The returns template for Private Water Supplies includes 12 additional columns in the **details sheet** for local authorities (LAs) to provide their justification for not monitoring low risk supplies in terms of the radioactivity requirements. The following questions need to be completed to provide evidence that monitoring for radioactive substances is not required.

The following explanatory notes have been taken from The DWI's Information Note on regulation 11. The full Guidance note is available on the DWI's website at <a href="http://dwi.defra.gov.uk/private-water-supply/regs-guidance/Guidance/info-notes/england/reg-11.pdf">http://dwi.defra.gov.uk/private-water-supply/regs-guidance/Guidance/Info-notes/england/reg-11.pdf</a>.

	Question	Explanatory note.	Possible
			answers
AE	Do you intend to apply for a radioactivity monitoring exemption to this supply?	LAs do not need permission from the DWI to cease monitoring but must indicate where cessation has occurred so that the DWI can inform the European Commission (Regulation 11(England), 12(Wales)). Answering Y will indicate that the LA has or intends to cease radioactivity monitoring for this supply and applied a radioactivity monitoring exemption. If the risk assessment carried out by the LA (having taking into account all relevant information) confirms that it is unlikely to be a risk and where applicable, radioactivity monitoring data has been assessed then monitoring for ID, tritium and radon is not required until such a time as information becomes available which would materially affect the risk classification. Monitoring is not required for radioactivity parameters where the LA can demonstrate through a comprehensive risk assessment that the risk of breaching triggers or prescribed concentrations or values is low (e.g. a surface water supply in a low risk radon hazard area). Risk assessments should be kept under continuous review if changes are identified and as a minimum at least every five years.	Y or N
AF	Are there any man- made sources of	Examples of man-made tritium could include authorised routine releases into the environment in effluent discharged from nuclear fuel facilities, following use in unsealed	N or N/A

	tritium in the catchment that could affect the supply?	forms for medical and industrial applications, or as a result of past fallout contamination. The LA should approach the local water company, Public Health England or the Environment Agency who may be able to provide information to be taken into account during the risk assessment process.	
AG	Has the EA any record of historic pollution events in the catchment which contained radioactive substances?	This information can be obtained from the Environment Agency to assist in the LA's risk assessment.	N or N/A
AH	Is there a low risk indicated by a local water company Notice, which allows them to cease monitoring for tritium or ID for abstraction points in the same aquifer?	Water companies are able to apply for a Radioactivity Notice by presenting information to the Inspectorate to evidence that compliance monitoring can be ceased on the basis of risk and monitoring data. It is expected however that water companies continue to analyse their own operational samples for radioactivity parameters. This is information which LAs can obtain from the local water company to assess the risk where water is from the same aquifer; this information may remove the need to monitor and provide the evidence for the risk assessment.	Y or N/A
AI	Is there a low risk indicated by monitoring data for radioactive substances in this supply?	Where monitoring is required, the frequency of sampling must comply with the audit monitoring frequency shown in Schedule 2 for Regulation 9 supplies, Regulation 11(7) for Regulation 8 and 10 supplies and Regulation 11(8) for single domestic dwellings. Where multiple samples are required over a year, their timings should vary to take account of any seasonal variations. Where available and appropriate (e.g. radioactivity samples of the supply are taken by the EA as part of their monitoring regime), monitoring data from the	Y or N/A

	EA can be used to satisfy this requirement as long as the requirements of Part 3 of Schedule 3 are fulfilled. For more information see the information note on Regulation 11 available	
	online at <u>http://dwi.defra.gov.uk/private-water-supply/regs-guidance/Guidance/info-</u>	
	notes/england/reg-11.pdf.	
Is there a low risk	'Radioactivity in food and the environment' (RIFE) report is a joint publication issued	Y or N/A
indicated by the	annually by the Environment Agency (EA), the Food Standards Agency (FSA), the Scottish	
'Radioactivity in	Environment Protection Agency (SEPA) and the Northern Ireland Environment Agency	
food and the	(NIEA) available on the FSA website. LAs should use this to help inform the risk	
environment'	assessment process. Available at:	
report?	https://www.food.gov.uk/science/research/radiologicalresearch/radiosurv/rife/radioactivity-	
	in-food-and-the-environment-rife-report-2015	
Where gross alpha	Indicative dose is a calculation that takes into account all radioactivity, with the exception of	Y or N/A
or gross beta exceed	radon, found in drinking water. Drinking water can be screened for their general	
the screening value,	radioactivity content by monitoring for alpha ( $\alpha$ ) and beta ( $\beta$ ) emissions, and calculating the	
does the Indicative	indicative dose where the screening levels are above their maximum limits. Regulation 11(6)	
dose calculation	proposes the monitoring requirements for indicative dose (ID), which has a specified value	
confirm the value is	of 0.1mSv.	
<0.1mSV?		
Are there historic	The LA can take into consideration any previous monitoring for radon at the supply that	Y or N/A
results from the	may have taken place to help inform the risk assessment. Regulation 11(2) prescribes the	
supply confirming	monitoring requirements for radon which has a specified value (i.e. the value above which	
the radon levels are	an investigation must be carried out) of 100Bq/l. N/A would apply to surface water and	
below 100Bq/l? (Y,	groundwater supplies in low risk radon hazard areas as they do not require monitoring.	
	indicated by the 'Radioactivity in food and the environment' report? Where gross alpha or gross beta exceed the screening value, does the Indicative dose calculation confirm the value is <0.1mSV? Are there historic results from the supply confirming	3 are fulfilled. For more information see the information note on Regulation 11 available online at <a (rife)="" a="" and="" environment'="" food="" href="http://dwi.defra.gov.uk/private-water-supply/regs-guidance/Guidance/info-&lt;/a&gt;notes/england/reg-11.pdf.Is there a low risk&lt;br/&gt;indicated by the&lt;br/&gt;" in="" is="" issued<br="" joint="" publication="" radioactivity="" report="" the=""></a> annually by the Environment Agency (EA), the Food Standards Agency (FSA), the Scottish Environment Protection Agency (SEPA) and the Northern Ireland Environment Agency (NIEA) available on the FSA website. LAs should use this to help inform the risk assessment process. Available at: https://www.food.gov.uk/science/research/radiologicalresearch/radiosurv/rife/radioactivity- in-food-and-the-environment-rife-report-2015Where gross alpha does the Indicative dose is a calculation that takes into account all radioactivity, with the exception of or gross beta exceed the screening value, confirm the value is <0.1mSV?

		data as part of the catchment risk assessment to justify monitoring cessation for radon.	
AM	Does the local water company have a waiver for radon or abstraction points in the same aquifer?	Water companies are able to apply to the Inspectorate for a Radioactivity Notice to cease compliance monitoring by evidencing that the source will not exceed the maximum prescribed concentration or value. For groundwater sources in moderate and high risk radon hazard areas, (as classified by the AEA Ricardo report), monitoring data is also required from water companies to evidence the risk. It is expected however that water companies continue to complete their own operational samples for radioactivity parameters where applicable. LA's should approach the local water company to ascertain whether such a Notice is in place during the risk assessment process. This is information which LAs can obtain from the local water company to assess the risk where water is from the same aquifer; this information may remove the need to monitor and provide the evidence for the risk assessment.	Y or N/A
AN	Do radon-in-air measurements confirm the levels are below 100Bq/m3 (where there is no existing radon treatment)?	This information can be used to help inform the LA's risk assessment for the supply. However measuring radon-in-air as a surrogate for radon in water is not advised as a method of determining compliance with the PCV since the PCV roughly equates to a level of radon-in-air that is at or below normal background levels of radon normally found indoors. As the significance of radon-in-air monitoring has changed since the template was produced, local authorities can enter N/A in column AN if they have not carried out any radon-in-air monitoring	Y or N/A
AO	Is there a low risk indicated by the	Complete to provide evidence that monitoring for radioactive substances is not required. During the risk assessment process, LA's should refer to AEA Ricardo's report	Y or N/A

	PHE report or AEA Ricardo report?	Understanding the Implications of the EC's Proposals Relating to Radon in Drinking Water for the UK: Final Report. Available at <u>http://www.dwi.gov.uk/research/completed-</u>	
		research/reports/DWI70-2-301.pdf	
AP	Do sample results	Regulation 11(2) prescribes the monitoring requirements for radon which has a specified	Y or N/A
	indicate radon levels	value (i.e. the value above which an investigation must be carried out) of 100Bq/l. The	
	are less than	Regulations specify an upper maximum limit for radon of 1,000 Bq/l. If this level is	
	1000Bq/l?	exceeded, then appropriate remedial action must be taken. N/A would apply to surface	
		water and groundwater supplies in low risk radon hazard areas as they do not require	
		monitoring. Groundwater supplies in high and moderate risk radon hazard areas require	
		monitoring data as part of the catchment risk assessment to justify monitoring cessation for	
		radon.	