

4. British Nuclear Fuels plc

Table 4.1. Beta/gamma radioactivity in fish from the Irish Sea vicinity and further afield, 1998

Location ^a	Material	No. of sampling observations ^b	Mean radioactivity concentration (wet), Bq kg ⁻¹										
			¹⁴ C	⁶⁰ Co	⁹⁰ Sr	⁹⁵ Zr	⁹⁵ Nb	⁹⁹ Tc	¹⁰⁶ Ru	¹³⁴ Cs	¹³⁷ Cs	¹⁴⁴ Ce	Total beta
Sellafield coastal area	Cod	8		<0.50		<0.42	<0.46		<1.4	<0.17	12	<0.85	170
Sellafield coastal area	Plaice	4		<0.45		<0.42	<0.44		<1.4	<0.17	9.0	<0.78	170
Sellafield coastal area	Grey mullet	1		0.39		<0.48	<0.58		<1.6	<0.17	9.0	<0.67	
Sellafield coastal area	Bass	1		<0.15		<0.47	<0.60		<1.3	<0.14	24	<0.57	
Sellafield offshore area	Cod	2	84	<0.22	0.094	<0.29	<0.24	2.5	<1.2	<0.13	8.6	<0.65	
Sellafield offshore area	Plaice ^c	2	140	<0.21	0.16	<0.11	<0.10	14	<0.41	<0.04	6.6	<0.19	
Sellafield offshore area	Dab	2		<0.28		<0.27	<0.24		<1.2	<0.15	9.1	<0.66	
Sellafield offshore area	Whiting	2		<0.12		<0.23	<0.19		<1.0	<0.11	14	<0.64	
Sellafield offshore area	Haddock	1		<0.12		<0.23	<0.20		<0.93	<0.11	2.7	<0.46	
Ravenglass	Cod	5		<0.43		<0.31	<0.33		<1.0	<0.13	12	<0.51	
Ravenglass	Plaice	4		<0.46		<0.40	<0.41		<1.3	<0.14	10	<0.71	
Ravenglass	Salmon	1		<0.24		<0.71	<0.68		<2.6	<0.26	<0.24	<0.93	
Whitehaven	Cod	4	67	<0.27	0.058	<0.30	<0.34		<0.97	<0.13	7.8	<0.61	
Whitehaven	Plaice	4		<0.13	<0.031	<0.35	<0.43		<1.0	<0.12	5.3	<0.68	
Whitehaven	Ray	4		<0.13		<0.32	<0.30		<1.2	<0.13	9.5	<0.62	
Parton	Cod	4		<0.13		<0.26	<0.24		<1.0	<0.11	11	<0.50	
Morecambe Bay (Flookburgh)	Flounder	4	98	<0.15		<0.56	<0.79		<1.6	<0.15	17	<0.88	
Morecambe Bay (Morecambe)	Plaice	4		<0.11	0.039	<0.29	<0.31	1.6	<0.98	<0.10	6.6	<0.48	
Morecambe Bay (Morecambe)	Bass	2		<0.15		<0.83	<1.6		<1.5	<0.16	18	<0.74	
Morecambe Bay (Sunderland Point)	Whitebait	1		<0.08	0.20	<0.21	<0.22		<0.67	<0.08	5.8	<0.43	
Calder Farm	Rainbow trout	2		1.1		<0.95	<1.6		<3.3	<0.25	180	<1.4	
River Duddon	Sea trout	1		<0.07		<0.30	<0.38		<0.75	<0.08	7.4	<0.51	
River Kent	Sea trout	1		<0.09		<0.32	<0.44		<0.90	<0.09	9.6	<0.56	
River Derwent	Sea trout	1		<0.15		<0.80	<1.3		<1.5	<0.16	6.0	<0.73	
Fleetwood	Cod	4	77	<0.08	0.068	<0.19	<0.18	1.8	<0.68	<0.07	6.5	<0.40	
Fleetwood	Plaice	4		<0.10		<0.21	<0.20		<0.80	<0.09	6.2	<0.38	
Isle of Man	Cod	4		<0.06		<0.17	<0.19		<0.53	<0.06	2.6	<0.28	
Isle of Man	Herring	3		<0.08		<0.31	<0.45		<0.75	<0.08	2.3	<0.41	
Inner Solway	Flounder ^d	1	64	<0.10	0.10	<0.50	<0.10	3.2	<1.0	<0.10	1.1	<0.50	
Inner Solway	Sea trout	1		<0.10	<0.10	<0.50	<0.10		<1.0	<0.10	7.1	<0.50	
Inner Solway	Salmon	1		<0.10	<0.10	<0.50	<0.10		<1.0	<0.10	0.31	<0.50	
Kirkcudbright	Plaice	4		<0.11		<0.48	<0.19		<1.1	<0.11	2.2	<0.56	
Garlieston	Cod	1	54	<0.07	<0.046	<0.19	<0.18	0.32	<0.65	<0.07	3.2	<0.39	
Garlieston	Plaice	1		<0.11		<0.32	<0.34		<0.92	<0.10	5.6	<0.54	
North Anglesey	Ray	4		<0.12		<0.40	<0.58		<1.2	<0.12	3.0	<0.55	
North Anglesey	Plaice	2	52	<0.14		<0.46	<0.77		<1.3	<0.14	1.3	<0.63	
Ribble Estuary	Flounder	1		<0.09		<0.33	<0.48		<0.83	<0.09	9.2	<0.49	
Ribble Estuary	Salmon	1		<0.09		<0.26	<0.25		<0.91	<0.10	0.43	<0.56	
Ribble Estuary	Grey mullet	1		<0.19		<1.4	<3.1		<1.8	<0.21	4.7	<1.3	
Ribble Estuary	Sea trout	1		<0.11		<0.81	<1.7		<1.2	<0.13	6.0	<0.57	
Northern Ireland	Cod	7	36	<0.06		<0.26	<0.39		<0.61	<0.07	2.6	<0.37	
Northern Ireland	Whiting	7		<0.08		<0.26	<0.36		<0.72	<0.08	3.6	<0.41	
Northern Ireland	Herring	1		<0.12		<0.59	<1.1		<1.1	<0.12	2.1	<0.53	
Northern Ireland	Spudog	8		<0.10		<0.37	<0.53		<0.97	<0.10	3.4	<0.56	
Sound of Mull	Salmon	1		<0.10		<0.43	<0.66		<0.94	<0.10	0.27	<0.63	