## **ERRATA**

## Corrections to published RIFE reports

	Page, Section	Comment						
RIFE-1	38, Section 16.2	Last but one sentence	e, replace 1994 w	ith 1995.				
1995	39, Section 16.4	First sentence, 2 <sup>nd</sup> pa	ragraph, replace	1994 with 199	<b>9</b> 5.			
	45, Table 1	Replace <sup>241</sup> Am Sellafield (sea pipelines) limit of 1.3 TBq with 0.3 TBq. Replace <sup>60</sup> Co Harwell (pipeline) percentage of 1.5 with 6.9.						
	74, Table 16 99, Table 33(a)	The following activing Bq kg <sup>-1</sup> (dry) whilst kg <sup>-1</sup> (wet). All data at	they should have	been reporte				
		Site/location	<sup>210</sup> Po	<sup>238</sup> Pu	239+240 Pu			
99 Table 33(a)		Sellafield (Table 16) Aldermaston (Table 33(a)) max	64	0.0091 0.016	0.36 0.56			
99, Table 33(a)	99, Table 33(a)	The concentration of <sup>137</sup> Cs in clay at Outfall (Pangbourne) was 12±0.15 Bq kg <sup>-1</sup> (dry)						
	133, Appendix 3	The average consumption rates of nuts and offal by 10 year old children were 1.5 kg y <sup>-1</sup> .  The consumption of whelks at Sellafield by group E (Whitehaven commercial) was 11 kg y <sup>-1</sup> .						
	138, Appendix 6	The values of $t_f$ and $t$ offal ( $^{241}$ Pu) and lamb respectively.			for beef			
RIFE-2 1996	32, Section 8.1	Lines 8-11. Replace fuel were found on small fragments we the range 10 <sup>5</sup> -10 <sup>8</sup> B operator). They we which although a pub	the public beach ere found with c q (these activities are all found on	at Dounreay aesium-137 es were meas the Dounreay	y. Thirteen activities in sured by the y foreshore			
	58, Table 2	Replace <sup>35</sup> S Oldbury limit of 0.8 TBq with 0.75 TBq. Replace <sup>41</sup> 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	The following activit Bq kg <sup>-1</sup> (dry) whilst the Bq kg <sup>-1</sup> (wet). All da	ney should have	e been report	ed as
119, Table 41	Site/location	<sup>234</sup> U	<sup>235</sup> U	<sup>238</sup> 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. Radioactiv	ivity in plants near landfill sites, 1996											
Sampling location	Material	No of samples	Mean radioactivity concentration (dry)*, Bq kg¹									
	12-0		<sup>3</sup> H	<sup>14</sup> C	90Sr	<sup>125</sup> I	<sup>134</sup> Cs	<sup>137</sup> Cs	<sup>238</sup> 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	<063	< 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		

161, Appendix 4

	are less than the limit of detection							
RIFE-3 1997	19, Table 1.1	Replace beta, tritium discharges with 1.97						
		respectively.	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1			
		Replace alpha and beta limit and percentage Greenwich						
		with 4.44 10 <sup>-3</sup> TBq a	nd <1 respec	tively.				
	21, Table 1.2	Replace tritium Win	frith limit wit	th 5 TBq.				
	38, Section 3.6.5	First paragraph. Re			nillisievert			
			,	•				
	70, Table 4.10	The following activity	•		•			
	72, Table 4.12	Pa ka <sup>-1</sup> (dry) whilet t	la av v ala av vl al la					
	•	Bq kg <sup>-1</sup> (dry) whilst t			ed as Bq			
	81, Table 4.16	kg <sup>-1</sup> (wet). All data a			ed as Bq			
	•				ed as Bq			
	81, Table 4.16	kg <sup>-1</sup> (wet). All data a	re averages ı	ınless stated.	•			
	81, Table 4.16	kg <sup>-1</sup> (wet). All data a	re averages u	unless stated.	238U			
	81, Table 4.16	kg <sup>-1</sup> (wet). All data a Site/location Drigg (Table 4.10)	re averages u	unless stated.	9.5 16 30			
	81, Table 4.16	kg <sup>-1</sup> (wet). All data a  Site/location  Drigg (Table 4.10) Ravenglass (Table 4.12)	234U 9.9 18	235U 0.37 0.60	<sup>238</sup> U 9.5 16			
	81, Table 4.16	kg <sup>-1</sup> (wet). All data a  Site/location  Drigg (Table 4.10) Ravenglass (Table 4.12) Springfields (Table 4.12)	234U 9.9 18 31	235U 0.37 0.60 1.5	9.5 16 30			

The 1 year old child dose coefficient for <sup>99</sup>Tc was 4.80 10<sup>-9</sup>.

	Page, Section	Comment							
RIFE-4 1998	70, Table 4.12	The concentrations of (max) were 0.61 and value for <sup>155</sup> Eu is availa	<1.8 Bq kg <sup>-</sup>						
	75, Table 4.15(a) 77, Table 4.16 116, Table 9.1	The following activity Bq kg <sup>-1</sup> (dry) whilst the kg <sup>-1</sup> (wet). All data are	ey should ha	ave been repo					
		Site/location	<sup>234</sup> U	<sup>235</sup> U	<sup>238</sup> U				
		Springfields (Table 4.15(a)) Capenhurst (Table 4.16) Derby (Table 9.1)	72 7.9 31	3.0 0.30 0.93	68 7.4 26				
	96, Table 6.4(a)	The concentration of <sup>24</sup> <1.0 Bq kg <sup>-1</sup> (dry). No made.							
	125, Section 11.1	Last but one paragraph	h. The est	imated dose	was 0.094 mSv.				
	131, Section 11.8	Last paragraph, first ser	ntence. Repl	ace 1997 with	ı 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 <sup>-1</sup> (dry) whilst they should have been reported as Bq kg <sup>-1</sup> (wet). All data are averages unless stated.							
		Site/location	<sup>234</sup> U	<sup>235</sup> U	<sup>238</sup> U				
		Springfields (Table 4.15(a)) may Capenhurst (Table 4.16) max Derby (Table 9.1) max	12 34	15 0.46 1.3	200 12 31				
	112, Section 8.2	The second sentence duck and tide washed p 0.032 and 0.009 mSv duck pathway should washed pasture is correct	asture pathw y <sup>-1</sup> respecti read 0.042	vays gave dose vely." The o	es of dose due to the				
	123, Table 10.2	The concentration of Bq kg <sup>-1</sup> (wet).	<sup>14</sup> C in grass	s from Billing	gham was 960				
	162, Table A1.2	The Dounreay (Fast Re	actor) data w	vere duplicated	d.				
RIFE-6 2000	31, Section 3.5	It was stated that the radionuclides. This sen			to natural				
	75, Table 4.16 124, Table 9.1	The following activity Bq kg <sup>-1</sup> (dry) whilst the kg <sup>-1</sup> (wet). All data are	ey should ha	ave been repo					
		Site/location	<sup>234</sup> U	<sup>235</sup> U	<sup>238</sup> U				
		Capenhurst (Table 4.16) max Derby (Table 9.1) max	8.5 24	0.35 0.96	8.4 23				

	Page, Se	ection		Comme	nt					
	155, Tal	ole 12.1			ate for pro ave been l			d carbon-1	4 in seaf	rood'
	166, Tal	ole A1.1			ges of triti q should l				ine) give	n as
	168, Tal	ble 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 <sup>14</sup> 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	93, Tabl 122, Tal	le 4.15(a) le 5.2(a) ole 7.3 ole 8.2(a)		Bq kg <sup>-1</sup> (	owing acti dry) while wet). All	st they sh	ould hav	ve been re	ported as	
Site/location		<sup>60</sup> Co	<sup>106</sup> Ru	125Sb	<sup>134</sup> Cs	<sup>137</sup> Cs	<sup>234</sup> U	<sup>235</sup> U	<sup>238</sup> U	<sup>241</sup> Am
Sellafield (Table 4.8)	ıax	<0.80 1.2	<3.1	<1.1		80 97	9.3	0.34	9.1	5.8 6.0
Springfields (Table 4.15(a	a)) aax						95	4.6	89	
Harwell (Table 5.2(a)) Featherstone position A ( Featherstone position B (**)	(Table 7.3)	<0.40			<0.40	2.9	9.5 7.3	0.41 0.34	9.0 7.5	
Cardiff (Table 8.2(a))	nax				<0.33 <0.40	5.6 6.5				
Derby (Table 9.1)	iax						18 30	0.80 1.3	18 29	
	176, Tab	ole A1.1		should h	ges of Alp ave been ave been	1.4 10 <sup>-5</sup> T				
	181, Tal	ole A1.2		_	ess 'A' dis ave been	_			t for triti	um
RIFE-8 2002	59, Tabl	e 4.1			ium result are attacl		mitted.			
				Table 4.1				v in fish fro ield, 2002	m the Irish	1 
				Location	M	<b>I</b> aterial		No.of sampling observ-	:	<sup>3</sup> H

	Ta violinity aria farti	101 411014, 2002		
Location	Material	No.of sampling observ- ations	³H	
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 follow Bq kg <sup>-1</sup> (dr Bq kg <sup>-1</sup> (we	y) whilst th	ey should	have been	reported a	_
Site/location	<sup>60</sup> Co	<sup>106</sup> Ru	<sup>125</sup> Sb	<sup>134</sup> Cs	<sup>137</sup> Cs	<sup>234</sup> U	<sup>235</sup> U	238

<sup>60</sup> Co	106Ru	<sup>125</sup> Sb	<sup>134</sup> Cs	<sup>137</sup> Cs	$^{234}U$	$^{235}U$	$^{238}U$
< 0.80	<2.3	<1.2	68				
1.0	<2.7	<1.4	82				
					6.9	0.30	6.5
					8.7	0.35	8.3
			< 0.30	6.4			
				8.1			
	<0.80	<0.80 <2.3	<0.80 <2.3 <1.2	<0.80 <2.3 <1.2 68 1.0 <2.7 <1.4 82	<0.80 <2.3 <1.2 68 1.0 <2.7 <1.4 82 <0.30 6.4		

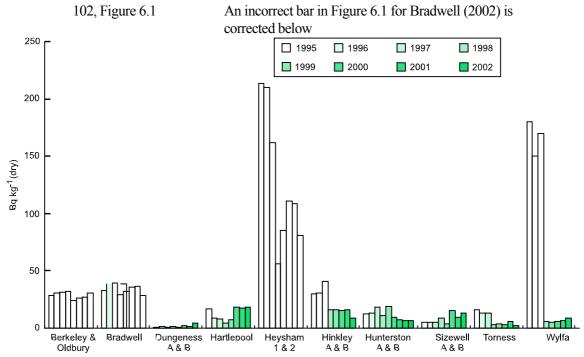


Figure 6.1. Caesium-137 concentration in sediments near nuclear power stations

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 discharge from Urenco Capenhurst	es of uranium
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 <sup>-7</sup>
2002	$1.16\ 10^{-7}$	6.01 10 <sup>-7</sup>

	Page, Se	ction		Con	mment									
RIFE-9 2003	82, Table 138 Tabl 141, Tab 151, Tab 157, Tab	le 6.1(a) ble 6.3(a) ble 7.3(a)	າ) າ)	Bq	The following activity in soil data were reported as being Bq kg <sup>-1</sup> (dry) whilst they should have been reported as Bq kg <sup>-1</sup> (wet). All data are averages unless stated.									
Site/location		<sup>60</sup> Co	<sup>106</sup> Ru	<sup>125</sup> Sb	<sup>134</sup> Cs	<sup>137</sup> Cs	<sup>154</sup> Eu	<sup>234</sup> U	<sup>235</sup> U	<sup>238</sup> U	<sup>241</sup> Am			
Sellafield (Table 3.15)	ζ.	<0.90 1.6	<3.3 <4.2	<1.2 <1.6	< 0.40	75 89	<0.50 <0.60	11	0.54	10	5.9 7.7			
Aldermaston (Table 6.1(a))														
Derby (Table 6.3(a))	ζ.							11	0.48	11				
Cardiff (Table 7.3(a))					<0.40	8.8 11		47	1.6	40				
Drigg (Table 8.1)	X.					11								
max	ζ.							6.7	0.26	6.7				

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

Location	Sample	No. of	Mean	radioactivit	y concentratio	n <sup>a</sup> in rainwater an	d air				
		sampling observ- ations	<sup>3</sup> H <sup>7</sup>	Be	<sup>90</sup> Sr <sup>b</sup>	<sup>137</sup> Cs	<sup>210</sup> Pb	<sup>210</sup> Po	<sup>228</sup> Th	Gross alpha <sup>b</sup>	Gross beta <sup>b</sup>
Ceredigion Aberporth	Rainwater Air	12 4	<2.4	<1.6 0.0022		<0.053 <0.00000052	0.10 0.00017		*		
Co. Down Conlig	Rainwater Air	4 4		<1.5 0.0022		<0.022 <0.00000063	* 0.00015		*		
Dumfries and G	alloway Eskdalemuir Air	Rainwater 4	4	<2.7 0.0018	1.2	<0.00000043	<0.0098 0.00013	0.094	*	*	
North Yorkshire Dishforth	Rainwater Air	4 4		<2.2 0.0016		<0.039 <0.0000055	* 0.00014		*		
Oxfordshire Chilton	Rainwater Air	12 13		<1.5 0.0018	<0.00064	<0.032 <0.0000034	0.32 0.00027	<0.000014	*	0.074	0.17
Shetland Lerwick	Rainwater Air	4 4		1.6 0.0015		<0.017 <0.00000052	* 0.00010		*		
Suffolk Orfordness	Rainwater Air	4 4	<2.2	<2.4 0.0022		<0.048 <0.0000053	* 0.00020		5.2		

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

<sup>\*</sup> Not detected by the method used

<sup>a</sup> Bq l<sup>1</sup> for rainwater and Bq kg<sup>1</sup> for air

<sup>b</sup> Annual bulk analysis

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<sup>a</sup>

Country	Exposure, mSv Man-made radionuclides <sup>b</sup>	Natural radionculides <sup>c</sup>	All radionuclides	
England	<0.001	0.028	0.028	
Northern Ireland	< 0.001	0.026	0.026	
Scotland Wales	<0.001 <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.

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

45, Figure 3.8

The entry for Haverigg should read 0.087.

An incorrect bar in Figure 3.8 for Americium discharge is corrected below:

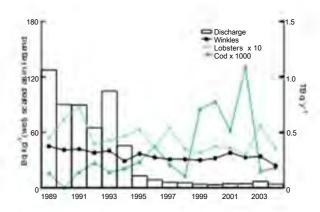


Figure 3.8. Americium-241 and liquid discharge from Sell afield and concentrations in cod\*, lobsters and winkles near Sellafield (\* estimated in 2004 due to lack of availability of cod)

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<sup>-1</sup> (dry) whilst they should have been reported as Bq kg<sup>-1</sup> (wet). All data are averages unless stated.

Site/location	<sup>60</sup> Co	<sup>106</sup> Ru	<sup>125</sup> Sb	<sup>134</sup> Cs	<sup>137</sup> Cs	$^{234}U$	<sup>235</sup> U	<sup>238</sup> 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

b Including tritium

c Including carbon-14

<sup>&</sup>lt;sup>d</sup> Analysis of natural radionuclides was not undertaken

	Page, Section	Comme	nt					
	223, Table A1.1	The % 7% (not		limit fo	or <sup>106</sup> Ru	dischar	ge at Se	ellafield was
	246, Table A5.1	Some dose per unit intake values were missing for 1 yr old. These were:						
		Table As	5.1. Dosir	netric da	ata			
		Radionuclio	de			ntake by inh methodolog	alation gy (Sv Bq <sup>-1</sup> )	
			and dose p		-08 -08 -06 -04 -06	include the	effects of r	adiations of short-
RIFE-11 2005	72, Table 3.3a	Footnote  d The conce					It should	have read:
	112, Table 4.3a	Column	headin	gs shou	uld have	e read:	<sup>239</sup> Pu+ <sup>240</sup> Pu	<sup>241</sup> Pu
	140,Table 5.5a	The result of <0.13 for <sup>241</sup> Am in the <i>Fucus vesiculosis</i> samples from Pilot Station was incorrectly put into the <sup>239</sup> Pu+ <sup>240</sup> Pu column.						
	206, Figures 9.5 and 9.6	Incorrect mBq 1 <sup>-1</sup> .		were s	hown.	The co	rrect uni	ts were
	225, Table 9.15	Incorret have be			ne top p	oart of t	he table	. Should
Table 9.15.	Concentrations of radionuclide 2005	es in sourd	ces of dri	inking w	ater in E	ngland a	nd Wales	,
Location	Sample source		No. of sampling	Mean rac	dioactivity	concentrati	on, Bq l <sup>-1</sup>	
			observ- ations	<sup>3</sup> H	<sup>40</sup> K	90Sr	<sup>137</sup> Cs	<sup>210</sup> Po
Wales Gwynedd Mid-Glamorgan Powys	Cwm Ystradllyn Treatment Works Llwyn-on Reservoir Elan Valley Reservoir		4 4 4	<4.0 <4.0 <4.0	<0.020 <0.045 <0.050	0.0036 0.0030 0.0040	0.0018 <0.0010 0.00090	<0.010 <0.013 <0.010
	248, Table A1.2						and beta q respec	
	251, Table A1.2	Alderm have be						mit should
RIFE 8-11 2002-2005	Concentrations in sediments	contents sample calibrate factor h	s it was bulk de ion ran as been l data	discovensities ge. For calculation 2	ered in were of ollowing ated and 2002-20	2007 the utside the grinves and this h	as been	esulting

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

'ear	Site	Location	No. of	Mean 1	radioact	ivity co	oncentrati	on (dry), B	q kg <sup>-1</sup>		
			sampling observ-	57Ca	60Ca		657	<sup>95</sup> Zr	95 <b>N</b> II.	106 <b>D</b>	125CL
002	Aldermaston	Reading (Kennet)	ations 4	<sup>57</sup> Co	<sup>60</sup> Co	-	<u>65Zn</u>	<u>~Zr</u>	<u>95Nb</u>	106Ru	125Sb
02		Stream draining south	4								
	Bradwell	Maldon Waterside	2 2		<3.4 <4.0						
	Capenhurst	Rossmore (4.3 km downstream)	2		1.0						
	Cardiff	Canal West of pipeline	2 2 2 2								
	Devonport	Lopwell	2		<3.7						
	Dungeness Harwell	Pilot Sands Appleford	2 4		<0.9 <0.6						
	Sellafield	Day's Lock Caerhun	4 2		<0.5			<9.6	-77	<23	<9.2
	Senaneio		2		<3.3			<9.6	<7.7	<23	<9.2
003	Aldermaston	Reading (Kennet) Aldermaston	4 4								
	Amersham	Outfall (Grand Union Canal)	3	< 0.30	<1.1		<1.5				
	Bradwell Cardiff	Waterside Canal	2		<2.0						
	Derby	River Derwent (downstream)	4		<1.0						
	Devonport	Lopwell	2		<2.5						
004	Aldermaston	Reading (Kennet) Aldermaston	4 4								
		Stream draining south	4								
	Amersham Cardiff	Upstream of outfall (Grand Union Canal) 2 Canal	2	<6.4	<1.8		<4.1				
	Sellafield	Caerhun	2		<1.6			<4.5	<2.2	<12	<13
005	Aldermaston	Reading (Kennet)	4								
	Amersham Cardiff	Upstream of outfall (Grand Union Canal) 2 Canal	2	<5.3	<1.6		< 3.6				
	Harwell	Lydebank Brook	2 4		<1.7						
	Sellafield	Appleford Caerhun	4 2		<2.5 <2.6			<8.8	<6.8	<20	<20
	Trawsfynydd	Bailey Bridge	2		<8.3			<b>~0.0</b>	<b>\0.0</b>	~20	<44
ear	Site	Location	No. of Mean radioactivity concentration (dry), Bq kg <sup>-1</sup>								
			sampling observ-								
			ations	$\frac{^{125}I}{}$	$^{131}I$	134Cs	137Cs	<u> 144Ce</u>	<sup>154</sup> Eu	155 <b>Eu</b>	241 <b>An</b>
002	Aldermaston	Reading (Kennet)	4				7.3				<1.9
	Bradwell	Stream draining south Maldon	4			6.5	<5.1 80				<1.2 <4.0
		Waterside	2 2			3.9	59				<13
	Capenhurst Cardiff	Rossmore (4.3 km downstream) Canal	2 2	< 0.80			<4.4 2.4				
		West of pipeline	2 2 2	<3.1			33				
	Devonport Dungeness	Lopwell Pilot Sands	2				7.7 <0.90				<1.6
	Harwell	Appleford	4				<13				
	Sellafield	Day's Lock Caerhun	4 2			<3.4	6.0 430	<25	<7.3	<8.0	75
003	Aldermaston	Reading (Kennet)	4				8.0				<1.6
103	Aluciniasion	Aldermaston	4				6.3				<2.7
	Amersham Bradwell	Outfall (Grand Union Canal) Waterside	3 2	<1.0	< 550		<2.1 35				<2.7
	Cardiff	Canal	1	<1.4			16				~2.7
	Derby Devonport	River Derwent (downstream) Lopwell	4 2				<10				
004	•	•									<i>-</i> 1.1
004	Aldermaston	Reading (Kennet) Aldermaston	4 4				5.4 <3.9				<1.1 <1.3
	Amersham	Stream draining south Upstream of outfall (Grand Union Canal) 2	4	< 0.80	~1 <i>1</i>		<2.8 10				1.6
	Cardiff	Canal	2	<1.5	\1. <del>4</del>		11				
	Sellafield	Caerhun	2			<1.5	220	<5.7	<7.3	<3.1	51
005	Aldermaston	Reading (Kennet)	4				<3.9				6.5
	Amersham Cardiff	Upstream of outfall (Grand Union Canal) 2 Canal	2	<1.0 <1.8	<9.1		6.2 9.1				
	Harwell	Lydebank Brook	4	1.0			9.0				
	Sellafield	Appleford Caerhun	4 2			<2.5	<11 230	<9.3	<12	<5.3	59

	Page, Section	Comment
RIFE-11 2005	270, Table A7.2B	Trawsfynydd, should read  Prenatal children of 0.008 Direct radiation, gamma occupants over sediment dose rate over sand/stone
RIFE-12 2006	70, Table 2.17	The concentration of <sup>241</sup> 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 0.013 Fish, gamma dose rate over consumers sediment, 90Sr
RIFE-13 2007	127, Table 4.5a	The <sup>210</sup> Po and <sup>210</sup> Pb results are the wrong way round for South Gare winkles. <sup>210</sup> Po should be 11 and <sup>210</sup> Pb should be 0.46 Bq kg <sup>-1</sup>
	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, 90Sr, 137Cs, 241Am
	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 readpathways 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					
	Location or selection <sup>b</sup>	No. of sampling	Mean rad Bq kg <sup>-1</sup>	dioactivity co	ncentratior	n (fresh)ª,
		observ- ations <sup>c</sup>	Organic			
			3He	³H	<sup>3</sup> H <sup>f</sup>	14 <sup>c</sup>
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

			samping	вч ку	<u> </u>			
			observ- ations <sup>c</sup>	Organic				
				3He	3H	<sup>3</sup> H <sup>f</sup>	14 <sup>c</sup>	
	Terrestrial samples	Cardiff East WWTW Cardiff East WWTW Cardiff East WWTW  Sellafield (sea pread 2 104  B Trawsfynydd, s Adult fish consu  MoD Coulport The 3H discharg  B Trawsfynydd, s Adult fish consu  Trawsfynydd, s Adult fish consu  Line 13, paragra The dose to wil marsh was 0.03 limit for membed dose from 0.036 rates over marsi  The graph in Fi is shown in Fig  Line 7, paragrap		-				
	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		oipelines)	Tritium (	discharge l	limit sho	uld have	
	236, Table A4.2B	Trawsfynydd, s	hould read	d				
		• •		0.010			e rate over Cs, <sup>241</sup> Am	
RIFE-15 2009	233, Table A2.1				_			
	249, Table A4.2B	Trawsfynydd, s	hould read	d				
	_ 13, 140.011.122			0.012			e rate over Cs, <sup>241</sup> Am	
RIFE-16	30, Table 1.2B	Trawsfynydd, s	hould read	d				
2010		* *		0.012			e rate over Cs, <sup>241</sup> Am	
	37, Section 2	The dose to wil marsh was 0.03 limit for memb dose from 0.03	dfowlers a 2 mSv, where of the p 6 mSv (in	and farm hich was public of 2009) w	ers from e less than f 1 mSv. T	exposure 4 per cer he small	nt of the dose decrease in	
	100, Section 3		-		g 2010 dat	a. The da	ata for 2010	
	122, Section 4	Line 7, paragra An increase in been observed, occupancy rater reported in 200	the fish an together v s, in comp	d crustacy vith a de	cean consu crease in t	ımption ı he mollu	sc and	
DIEE 16	Annandiv 1 Annay 2	Tabla Y2 2 Sall	afiald Gra	un N wi	nkla cons	ımption	should have	

		18 SHOWII III FIGURE 3.2 KIFE 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 $y^{\text{-1}}$ (not 18 kg $y^{\text{-1}}$ )

RIFE-18 2012  Site  Total dose – all sou	Exposed population <sup>a</sup>	3.4 10-3 kg y-1 th 6.3 10-5 kg y-1 th RIFE-17 3.4 10-3 kg y-1 th 6.3 10-5 kg y-1 th 6.3 10-5 kg y-1 th 6.3	mud by inadvertant ingestion mud by resuspension and inhalation  mud by inadvertant ingestion mud by resuspension and inhalation  These are small changes to the total dose and dose shown below. The apply to relevant pollocytope 1.2, 1.3, 1.4 and 4.1) and figures (1.1, 4.1 and 1.2, 1.3, 1.4 and 4.1) and figures (1.1, 4.1 and 1.2, 1.3, 1.4 and 4.1) and figures (1.1, 4.1 and 1.3) are coal food from intertidal areas or the shoreline pathways plume related pathways  solution of the coal food of the shoreline plume related pathways coal food or the shoreline pathways coal food or the shoreline pathways coal food or the shoreline pathways coal food pathways coal food or the shoreline pathways coal food pathways coal food or the shoreline pathways coal food pathways coal food or the shoreline pathways coal food pathways coal f	ints of d 6.2).			
2012	Exposed	3.4 10-3 kg y-1 to 6.3 10-5 kg y-1 to 6.3 to	mud by inadvertant ingestion mud by resuspension and inhalation  These are small changes to the total dose and dose shown below. The apply to relevant po 1.2, 1.3, 1.4 and 4.1) and figures (1.1, 4.1 and other cocal food from intertidal areas plume related radiation radiation plume related radiation plume related radiation radiation plume related radiation plum plume related radiation plum plum plume related radiation plum plum plum plum plum plum plum plum	ints of d 6.2).			
	134, Table 4.1	3.4 10-3 kg y-1 1 6.3 10-5 kg y-1 1 RIFE-17 3.4 10-3 kg y-1 1 6.3 10-5 kg y-1 1 Hinkley Point. T source specific of	mud by resuspension and inhalation  mud by inadvertant ingestion mud by resuspension and inhalation  These are small changes to the total dose and dose shown below. The apply to relevant po	ints of			
		3.4 10-3 kg y-1 1 6.3 10-5 kg y-1 1 RIFE-17 3.4 10-3 kg y-1 1	mud by resuspension and inhalation mud by inadvertant ingestion				
		3.4 10-3 kg y- <sup>1</sup> 1					
		RIFE-16					
			mud by inadvertant ingestion mud by resuspension and inhalation				
			mud by inadvertant ingestion mud by resuspension and inhalation				
RIFE-14-17 2011	CD, Appendix 1	Table X2.2 Sellafield Q – Ravenglass nature warden ass the ingestion and inhalation rates of sediment have been incorrect, they should have read:					
		Uranium Other Alpha Technetium-99 Others	7.50E+06 2.40E+06				
	240, Appendix 2	-	the table – Capenhurst (Urenco UK) the disc equivalent) <sup>a</sup> Bq column should have read:	charge			
	209, Section 9		ph 7, should read: Tritium concentrations in Channel were also very low (Figure 9.7).	the			
	61, Section 2		ource specific doses' last entry on the table sers of locally grown food' not 'Infant consumer food'				
RIFE-17 2011	52, Section 2	underneath the b	the year labels from 2004 to 2011 were bar chart incorrectly and should have been on the shown in RIFE 18.	one			
	Page, Section	Comment					

<0.005

Seafood consumers 0.018

Source specific doses

0.017

	Page, Section	Comn	nent					
RIFE-18 2012	240, Appendix 2		nd % o		imitb) c	afield – the columns and s 1.03E+09 3.20E+09 1.59E+08	_	-
	41, Figure 2.3	RIFE-		as plotted		ose rate datu		. •
	134, Table 2.18	below		apply to r		inges to the t points of tex		
Exposed	Exposure, mSv per	vear						
population <sup>a</sup>	Total Seafo (nucle indus	ood Sea ear (oth	food er harges)	Other local food	radiation	ertidal and wate ver	t plume	Direct radiation from site
Total dose – maximu effect of gaseous re and direct radiation	lease							
Infant root vegetabl consumers	e 0.011 –	-		0.011	-	-	-	-
	196, Table 7.7	Oil &	Gas (C	Offshore) s	should l	ous to RIFE- nave been cla ected for RIF	assified as	Oil & Gas
RIFE-19 2013	183, Table 6.1	specif	ic asse	essments s	hown b	es to the <i>tota</i> elow. They a solution. 1) and figure	pply to rel	
Site	Exposed	Exposure,	mSv pe	r year				
	population <sup>a</sup>	Total	Fish shell		ner al 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	<0.0	005 –		0.005	_	-
Source specific doses	Prenatal children of seafood consumers	0.009	<0.0	005 –		0.009	-	_
	41, Figure 2.13	RIFE-		as plotted	_	e datum for 2 ctly, it is show	. •	· ·
	247, Appendix A2.1	_	elcross,	-	all other	nuclides lin	nit of 7.50E	C+09 Bq

	Page, Section	Comment
RIFE-19 2013	109, Figure 3.5	The discharge data for <sup>60</sup> Co and <sup>137</sup> 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 155Eu	revised 155Eu
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.

Site	Representative person <sup>a</sup>	Exposure, mSv	
		Total	Dominant contributions <sup>b</sup>
C All sources			
Aldermaston and Burghfield	Infant milk consumer	< 0.005	Milk, <sup>3</sup> Hc, <sup>137</sup> Csc, <sup>238</sup> 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, <sup>14</sup> C
Capenhurst	Local inhabitant aged 10y (0–0.25km)	0.080	Direct radiation
Cardiff	Infant milk consumer	0.010	Milk, <sup>14</sup> C, <sup>32</sup> P <sup>c</sup>
Chapelcross	Infant milk consumer	0.024	Milk, <sup>90</sup> Sr, <sup>241</sup> Am <sup>c</sup>
Derby	Adult consumer of locally sourced water	< 0.005	Water, <sup>60</sup> Co <sup>c</sup>
Devonport	Adult fish consumer	< 0.005	Fish, <sup>14</sup> C, <sup>241</sup> Am <sup>c</sup>
Dounreay	Adult green vegetable consumer	0.012	Domestic fruit, potatoes, root vegetables, 129 <sub>IC</sub> , 238 <sub>Pu</sub> c, 239/240 <sub>Pu</sub> c, 241 <sub>Am</sub> 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, <sup>137</sup> Cs, <sup>239/240</sup> Pu, <sup>241</sup> 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 <sup>e</sup>	Adult fish consumer	0.061 <sup>f</sup>	Crustaceans, fish, gamma dose rate over
			sediment, <sup>129</sup> I <sup>c</sup> , <sup>210</sup> Po
Rosyth	Adult occupant over sediment	< 0.005	Gamma dose rate over sediment
Sellafield <sup>e,g</sup>	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, <sup>14</sup> C, <sup>241</sup> Am
Whitehaven <sup>e</sup>	Adult fish consumer	0.061 <sup>f</sup>	Crustaceans, fish, gamma dose rate over sediment, <sup>129</sup> Ic, <sup>210</sup> Po
Winfrith	Infant milk consumer	< 0.005	Milk, <sup>14</sup> C
Wylfa	Adult occupant over sediment	< 0.005	Gamma dose rate over sediment

Selected on the basis of providing the highest dose from the pathways associated with the sources as defined in A, B or C

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. 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

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

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

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 <i>Fucus vesiculosus</i> which was undertaken by radiochemistry. All other results reported as <sup>129</sup> I were actually <sup>131</sup> I.
RIFE-17-20 2014	86, Table 2.11	The units of Mean beta dose rate in tissue should read uSvh <sup>-1</sup>