

S.I. No. 268/2006 — European Communities (Quality of Shellfish Waters) Regulations 2006

SCHEDULE 2

Shellfish Waters Mandatory Values

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Shellfish Waters Guide Values

S.I. No. 55/2009 — European Communities (Quality of Shellfish Waters) (Amendment) Regulations 2009

SCHEDULE 1

Shellfish Waters

SCHEDULE 2

Shellfish Waters Mandatory Values

Parameter	Unit of Measurement	Standard/Value	Reference Method of Analysis/Inspection	Frequency of Sampling
1 pH	pH unit	Not less than 7 nor greater than 9	Electrometry Measured in situ at the time of sampling	Quarterly
2 Temperature	Degrees Celsius		Thermometry Measured in situ at the time of sampling.	Quarterly
3 Coloration (after filtration)	Milligrams per litre	A discharge affecting shellfish waters must not cause the colour of the waters after filtration to deviate by more than 10 milligrams per litre from the colour of waters not so affected.	Filter through a 0.45 micrometre membrane. Photometric method, using the platinum/cobalt scale.	Quarterly
4 Suspended solids	Milligrams per litre	A discharge affecting shellfish waters must not cause the suspended solids content of the waters to exceed by more than 30 per cent the suspended solids content of waters not so affected.	Filtration through a 0.45 micrometre membrane, drying at 105 degrees Celsius and weighing. Centrifuging (for at least 5 minutes, with mean acceleration 2,800 to 3,200g), drying at 105 degrees Celsius and weighing.	Quarterly
5 Salinity	Practical salinity units	(a) less than 40 practical salinity units, and discharges affecting shellfish waters must not cause the salinity of the waters to exceed by more than 10 per cent the salinity of waters not so affected	Conductimetry	Monthly
6 Dissolved oxygen	Saturation per cent	(a) equal to or greater than 70 per cent (average value) (b) no individual measurement to indicate a value less than 60 per cent unless it can be established that there are no harmful consequences for the development of shellfish colonies. Should an individual measurement indicate a value less than 70 per cent, measurements must be repeated	Winkler's method or electrochemical method	Monthly, with a minimum of one sample representative of low oxygen conditions on the day of sampling. However, where major daily variations are suspected, a minimum of two samples in one day must be taken.

Parameter	Unit of Measurement	Standard/Value	Reference Method of Analysis/Inspection	Frequency of Sampling
7 Petroleum hydrocarbons		Hydrocarbons must not be present in the shellfish waters in such quantities as will— produce a visible film on the surface of the water or a deposit on the shellfish, or both, or have harmful effects on the shellfish.	Visual examination	Quarterly

8 Organohalogenated Substances

Polychlorinated biphenyls	$\mu\text{g.litre}^{-1}$ (seawater)	0.30	Gas chromatography after extraction with suitable solvents and purification	Half-yearly
Polychlorinated Biphenyls: Sum of ICES 7CBs ¹	$\mu\text{g.kilogram}^{-1}$ wet weight @ 1 % lipid (shellfish flesh ²)	300.00		
The concentration of each substance in the shellfish water or in the shellfish flesh must not reach or exceed a level, which has harmful effects on the shellfish and their larvae.				

9 Metals (Dissolved)

Arsenic	$\mu\text{g.litre}^{-1}$ (seawater)	40.00	Spectrometry of atomic absorption preceded, when appropriate, by concentration or extraction, or both	Half-yearly
Cadmium		5.00		
Chromium		30.00		
Copper		10.00		
Lead		20.00		
Mercury		0.40		
Nickel		50.00		
Silver		10.00		
Zinc		200.00		
The concentration of each substance in the shellfish water must not exceed a level that gives rise to harmful effects on the shellfish and their larvae. The synergic effects of these metals must be taken into consideration				

10 Faecal coliforms	Number of faecal coliforms per 100 millilitres		Method of dilution with fermentation in liquid substrates in at least three tubes in three dilutions. Subculturing of the positive tubes on a confirmation medium. Count according to MPN (most probable number). Incubation temperature $44^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$	Quarterly
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Parameter	Unit of Measurement	Standard/Value	Reference Method of Analysis/Inspection	Frequency of Sampling
11 Substances affecting the taste of shellfish		The concentrations of such substances in shellfish waters or in shellfish flesh must be limited so that the taste of shellfish is not impaired.	Examination of the shellfish by tasting	If the presence of any of these substances is presumed.

¹ ICES 7 CBs: PCBs 28, 52, 101, 118, 138, 153, 180

² Applies to shellfish flesh of bivalve molluscs

SCHEDULE 3 Shellfish Waters

The following are the shellfish waters to which these Regulations apply:

Mulroy Bay, Co. Donegal	The designated area covers all points due south of an imaginary line between Melmore Head and Ballyhoorisky Point, to the high water mark, as shown on a map of public record certified by the Minister for the purposes of these Regulations and kept at the head office of the Department of Communications, Marine and Natural Resources or at such other place as the Minister has publicly notified.
Killary Harbour, Co. Mayo	The designated area covers the full area of the Harbour below the high water mark from Aasleagh at the head, to Dooneen at the mouth of the harbour, as shown on a map of public record certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Communications, Marine and Natural Resources or at such other place as the Minister has publicly notified.
Kilkieran Bay, Co. Galway	The designated area is as shown on a map of record certified by the Minister for the purposes of these Regulations and kept at the head office of the Department of Communications, Marine and Natural Resources or at such other place as the Minister has publicly notified.
Clarinbridge/Kinvara Bay, Co. Galway	The designated area covers all points East of a line drawn between Kilcolgan Point on Tawin Island, and Eddy Point on island Eddy, and continued on to the Mainland at Doorus, to the high water mark, as shown on a map of public record certified by the Minister for the purposes of these Regulations and kept at the head office of the Department of Communications, Marine and Natural Resources or at such other place as the Minister has publicly notified.

<p>Inner Bantry Bay, Co. Cork</p>	<p>The designated shellfish area of Inner Bantry Bay at the head of the bay covers the area of approximately 1100 hectares, east of an imaginary line due south from Ardnamanagh South on the mainland to Whiddy Point East on Whiddy Island, and from Cusroe on Whiddy Island due south to the mainland near Dromclough, to the high water mark, with the exclusion of Bantry Harbour, as shown on a map of public record certified by the Minister for the purposes of these Regulations and kept at the head office of the Department of Communications, Marine and Natural Resources or at such other place as the Minister has publicly notified.</p>
<p>Glengarriff Harbour, Co. Cork</p>	<p>The designated area covers all points north of a line drawn between Big Point and the unnamed point south east of Illauncreeveen, and the high water mark, as shown on a map of public record certified by the Minister for the purposes of these Regulations and kept at the head office of the Department of Communications, Marine and Natural Resources or at such other place as the Minister has publicly notified.</p>
<p>Roaringwater Bay, Co. Cork</p>	<p>The designated area covers that part of inner Roaringwater Bay that lies east of an imaginary line southeast from a point 1 kilometre east of Coosheen Point on the mainland to the northwest of Castle Island, and from the southeast of Castle Island west to the northwest of Skeam West to Skeam East and on to the westerly point of Cunnamore, north of Coolim and Goose Island, to the high water mark, but not including Ballydehob Bay, as shown on a map of public record certified by the Minister for the purposes of these Regulations and kept at the head office of the Department of Communications, Marine and Natural Resources or at such other place as the Minister has publicly notified.</p>
<p>Aughinish Bay, Co. Galway</p>	<p>The designated area is as shown on a map of record certified by the Minister for the purposes of these Regulations and kept at the head office of the Department of Communications, Marine and Natural Resources or at such other place as the Minister has publicly notified.</p>
<p>Cromane, Co. Kerry</p>	<p>The designated area is as shown on a map of record certified by the Minister for the purposes of these Regulations and kept at the head office of the Department of Communications, Marine and Natural Resources or at such other place as the Minister has publicly notified.</p>
<p>Inner Bay, Maharees, Co. Kerry</p>	<p>The designated area covers all points south west of an imaginary line from Rough Point, (062 660E 120 150N), to 065 210E 120 150N, to 062 500E 114 240N to the high water mark, as shown on a map of public record certified by the Minister for the purposes of these Regulations and kept at the head office of the Department of Communications, Marine and Natural Resources or at such other place as the Minister has publicly notified.</p>
<p>Kilmakillogue Harbour, Co. Kerry</p>	<p>The designated area covers all points east of an imaginary line from Loughaunacreen point to the most north westerly point of Collorus head to</p>

	<p>the high water mark (excluding the area south of the road between Lauragh and Ardgroom), as shown on a map of public record certified by the Minister for the purposes of these Regulations and kept at the head office of the Department of Communications, Marine and Natural Resources or at such other place as the Minister has publicly notified.</p>
<p>Carlingford Lough, Co. Louth</p>	<p>The designated area is as is shown on a map of record certified by the Minister for the purposes of these Regulations and kept at the head office of the Department of Communications, Marine and Natural Resources or at such other place as the Minister has publicly notified.</p>
<p>Clew Bay (East of Old Head), Co. Mayo</p>	<p>The designated area covers all that area up to the high water mark and east of a line drawn from the most northerly point at Old Head to the most easterly point at Gubbaun Point as shown on a map of public record certified by the Minister for the purposes of these Regulations and kept at the head office of the Department of Communications, Marine and Natural Resources or at such other place as the Minister has publicly notified.</p>
<p>Bannow Bay, Co. Wexford</p>	<p>The designated area is as is shown on a map of record certified by the Minister for the purposes of these Regulations and kept at the head office of the Department of Communications, Marine and Natural Resources or at such other place as the Minister has publicly notified</p>

SCHEDULE 4

Shellfish Waters Guide Values

Parameter No.	Parameter	Unit of Measurement	Standard/Value
1	pH	pH unit	
2	Temperature	Degrees Celsius	A discharge affecting shellfish must not cause the temperature of the waters to exceed by more than 2 degrees Celsius the temperatures of waters not so affected.
3	Coloration (after filtration)	Milligrams per litre	
4	Suspended solids	Milligrams per litre	
5	Salinity	Practical salinity units	12 to 38 practical salinity units.
6	Dissolved oxygen	Saturation per cent	Equal to or greater than 80 per cent (average value)
7	Petroleum hydrocarbons		
8	Organohalogenated substances:		
	Polychlorinated biphenyls: Sum of ICES 7 CBs ¹	µg.kilogram ⁻¹ wet weight @ 1% lipid (shellfish flesh ²)	100.00 The concentration of each substance in the shellfish flesh must be so limited that it contributes to the high quality of shellfish products.
9	Metals:	Milligrams/ kilogram ⁻¹ dry weight (shellfish flesh)	
	Arsenic		30.00
	Cadmium		5.00
	Chromium		6.00
	Copper		400.00
	Lead		7.50
	Mercury		1.00
	Nickel		5.00
	Silver		15.00
	Zinc		4000.00
		The concentration of each substance in the shellfish flesh must be so limited that it contributes to the high quality of shellfish products.	
10	Faecal coliforms	Number of faecal coliforms per 100 millilitres	Equal to or less than 300 in the shellfish flesh and intervalvular liquid
11	Substances affecting the taste of shellfish		

¹ ICES 7 CBs: PCBs 28, 52, 101, 118, 138, 153, 180

² Applies to shellfish flesh of bivalve molluscs

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SCHEDULE 1 Shellfish Waters

Castletownbere	All that area below the High Water Mark and enclosed by the red line as shown on Map number 1 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Kenmare River	All that area below the High Water Mark and enclosed by the red line as shown on Map number 2 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Valencia Harbour	All that area below the High Water Mark and enclosed by the red line as shown on Map number 3 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Tralee Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 4 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
West Shannon Ballylongford	All that area below the High Water Mark and enclosed by the red line as shown on Map number 5 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
West Shannon Poulnasherry Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 6 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
West Shannon Carrigaholt	All that area below the High Water Mark and enclosed by the red line as shown on Map number 7a of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
West Shannon Rinevella	All that area below the High Water Mark and enclosed by the red line as shown on Map number 7b of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the

	Minister has publicly notified.
Ballyvaughan / Poul-na-clough Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 8 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Outer Galway Bay Indreabhán	All that area below the High Water Mark and enclosed by the red line as shown on Map number 9 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Mannin Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 10 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Clifden Bay / Ardbear Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 11 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Streamstown Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 12 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Ballinakill Harbour	All that area below the High Water Mark and enclosed by the red line as shown on Map number 13 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Achill Sound South	All that area below the High Water Mark and enclosed by the red line as shown on Map number 14a of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Achill Sound North	All that area below the High Water Mark and enclosed by the red line as shown on Map number 14b of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Blacksod Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 15 of the Book of Record Maps certified by the Minister for the

	purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Killala Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 16 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Sligo Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 17 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Drumcliff Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 18 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Donegal Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 19 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Inver Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 20 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
McSwynes Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 21 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Loughros Beg	All that area below the High Water Mark and enclosed by the red line as shown on Map number 22 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Gweebarra Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 23 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.

Trawenagh Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 24 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Dunglow	All that area below the High Water Mark and enclosed by the red line as shown on Map number 25 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Gweedore Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 26 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Sheephaven	All that area below the High Water Mark and enclosed by the red line as shown on Map number 27 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Lough Swilly	All that area below the High Water Mark and enclosed by the red line as shown on Map number 28 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Trawbreaga Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 29 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Dundalk Bay	All that area below the High Water Mark and enclosed by the red line as shown on Map number 30 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Balbriggan / Skerries	All that area below the High Water Mark and enclosed by the red line as shown on Map number 31 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Malahide	All that area below the High Water Mark and enclosed by the red line as shown on Map number 32 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of

	Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Wexford Harbour Outer	All that area below the High Water Mark and enclosed by the red line as shown on Map number 33 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Wexford Harbour Inner	All that area below the High Water Mark and enclosed by the red line as shown on Map number 34 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Waterford Harbour	All that area below the High Water Mark and enclosed by the red line as shown on Map number 35 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Dungarvan Harbour	All that area below the High Water Mark and enclosed by the red line as shown on Map number 36 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Ballymacoda	All that area below the High Water Mark and enclosed by the red line as shown on Map number 37 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Rostellan North	All that area below the High Water Mark and enclosed by the red line as shown on Map number 38a of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Rostellan South	All that area below the High Water Mark and enclosed by the red line as shown on Map number 38b of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Cork Great Island North Channel	All that area below the High Water Mark and enclosed by the red line as shown on Map number 39 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Oyster Haven	All that area below the High Water Mark and enclosed by the red line as shown on

	Map number 40 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Kinsale	All that area below the High Water Mark and enclosed by the red line as shown on Map number 41 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Baltimore Harbour / Sherkin	All that area below the High Water Mark and enclosed by the red line as shown on Map number 42 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Dunmanus Inner	All that area below the High Water Mark and enclosed by the red line as shown on Map number 43 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Bantry Bay South	All that area below the High Water Mark and enclosed by the red line as shown on Map number 44 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
League Point	All that area below the High Water Mark and enclosed by the red line as shown on Map number 45 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.
Adrigole Harbour	All that area below the High Water Mark and enclosed by the red line as shown on Map number 46 of the Book of Record Maps certified by the Minister for the purpose of these Regulations and kept at the head office of the Department of Environment, Heritage and Local Government, or at such other place as the Minister has publicly notified.