local authority shall carry out appropriate monitoring to enable timely identification of health risks.
4	Where the bathing water profile established in relation to a bathing water indicates a tendency for proliferation of macro-algae or marine phytoplankton, a local authority shall undertake investigations to determine their acceptability and health risks.

Schedule 4 Parameters and Reference Methods

For inland waters

	Parameter	Excellent quality	Good quality	Sufficient quality	Reference methods of analysis
1	Intestinal enterococci (cfu/100 ml)	200 (*)	400 (*)	330 (**)	ISO 7899-1 or ISO 7899-2
2	Escherichia coli (cfu/100ml)	500(*)	1,000(*)	900 (**)	ISO 9308-3 or ISO 9308-1

(*) Based upon a 95-percentile evaluation. See Schedule 6.

(**) Based upon a 90-percentile evaluation. See Schedule 6.

For coastal waters and transitional waters

	Parameter	Excellent quality	Good quality	Sufficient quality	Reference methods of analysis
1	Intestinal enterococci (cfu/100 ml)	100 (*)	200 (*)	185 (**)	ISO 7899-1 or ISO 7899-2
2	Escherichia coli (cfu/100ml)	250(*)	500 (*)	500 (**)	ISO 9308-3 or ISO 9308-1

(*) Based upon a 95-percentile evaluation. See Schedule 6.

(**) Based upon a 90-percentile evaluation. See Schedule 6.

Schedule 5 - Rules on the Handling of Samples for Microbiological Analyses

1	Sampling point	Where possible, samples are to be taken 30 centimetres below the water's surface and in water that is at least one metre deep.
2	Sterilisation of sample bottles	<p>Sample bottles are:</p> <ul style="list-style-type: none"> — to undergo sterilisation in an autoclave for at least 15 minutes at 121 °C, or — to undergo dry sterilisation at between 160 °C and 170 °C for at least one hour, or — to be irradiated sample containers obtained directly from manufacturer.
3	Sampling	<p>The volume of the sampling bottle/container is to depend on the quantity of water needed for each parameter to be tested. The minimum content is generally to be 250 ml.</p> <p>Sample containers are to be of transparent and non-coloured material (glass, polyethene or polypropylene).</p> <p>In order to prevent accidental contamination of the sample, the sampler is to employ an aseptic technique to maintain the sterility of the sample bottles. There is no further need for sterile equipment (such as sterile surgical gloves or tongs or sample pole) if this is done properly.</p> <p>The sample is to be clearly identified in indelible ink on the sample container and on the sampling form.</p>
4	Storage and transport of samples before analysis	<p>Water samples are to be protected at all stages of transport from exposure to light, in particular direct sunlight.</p> <p>The sample is to be conserved at a temperature of around 4 °C, in a cool box or refrigerator (depending on climate) until arrival at the laboratory. If the transport to the laboratory is likely to take more than four hours, then</p>

		<p>transport in a refrigerator is required.</p> <p>The time between sampling and analysis is to be kept as short as possible. Samples are to be analysed on the same working day where possible. If this is not possible for practical reasons, then the samples shall be processed within no more than 24 hours. In the meantime, they shall be stored in the dark and at a temperature of 4 °C 3 °C.</p>
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Schedule 6 - Bathing Water Assessment and Classification

1	Poor quality	<p>Bathing waters are to be classified as "poor" if, in the set of bathing water quality data for the last assessment period (a), the percentile values (b) for microbiological enumerations are worse (c) than the "sufficient quality" values set out in Schedule 4, column D.</p>
2	Sufficient quality	<p>Bathing waters are to be classified as "sufficient":</p> <ol style="list-style-type: none"> 1. if, in the set of bathing water quality data for the last assessment period, the percentile values for microbiological enumerations are equal to or better (d) than the "sufficient" values set out in Schedule 4, column D; and 2. if the bathing water is subject to short-term pollution, on condition that: <ol style="list-style-type: none"> (i) adequate management measures are being taken, including surveillance, early warning systems and monitoring, with a view to preventing bathers' exposure by means of a warning or, where necessary, a bathing prohibition; (ii) adequate management measures are being taken to prevent, reduce or eliminate the causes of pollution; and (iii) the number of samples disregarded in accordance with Regulation 7(4) because of short-term pollution during the last assessment period represented no more than 15% of the

		total number of samples provided for in the monitoring calendars established for that period, or no more than one sample per bathing season, whichever is the greater.
3	Good quality	<p>Bathing waters are to be classified as "good":</p> <ol style="list-style-type: none"> 1. if, in the set of bathing water quality data for the last assessment period, the percentile values for microbiological enumerations are equal to or better (d) than the "good quality" values set out in Schedule 4, column C; and 2. if the bathing water is subject to short-term pollution, on condition that: <ol style="list-style-type: none"> (i) adequate management measures are being taken, including surveillance, early warning systems and monitoring, with a view to preventing bathers' exposure, by means of a warning or, where necessary, a bathing prohibition; (ii) adequate management measures are being taken to prevent, reduce or eliminate the causes of pollution; and (iii) the number of samples disregarded in accordance with Regulation 7(4) because of short-term pollution during the last assessment period represented no more than 15% of the total number of samples provided for in the monitoring calendars established for that period, or no more than one sample per bathing season, whichever is the greater.
4	Excellent quality	<p>Bathing waters are to be classified as "excellent":</p> <ol style="list-style-type: none"> 1. if, in the set of bathing water quality data for the last assessment period, the percentile values for microbiological enumerations are equal to or better than the "excellent quality" values set out in Schedule 4, column B; and 2. if the bathing water is subject to short-term pollution, on condition that:

		<p>(i) adequate management measures are being taken, including surveillance, early warning systems monitoring, with a view to preventing bathers' exposure, by means of warning or, where necessary, a bathing prohibition;</p> <p>(ii) adequate management measures are being taken to prevent, reduce or eliminate the causes of pollution; and</p> <p>(iii) the number of samples disregarded in accordance with Regulation 7(4) because of short-term pollution during the last assessment period represented no more than 15% of the total number of samples provided for in the monitoring calendars established for that period, or no more than one sample per bathing season, whichever is the greater.</p>
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