ERRATA

Corrections to published RIFE reports

	Page, Section	Comment
RIFE-1 1995	38, Section 16.2	Last but one sentence, replace 1994 with 1995.
	39, Section 16.4	First sentence, 2nd paragraph, replace 1994 with 1995.
	45, Table 1	Replace ^{241}Am Sellafield (sea pipelines) limit of 1.3 TBq with 0.3 TBq. Replace ^{60}Co Harwell (pipeline) percentage of 1.5 with 6.9.
	74, Table 16 99, Table 33(a)	The following activity in soil data were reported as being Bq kg^{-1} (dry) whilst they should have been reported as Bq kg^{-1} (wet). All data are averages unless stated.

Site/location	^{210}Po	^{238}Pu	$^{239+240}$Pu
Sellafield (Table 16)	64		
Aldermaston (Table 33(a))		0.0091	0.36
max		0.016	0.56

	99, Table 33(a)	The concentration of ^{137}Cs in clay at Outfall (Pangbourne) was 12±0.15 Bq kg^{-1} (dry)
	133, Appendix 3	The average consumption rates of nuts and offal by 10 year old children were 1.5 kg y^{-1}. The consumption of whelks at Sellafield by group E (Whitehaven commercial) was 11 kg y^{-1}.
	138, Appendix 6	The values of t_f and t_s were 0. The transfer factors for beef offal (^{241}Pu) and lamb (^{241}Pu) were 2 10^{-2} and 4 10^{-4} respectively.
RIFE-2 1996	32, Section 8.1	Lines 8-11. Replace with "In 1996 no fragments of spent fuel were found on the public beach at Dounreay. Thirteen small fragments were found with caesium-137 activities in the range 10^{5}-10^{8} Bq (these activities were measured by the operator). They were all found on the Dounreay foreshore which although a public area is largely inaccessible. A"
	58, Table 2	Replace ^{35}S Oldbury limit of 0.8 TBq with 0.75 TBq. Replace ^{41}Ar Trawsfynydd limit of 350 TBq with 3500 TBq.

Page, Section	Comment
85, Table 16 87, Table 18 91, Table 20(a) 95, Table 21 119, Table 41	The following activity in soil data were reported as being Bq kg^{-1} (dry) whilst they should have been reported as Bq kg^{-1} (wet). All data are averages unless stated.

Site/location	^{234}U	^{235}U	^{238}U
Drigg (Table 16)	8.3	0.28	7.4
Ravenglass (Table 18)	16	0.56	15
Springfields (Table 20(a))	49	2.3	45
Capenhurst (Table 21)	9.8	0.36	10
Derby (Table 41)	44	1.7	43

Table 47	This was omitted in error. The data are attached.

Table 47. Radioactivity in plants near landfill sites, 1996

Sampling location	Material	No of samples	Mean radioactivity concentration (dry)*, Bq kg^{-1}							
			^{3}H	^{14}C	^{90}Sr	^{125}I	^{134}Cs	^{137}Cs	^{238}Pu	$^{239+240}Pu$
Beddingham Lewes, East Sussex	Grass	4	<40 *±18*	130 *±28*	1.8 *±0.1*	<0.19	<0.61	<0.54 *±0.30*	<0.00099 *±0.00037*	0.0067 *±0.0012*
Cilgwyn Quarry, Gwynedd	"	4	<30	360 *±55*	3.0 *±0.2*	<0..63	<0.69	<5.2 *±0.9*	<0.0095	0.018 *±0.005*
Lyndown, Devon	"	4	<28	150 *±30*	2.4 *±0.2*	<1.3 *±0.2*	<0.60	<0.62 *±0.17*	<0.0010	<0.0024 *±0.0009*
Witton, Cheshire	"	4	<38	130 *±33*	0.76 *±0.12*	<1.1 *±0.3*	<0.59	<0.63	<0.0013	0.0021 *±0.0016*

* *Results are available for other artificial nuclides detectable by gamma spectrometry*
All such results are less than the limit of detection

RIFE-3 1997

19, Table 1.1	Replace beta, tritium and ^{60}Co Devonport (sewer) discharges with 1.97 10^{-6}, 2.22 10^{-6}, 5.60 10^{-7} TBq respectively. Replace alpha and beta limit and percentage Greenwich with 4.44 10^{-3} TBq and <1 respectively.
21, Table 1.2	Replace tritium Winfrith limit with 5 TBq.
38, Section 3.6.5	First paragraph. Reference to factor of 0.85 millisievert per milligray should be ICRP (1996b).
70, Table 4.10 72, Table 4.12 81, Table 4.16 121, Table 9.1	The following activity in soil data were reported as being Bq kg^{-1} (dry) whilst they should have been reported as Bq kg^{-1} (wet). All data are averages unless stated.

Site/location	^{234}U	^{235}U	^{238}U
Drigg (Table 4.10)	9.9	0.37	9.5
Ravenglass (Table 4.12)	18	0.60	16
Springfields (Table 4.12)	31	1.5	30
Capenhurst (Table 4.16)	9.5	0.40	9.5
Derby (Table 9.1)	27	0.97	24

90, Section 6.3	The maximum dose due to gaseous disposals was received by adults.
161, Appendix 4	The 1 year old child dose coefficient for ^{99}Tc was 4.80 10^{-9}.

	Page, Section	Comment
RIFE-4 1998	70, Table 4.12	The concentrations of total Cs and ^{144}Ce in ovine muscle (max) were 0.61 and <1.8 Bq kg^{-1} (wet) respectively. No value for ^{155}Eu is available.
	75, Table 4.15(a) 77, Table 4.16 116, Table 9.1	The following activity in soil data were reported as being Bq kg^{-1} (dry) whilst they should have been reported as Bq kg^{-1} (wet). All data are averages unless stated.

Site/location	^{234}U	^{235}U	^{238}U
Springfields (Table 4.15(a))	72	3.0	68
Capenhurst (Table 4.16)	7.9	0.30	7.4
Derby (Table 9.1)	31	0.93	26

	96, Table 6.4(a)	The concentration of ^{241}Am in mud at Paddy's Hole was <1.0 Bq kg^{-1} (dry). No measurement of $^{239/240}$Pu was made.
	125, Section 11.1	Last but one paragraph. The estimated dose was 0.094 mSv.
	131, Section 11.8	Last paragraph, first sentence. Replace 1997 with 1998.
RIFE-5 1999	71, Table 4.15(a) 73, Table 4.16 118, Table 9.1	The following activity in soil data were reported as being Bq kg^{-1} (dry) whilst they should have been reported as Bq kg^{-1} (wet). All data are averages unless stated.

Site/location	^{234}U	^{235}U	^{238}U
Springfields (Table 4.15(a)) max	180	15	200
Capenhurst (Table 4.16) max	12	0.46	12
Derby (Table 9.1) max	34	1.3	31

	112, Section 8.2	The second sentence of paragraph three states that "the duck and tide washed pasture pathways gave doses of 0.032 and 0.009 mSv y^{-1} respectively." The dose due to the duck pathway should read 0.042 mSv y^{-1}. The value for tide washed pasture is correct.
	123, Table 10.2	The concentration of ^{14}C in grass from Billingham was 960 Bq kg^{-1} (wet).
	162, Table A1.2	The Dounreay (Fast Reactor) data were duplicated.
RIFE-6 2000	31, Section 3.5	It was stated that the dose limits do not apply to natural radionuclides. This sentence should be deleted.
	75, Table 4.16 124, Table 9.1	The following activity in soil data were reported as being Bq kg^{-1} (dry) whilst they should have been reported as Bq kg^{-1} (wet). All data are averages unless stated.

Site/location	^{234}U	^{235}U	^{238}U
Capenhurst (Table 4.16) max	8.5	0.35	8.4
Derby (Table 9.1) max	24	0.96	23

	Page, Section	Comment
	155, Table 12.1	Target date for project 'Tritium and carbon-14 in seafood' should have been March 2003.
	166, Table A1.1	Discharges of tritium from Devonport (pipeline) given as 0.87 TBq should have been 0.087 TBq.
	168, Table A1.2	Sellafield Discharge limits of alpha and beta activity should have been 0.00196 and 0.328 TBq. Percentage of limit for alpha and beta activity should have been 4.0 and <1. Discharges of tritium and ^{14}C from Sellafield given as 213 and 2.58 TBq should have been 355 and 2.94 TBq. Relevant percentages given as 15 and 30 should have been 25 and 34.
RIFE-7 2001	71, Table 4.8 80, Table 4.15(a) 93, Table 5.2(a) 122, Table 7.3 127, Table 8.2(a) 130, Table 9.1	The following activity in soil data were reported as being Bq kg^{-1} (dry) whilst they should have been reported as Bq kg^{-1} (wet). All data are averages unless stated.

Site/location		^{60}Co	^{106}Ru	^{125}Sb	^{134}Cs	^{137}Cs	^{234}U	^{235}U	^{238}U	^{241}Am
Sellafield (Table 4.8)		<0.80	<3.1	<1.1		80				5.8
	max	1.2				97	9.3	0.34	9.1	6.0
Springfields (Table 4.15(a))										
	max						95	4.6	89	
Harwell (Table 5.2(a))		<0.40			<0.40	2.9				
Featherstone position A (Table 7.3)							9.5	0.41	9.0	
Featherstone position B (Table 7.3)							7.3	0.34	7.5	
Cardiff (Table 8.2(a))					<0.33	5.6				
	max				<0.40	6.5				
Derby (Table 9.1)							18	0.80	18	
	max						30	1.3	29	

	176, Table A1.1	Discharges of Alpha for Hunterston 'A' given as 0.14 TBq should have been 1.4 10^{-5} TBq. The % of limit given as 350 should have been <1.
	181, Table A1.2	Dungeness 'A' discharge limit and % of limit for tritium should have been 3 and 23 respectively.
RIFE-8 2002	59, Table 4.1	Two tritium results were omitted. The data are attached.

Table 4.1. Beta/gamma radioactivity in fish from the Irish Sea vicinity and further afield, 2002

Location	Material	No.of sampling observ-ations	^{3}H
Liverpool Bay	Flounder	2	<25
Mersey estuary	Flounder	2	<25

Page, Section	Comment
79, Table 4.14 82 Table 4.17 128, Table 7.1(a) 138, Table 8.2(a)	The following activity in soil data were reported as being Bq kg^{-1} (dry) whilst they should have been reported as Bq kg^{-1} (wet). All data are averages unless stated.

Site/location	^{60}Co	^{106}Ru	^{125}Sb	^{134}Cs	^{137}Cs	^{234}U	^{235}U	^{238}U
Sellafield (Table 4.14)	<0.80	<2.3	<1.2	68				
max	1.0	<2.7	<1.4	82				
Drigg (Table 4.17)								
max						6.9	0.30	6.5
Aldermaston (Table 7.1(a))								
max						8.7	0.35	8.3
Cardiff (Table 8.2(a))				<0.30	6.4			
max					8.1			

102, Figure 6.1	An incorrect bar in Figure 6.1 for Bradwell (2002) is corrected below

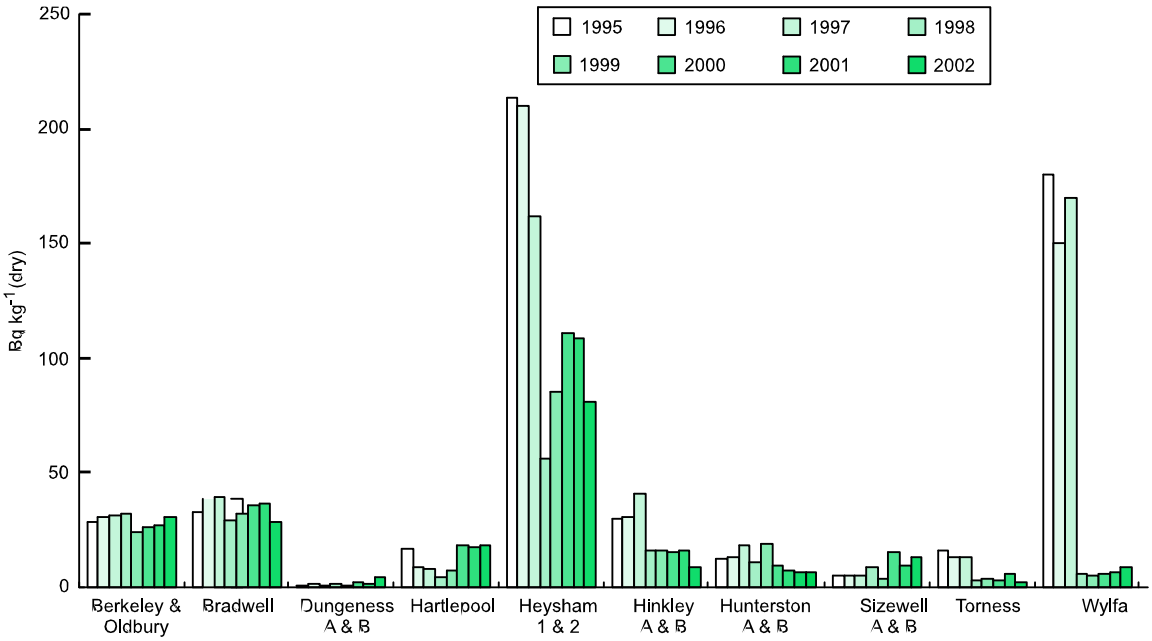

Figure 6.1. Caesium-137 concentration in sediments near nuclear power stations

RIFE-1 - RIFE-8
1995-2002

Urenco Capenhurst have reassessed atmospheric discharges of uranium; the reassessed discharges are listed in Table E1.

Table E1. Reassessed atmospheric discharges of uranium from Urenco Capenhurst

Year	Original reported discharge TBq	Reassessed discharge TBq
1993	$1.74\ 10^{-9}$	$2.41\ 10^{-7}$
1994	$6.74\ 10^{-9}$	$2.63\ 10^{-7}$
1995	$2.69\ 10^{-8}$	$2.75\ 10^{-7}$
1996	$1.11\ 10^{-7}$	$8.23\ 10^{-7}$
1997	$6.80\ 10^{-8}$	$4.90\ 10^{-7}$
1998	$6.87\ 10^{-8}$	$1.87\ 10^{-6}$
1999	$8.15\ 10^{-8}$	$1.01\ 10^{-6}$
2000	$9.64\ 10^{-8}$	$8.72\ 10^{-7}$
2001	$1.20\ 10^{-7}$	$9.77\ 10^{-7}$
2002	$1.16\ 10^{-7}$	$6.01\ 10^{-7}$

	Page, Section	Comment
RIFE-9 2003	82, Table 3.15 138 Table 6.1(a) 141, Table 6.3(a) 151, Table 7.3(a) 157, Table 8.1(a)	The following activity in soil data were reported as being Bq kg^{-1} (dry) whilst they should have been reported as Bq kg^{-1} (wet). All data are averages unless stated.

Site/location		^{60}Co	^{106}Ru	^{125}Sb	^{134}Cs	^{137}Cs	^{154}Eu	^{234}U	^{235}U	^{238}U	^{241}Am
Sellafield (Table 3.15)		<0.90	<3.3	<1.2	<0.40	75	<0.50				5.9
	max	1.6	<4.2	<1.6		89	<0.60	11	0.54	10	7.7
Aldermaston (Table 6.1(a))											
	max							11	0.48	11	
Derby (Table 6.3(a))											
	max							47	1.6	40	
Cardiff (Table 7.3(a))					<0.40	8.8					
	max					11					
Drigg (Table 8.1)											
	max							6.7	0.26	6.7	

	185, Table 9.12	Some data were incorrect. The amended version of the table is attached.

Table 9.12. Concentrations of radionuclides in rainwater and air 2003

Location	Sample	No. of sampling observ-ations	Mean radioactivity concentration[a] in rainwater and air								
			^{3}H^{7}	Be	^{90}Sr[b]	^{137}Cs	^{210}Pb	^{210}Po	^{228}Th	Gross alpha[b]	Gross beta[b]
Ceredigion											
Aberporth	Rainwater	12	<2.4	<1.6		<0.053	0.10		*		
	Air	4		0.0022		<0.00000052	0.00017		*		
Co. Down											
Conlig	Rainwater	4		<1.5		<0.022	*		*		
	Air	4		0.0022		<0.00000063	0.00015		*		
Dumfries and Galloway											
	Eskdalemuir Rainwater	4		<2.7	1.2		<0.0098	0.094		*	
	Air	4		0.0018		<0.00000043	0.00013		*		
North Yorkshire											
Dishforth	Rainwater	4		<2.2		<0.039	*		*		
	Air	4		0.0016		<0.00000055	0.00014		*		
Oxfordshire											
Chilton	Rainwater	12		<1.5	<0.00064	<0.032	0.32		*	0.074	0.17
	Air	13		0.0018		<0.00000034	0.00027	<0.000014	*		
Shetland											
Lerwick	Rainwater	4		1.6		<0.017	*		*		
	Air	4		0.0015		<0.00000052	0.00010		*		
Suffolk											
Orfordness	Rainwater	4	<2.2	<2.4		<0.048	*		5.2		
	Air	4		0.0022		<0.00000053	0.00020		*		

** Not detected by the method used*

[a] *Bq l^{-1} for rainwater and Bq kg^{-1} for air*

[b] *Annual bulk analysis*

	187, Table 9.14	The concentration of ^{210}Po in Cornwall, River Fowey was <0.0098 Bq l^{-1}.

Page, Section	Comment
188, Table 9.16	A revised version is attached.

Table 9.16. Estimates of maximum radiation exposure from radionuclides in drinking water, 2003[a]

Country	Exposure, mSv Man-made radionuclides[b]	Natural radionculides[c]	All radionuclides
England	<0.001	0.028	0.028
Northern Ireland	<0.001	0.026	0.026
Scotland	<0.001	[d]	[d]
Wales	<0.001	0.027	0.027

a The maximum dose is selected for each nuclide group from data for individual sampling locations. Many estimates of dose are based on concentration results at limits of detection.

b Including tritium

c Including carbon-14

d Analysis of natural radionuclides was not undertaken

	214, Table A1.2	The data shown for Faslane are a duplication of the data for Rosyth and were included in error.
RIFE-10 2004	75, Table 3.7	The entry for Haverigg should read 0.087.
	45, Figure 3.8	An incorrect bar in Figure 3.8 for Americium discharge is corrected below:

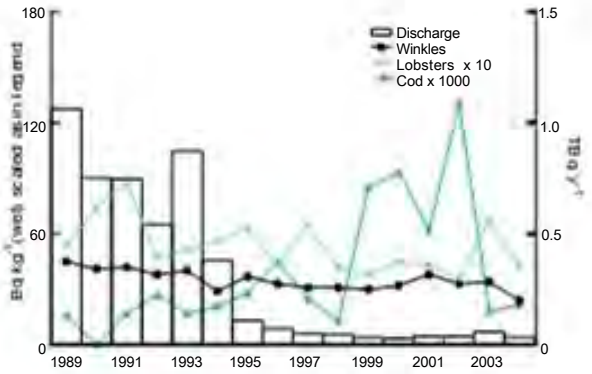

Figure 3.8. Americium-241 and liquid discharge from Sellafield and concentrations in cod*, lobsters and winkles near Sellafield (* estimated in 2004 due to lack of availability of cod)

	87, Table 3.15 151 Table 6.1(a) 154, Table 6.3(a) 166, Table 7.3(a) 173, Table 8.1(a)	The following activity in soil data were reported as being Bq kg^{-1} (dry) whilst they should have been reported as Bq kg^{-1} (wet). All data are averages unless stated.

Site/location		^{60}Co	^{106}Ru	^{125}Sb	^{134}Cs	^{137}Cs	^{234}U	^{235}U	^{238}U
Sellafield (Table 3.15)		<0.43	<1.4	<0.73					
	max	0.80	<1.5	<0.80			16	0.64	15
Aldermaston (Table 6.1(a))									
	max						7.8	0.29	7.2
Derby (Table 6.3(a))									
	max						27	0.94	23
Cardiff (Table 7.3(a))					<0.47	7.1			
	max				<0.50	7.7			
Drigg (Table 8.1)									
	max						11	0.42	11

	Page, Section	Comment
	223, Table A1.1	The % annual limit for ^{106}Ru discharge at Sellafield was 7% (not 70%).
	246, Table A5.1	Some dose per unit intake values were missing for 1 yr old. These were:

Table A5.1. Dosimetric data

Radionuclide	Dose per unit intake by inhalation using ICRP-60 methodology (Sv Bq^{-1})
Sr-90†	1.2E-07
Zr-95†	2.1E-08
Ba-140†	2.6E-08
Pb-210†	4.0E-06
Th-228†	1.4E-04
U-238	9.4E-06

† *Energy and dose per unit intake data include the effects of radiations of short-lived daughter products*

RIFE-11 2005	72, Table 3.3a	Footnote 'd' showed an incorrect value. It should have read: *[d] The concentration of ^{237}Np was 0.00035 Bq kg^{-1}*
	112, Table 4.3a	Column headings should have read: ^{239}Pu+ ^{240}Pu and ^{241}Pu
	140,Table 5.5a	The result of <0.13 for ^{241}Am in the *Fucus vesiculosis* samples from Pilot Station was incorrectly put into the ^{239}Pu+^{240}Pu column.
	206, Figures 9.5 and 9.6	Incorrect units were shown. The correct units were mBq l^{-1}.
	225, Table 9.15	Incorrct headings in the top part of the table. Should have been as below:

Table 9.15. Concentrations of radionuclides in sources of drinking water in England and Wales, 2005

Location	Sample source	No. of sampling observ-ations	Mean radioactivity concentration, Bq l^{-1}				
			^{3}H	^{40}K	^{90}Sr	^{137}Cs	^{210}Po
Wales							
Gwynedd	Cwm Ystradllyn Treatment Works	4	<4.0	<0.020	0.0036	0.0018	<0.010
Mid-Glamorgan	Llwyn-on Reservoir	4	<4.0	<0.045	0.0030	<0.0010	<0.013
Powys	Elan Valley Reservoir	4	<4.0	<0.050	0.0040	0.00090	<0.010

	248, Table A1.2	Sellafield discharge limits for alpha and beta should have been 8.90 10^{-5} and 0.00174 TBq respectively.
	251, Table A1.2	Aldermaston Tritium discharge and % limit should have been 14.1 and 8.3 respectively.
RIFE 8-11 2002-2005	Concentrations in sediments	For sediment samples with unusually high water contents it was discovered in 2007 that the resulting sample bulk densities were outside the instrument calibration range. Following investigations a correction factor has been calculated and this has been applied to the affected data from 2002-2005 and the new results are reported here in Table E2.

These amendments do not significantly affect any assessments, charts or statements in the relevant RIFE reports.

Table E2. Amended concentrations of radionuclides in sediment, 2002-2005

Year	Site	Location	No. of sampling observ-ations	Mean radioactivity concentration (dry), Bq kg^{-1}						
				^{57}Co	^{60}Co	^{65}Zn	^{95}Zr	^{95}Nb	^{106}Ru	^{125}Sb
2002	Aldermaston	Reading (Kennet)	4							
		Stream draining south	4							
	Bradwell	Maldon	2		<3.4					
		Waterside	2		<4.0					
	Capenhurst	Rossmore (4.3 km downstream)	2							
	Cardiff	Canal	2							
		West of pipeline	2							
	Devonport	Lopwell	2		<3.7					
	Dungeness	Pilot Sands	2		<0.90					
	Harwell	Appleford	4		<0.60					
		Day's Lock	4		<0.50					
	Sellafield	Caerhun	2		<3.3		<9.6	<7.7	<23	<9.2
2003	Aldermaston	Reading (Kennet)	4							
		Aldermaston	4							
	Amersham	Outfall (Grand Union Canal)	3	<0.30	<1.1	<1.5				
	Bradwell	Waterside	2		<2.0					
	Cardiff	Canal	1							
	Derby	River Derwent (downstream)	4		<1.0					
	Devonport	Lopwell	2		<2.5					
2004	Aldermaston	Reading (Kennet)	4							
		Aldermaston	4							
		Stream draining south	4							
	Amersham	Upstream of outfall (Grand Union Canal)	2	<6.4	<1.8	<4.1				
	Cardiff	Canal	2							
	Sellafield	Caerhun	2		<1.6		<4.5	<2.2	<12	<13
2005	Aldermaston	Reading (Kennet)	4							
	Amersham	Upstream of outfall (Grand Union Canal)	2	<5.3	<1.6	<3.6				
	Cardiff	Canal	2							
	Harwell	Lydebank Brook	4		<1.7					
		Appleford	4		<2.5					
	Sellafield	Caerhun	2		<2.6		<8.8	<6.8	<20	<20
	Trawsfynydd	Bailey Bridge	2		<8.3					<44

Year	Site	Location	No. of sampling observ-ations	Mean radioactivity concentration (dry), Bq kg^{-1}							
				^{125}I	^{131}I	^{134}Cs	^{137}Cs	^{144}Ce	^{154}Eu	^{155}Eu	^{241}Am
2002	Aldermaston	Reading (Kennet)	4				7.3				<1.9
		Stream draining south	4				<5.1				<1.2
	Bradwell	Maldon	2			6.5	80				<4.0
		Waterside	2			3.9	59				<13
	Capenhurst	Rossmore (4.3 km downstream)	2				<4.4				
	Cardiff	Canal	2	<0.80			2.4				
		West of pipeline	2	<3.1			33				
	Devonport	Lopwell	2				7.7				
	Dungeness	Pilot Sands	2				<0.90				<1.6
	Harwell	Appleford	4				<13				
		Day's Lock	4				6.0				
	Sellafield	Caerhun	2			<3.4	430	<25	<7.3	<8.0	75
2003	Aldermaston	Reading (Kennet)	4				8.0				<1.6
		Aldermaston	4				6.3				<2.7
	Amersham	Outfall (Grand Union Canal)	3	<1.0	<550		<2.1				
	Bradwell	Waterside	2				35				<2.7
	Cardiff	Canal	1	<1.4			16				
	Derby	River Derwent (downstream)	4								
	Devonport	Lopwell	2				<10				
2004	Aldermaston	Reading (Kennet)	4				5.4				<1.1
		Aldermaston	4				<3.9				<1.3
		Stream draining south	4				<2.8				1.6
	Amersham	Upstream of outfall (Grand Union Canal)	2	<0.80	<1.4		10				
	Cardiff	Canal	2	<1.5			11				
	Sellafield	Caerhun	2			<1.5	220	<5.7	<7.3	<3.1	51
2005	Aldermaston	Reading (Kennet)	4				<3.9				6.5
	Amersham	Upstream of outfall (Grand Union Canal)	2	<1.0	<9.1		6.2				
	Cardiff	Canal	2	<1.8			9.1				
	Harwell	Lydebank Brook	4				9.0				
		Appleford	4				<11				
	Sellafield	Caerhun	2			<2.5	230	<9.3	<12	<5.3	59
	Trawsfynydd	Bailey Bridge	2			<4.2	920				76

	Page, Section	Comment
RIFE-11 2005	270, Table A7.2B	Trawsfynydd, should read… Prenatal children of occupants over sediment — 0.008 — Direct radiation, gamma dose rate over sand/stone
RIFE-12 2006	70, Table 2.17	The concentration of ^{241}Am in winkles at Drigg should have been 29.
	103, Section 4 Key points	Line 22 second column replace with • At Dungeness, dose from gaseous discharges increased.
	187, Figure 8.5	The range in the key should have been 2 to 8.
	234, Table A4.2B	Trawsfynydd, should read… Prenatal children of fish consumers — 0.013 — Fish, gamma dose rate over sediment, ^{90}Sr
RIFE-13 2007	127, Table 4.5a	The ^{210}Po and ^{210}Pb results are the wrong way round for South Gare winkles. ^{210}Po should be 11 and ^{210}Pb should be 0.46 Bq kg^{-1}
	153, Table 5.1	Derby, the total exposure and exposure from intakes of sediment and water should have been <0.005 mSv.
	161, Section 6 Key points	Line 17 second column should read… • The total dose of 0.008…
	236, Table A4.2B	Trawsfynydd, should read… Adult fish consumers — 0.014 — Fish, gamma dose rate over sediment, ^{90}Sr, ^{137}Cs, ^{241}Am
	239, Appendix 5	Line 3 first column should read… … indicated that it was likely there would be no adverse impact
RIFE-14 2008	12, Figure S1	Both bars for Bradwell should be the same height. The bar for exposures due to liquid wastes is wrong.
	33, Section 2	Springfields, doses to the public Lines 1 & 2 second column should read… …pathways from gaseous discharges were less than 0.005mSv which was less than 0.5 per cent…
	51, Figure 2.22	The bar for Whitehaven in 2008 should have been the same height as the bar for 2007
	109, Section 4	Gaseous discharges and terrestrial monitoring Line 28, first column should read… The results of monitoring for 2008…
RIFE-14 2008	167, Table 6.3a	Results for Cardiff East WWTW should have been:

	Page, Section	Comment

Material	Location or selection[b]	No. of sampling observ-ations[c]	Mean radioactivity concentration (fresh)[a], Bq kg^{-1}			
			Organic			
			$^{3}H^{e}$	^{3}H	$^{3}H^{f}$	14^{C}
Terrestrial samples						
Crude effluent	Cardiff East WWTW	3E	<150	<220	82	<11
Final effluent	Cardiff East WWTW	3E	<60	<70	80	<11
Sludge pellets	Cardiff East WWTW	3E		76000		740
Solids from crude effluent	Cardiff East WWTW	3E		<7500		<1800

	225, Table A2.2	Sellafield (sea pipelines) Tritium discharge limit should have read 2 10^{4}
	236, Table A4.2B	Trawsfynydd, should read… Adult fish consumers 0.010 Fish, gamma dose rate over sediment, ^{90}Sr, ^{137}Cs, ^{241}Am
RIFE-15 2009	233, Table A2.1	MoD Coulport under reported discharges for the end of 2009. The ^{3}H discharge for 2009 should have been 3.40 E-03 TBq.
	249, Table A4.2B	Trawsfynydd, should read… Adult fish consumers 0.012 Fish, gamma dose rate over sediment, ^{90}Sr, ^{137}Cs, ^{241}Am
RIFE-16 2010	30, Table 1.2B	Trawsfynydd, should read… Adult fish consumers 0.012 Fish, gamma dose rate over sediment, ^{90}Sr, ^{137}Cs, ^{241}Am
	37, Section 2	Line 13, paragraph 3, second column should read… The dose to wildfowlers and farmers from exposure over salt marsh was 0.032 mSv, which was less than 4 per cent of the dose limit for members of the public of 1 mSv. The small decrease in dose from 0.036 mSv (in 2009) was due to lower gamma dose rates over marsh in 2010.
	100, Section 3	The graph in Figure 3.2 is missing 2010 data. The data for 2010 is shown in Figure 3.2 RIFE 17
	122, Section 4	Line 7, paragraph 1, first column should read… An increase in the fish and crustacean consumption rates has been observed, together with a decrease in the mollusc and occupancy rates, in comparison with those of the previous survey reported in 2006.
RIFE-16 2010	Appendix 1, Annex 2	Table X2.2 Sellafield Group N winkle consumption should have said 15kg y^{-1} (not 18 kg y^{-1})

	Page, Section	Comment
RIFE-17 2011	52, Section 2	On Figure 2.14 the year labels from 2004 to 2011 were underneath the bar chart incorrectly and should have been one place to the right, as shown in RIFE 18.
	61, Section 2	Springfields 'Source specific doses' last entry on the table should read: 'Consumers of locally grown food' not 'Infant consumers of locally grown food'
	209, Section 9	Line 7, paragraph 7, should read: Tritium concentrations in the western English Channel were also very low (Figure 9.7).
	240, Appendix 2	Third entry on the table – Capenhurst (Urenco UK) the discharge limits (annual equivalent)[a] Bq column should have read: Uranium 7.50E+06 Other Alpha 2.40E+06 Technetium-99 1.00E+08 Others 2.25E+09
RIFE-14-17 2011	CD, Appendix 1	Table X2.2 Sellafield Q – Ravenglass nature warden assessment, the ingestion and inhalation rates of sediment have been incorrect, they should have read: RIFE-14 3.1 10-3 kg y^{-1} mud by inadvertant ingestion 5.6 10-5 kg y^{-1} mud by resuspension and inhalation RIFE-15 3.4 10-3 kg y^{-1} mud by inadvertant ingestion 6.3 10-5 kg y^{-1} mud by resuspension and inhalation RIFE-16 3.4 10-3 kg y^{-1} mud by inadvertant ingestion 6.3 10-5 kg y^{-1} mud by resuspension and inhalation RIFE-17 3.4 10-3 kg y^{-1} mud by inadvertant ingestion 6.3 10-5 kg y^{-1} mud by resuspension and inhalation
RIFE-18 2012	134, Table 4.1	Hinkley Point. These are small changes to the total dose and source specific dose shown below. The apply to relevant points of text, tables (S, 1.2, 1.3, 1.4 and 4.1) and figures (1.1, 4.1 and 6.2).

Site	Exposed population[a]	Exposure, mSv per year					
		Total	Fish and shellfish	Other local food	External radiation from intertidal areas or the shoreline	Gaseous plume related pathways	Direct radiation from site
***Total dose* – all sources**	**Adult occupants over sediment**	**0.013**	**<0.005**	**<0.005**	**0.012**	**<0.005**	**<0.005**
Source specific doses	Seafood consumers	0.018	<0.005	–	0.017	–	–

	Page, Section	Comment
RIFE-18 2012	240, Appendix 2	Third entry on the table – Sellafield – the discharges during 2012 (Bq and % of annual limitb) columns and should have read: Beta 1.03E+09 2.5 Antimony-125 3.20E+09 11 Caesium-137 1.59E+08 2.7
	41, Figure 2.3	The River Ribble houseboat dose rate datum for 2012 (figure 2.3, RIFE-18) was plotted incorrectly, it is shown corrected in Figure 2.4 in RIFE-19
	134, Table 2.18	Sellafield. These are small changes to the total dose shown below. They apply to relevant points of text, tables (1.2 and 2.18) and figure 2.6.

Exposed population[a]	Exposure, mSv per year							
	Total	Seafood (nuclear industry discharges)	Seafood (other discharges)	Other local food	External radiation from intertidal areas, river banks or fishing gear	Intakes of sediment and water	Gaseous plume related pathways	Direct radiation from site
***Total dose* – maximum effect of gaseous release and direct radiation sources**								
Infant root vegetable consumers	**0.011**	**–**	**–**	**0.011**	**–**	**–**	**–**	**–**

	196, Table 7.7	Discharge data reported previous to RIFE-18 classified as Oil & Gas (Offshore) should have been classified as Oil & Gas (Onshore). This has been corrected for RIFE-18 onwards.
RIFE-19 2013	183, Table 6.1	Cardiff, these are small changes to the *total dose* and source-specific assessments shown below. They apply to relevant parts of text, tables (1.2B, 1.4 and 6.1) and figure (1.3)

Site	Exposed population[a]	Exposure, mSv per year					
		Total	Fish and shellfish	Other local food	External radiation from intertidal areas or the shoreline	Gaseous plume related pathways	Direct radiation from site
***Total dose* – liquid discharges**	**Adult occupants over sediment**	**0.006**	**<0.005**	**–**	**0.005**	**–**	**–**
Source specific doses	Prenatal children of seafood consumers	0.009	<0.005	–	0.009	–	–

	41, Figure 2.13	The cobalt-60 liquid discharge datum for 2013 (Figure 2.13, RIFE-19) was plotted incorrectly, it is shown corrected in Figure 2.13 in RIFE-20
	247, Appendix A2.1	Chapelcross, replace All other nuclides limit of 7.50E+09 Bq with 5.15E+09 Bq

	Page, Section	Comment
RIFE-19 2013	109, Figure 3.5	The discharge data for ^{60}Co and ^{137}Cs for 2013 (figure 3.5) were plotted incorrectly, they are shown corrected in Figure 3.5 in RIFE-20
	232, Table 8.15	Eu-155 results have been revised

Location	Sample source	reported ^{155}Eu	revised ^{155}Eu
Firth of Clyde	East of Gull Point	<0.21	0.72
Firth of Clyde	SW of Lady Isle	<0.36	2.1
Firth of Clyde	East of Johnston's Point	<0.22	0.81
Firth of Clyde	East of Brodick	<0.39	1.8
Clyde Estuary	The Hole	<0.50	2.1
Clyde Estuary	Kempoch Point	<0.43	2.7

33, Table 1.2	Some data was missing from Table 1.2 C (electronic version only), revised table shown below.		

Table 1.2. continued

Site	Representative person[a]	Exposure, mSv	
		Total	Dominant contributions[b]
C All sources			
Aldermaston and Burghfield	Infant milk consumer	<0.005	Milk, ^{3}H[c], ^{137}Cs[c], ^{238}U
Amersham	Local adult inhabitant (0–0.25km)	0.22	Direct radiation
Barrow	Adult occupant on a houseboat	0.076	Gamma dose rate over sediment
Berkeley and Oldbury	Adult occupant over sediment	0.010	Gamma dose rate over sediment
Bradwell	Prenatal child of green vegetable consumers	<0.005	Green vegetables, potatoes, root vegetables, ^{14}C
Capenhurst	Local inhabitant aged 10y (0–0.25km)	0.080	Direct radiation
Cardiff	Infant milk consumer	0.010	Milk, ^{14}C, ^{32}P[c]
Chapelcross	Infant milk consumer	0.024	Milk, ^{90}Sr, ^{241}Am[c]
Derby	Adult consumer of locally sourced water	<0.005	Water, ^{60}Co[c]
Devonport	Adult fish consumer	<0.005	Fish, ^{14}C, ^{241}Am[c]
Dounreay	Adult green vegetable consumer	0.012	Domestic fruit, potatoes, root vegetables, ^{129}I[c], ^{238}Pu[c], $^{239/240}$Pu[c], ^{241}Am[c]
Dungeness	Local adult inhabitant (0.5–1km)	0.021	Direct radiation
Faslane	Adult occupant over sediment	<0.005	Gamma dose rate over sediment
Hartlepool	Local adult inhabitant (0–0.25km)	0.024	Direct radiation, gamma dose rate over sediment
Harwell	Prenatal child of local inhabitants (0–0.25km)	0.010	Direct radiation
Heysham	Adult mollusc consumer	0.028	Fish, gamma dose rate over sediment, molluscs, ^{137}Cs, $^{239/240}$Pu, ^{241}Am
Hinkley Point	Adult occupant over sediment	0.022	Gamma dose rate over sediment
Hunterston	Prenatal child of local inhabitants (0.25–0.5km)	0.021	Direct radiation
LLWR near Drigg[e]	Adult fish consumer	0.061[f]	Crustaceans, fish, gamma dose rate over sediment, ^{129}I[c], ^{210}Po
Rosyth	Adult occupant over sediment	<0.005	Gamma dose rate over sediment
Sellafield[e,g]	Adult occupant on a houseboat	0.076	Gamma dose rate over sediment
Sizewell	Local adult inhabitant (0–0.25km)	0.021	Direct radiation
Springfields	Adult occupant on a houseboat	0.060	Gamma dose rate over sediment
Torness	Local adult inhabitant (0.5–1km)	0.020	Direct radiation
Trawsfynydd	Infant local inhabitant (0.25–0.5km)	0.017	Milk, ^{14}C, ^{241}Am
Whitehaven[e]	Adult fish consumer	0.061[f]	Crustaceans, fish, gamma dose rate over sediment, ^{129}I[c], ^{210}Po
Winfrith	Infant milk consumer	<0.005	Milk, ^{14}C
Wylfa	Adult occupant over sediment	<0.005	Gamma dose rate over sediment

[a] *Selected on the basis of providing the highest dose from the pathways associated with the sources as defined in A, B or C*
[b] *Pathways and radionuclides that contribute more than 10% of the* total dose. *Some radionuclides are reported as being at the limits of detection and based on these measurements, an upper estimate of dose is calculated*
[c] *The assessed contribution is based on data being wholly at limits of detection*
[d] *The effects of gaseous discharges and direct radiation are not assessed for this site*
[e] *The effects of liquid discharges from Sellafield, Whitehaven and LLWR near Drigg are considered together when assessing exposures at these sites because their effects are manifested in a common area of the Cumbrian coast*
[f] *The doses from man-made and naturally occurring radionuclides were 0.040 and 0.021 mSv respectively. The source of naturally occurring radionuclides was a phosphate processing works near Sellafield at Whitehaven. Minor discharges of radionuclides were also made from the LLWR near Drigg into the same area*
[g] *The highest exposure due to operations at Sellafield was to a person living on a houseboat near Barrow*

	Page, Section	Comment
RIFE-20 2014	201, Table 8.1	Iodine-129 data were entered incorrectly and should be removed with the exception of Alderney *Fucus vesiculosus* which was undertaken by radiochemistry. All other results reported as ^{129}I were actually ^{131}I.
RIFE-17-20 2014	86, Table 2.11	The units of Mean beta dose rate in tissue should read $uSvh^{-1}$