SCHEDULE 3

Sampling and analysis

PART 3

Monitoring for indicative dose and analytical performance characteristics

Calculation of the ID

8.—(1) The ID must be calculated from—

(a) the measured radionuclide concentrations and the dose coefficients laid down in Annex III, Table A of Directive 96/29/Euratom laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation(**1**), or

(b) more recent information recognised by the Secretary of State, on the basis of the annual intake of water (730 litres for adults).

(2) Where the following formula is satisfied, it can be assumed that the ID is less than the parametric value of 0,1mSv and no further investigation is required—

$$\sum_{i=1}^{n} \frac{C_i(obs)}{C_i(der)} \leq 1$$

Where—

"$C_i(obs)$" means the observed concentration of radionuclide *I*;

"$C_i(der)$" means the derived concentration of radionuclide *I*;

"*n*" means the number of radionuclides detected.

Derived concentrations for radioactivity in water intend for human consumption(**2**)

Origin	*Nuclide*	*Derived concentration*
Natural	U-238[(i)]	3,0 Bq/1
	U-234[(i)]	2,8 Bq/1
	Ra-226	0,5 Bq/1
	Ra-228	0,2 Bq/1
	Pb-210	0,2 Bq/1
	Po-210	0,1 Bq/1
Artificial	C-14	240 Bq/1
	Sr-90	4,9 Bq/1

(i) This Table allows only for the radiological properties of uranium, not for its chemical toxicity.

(**1**) OJ No L 159, 29.6.1996, p 1. It is prospectively repealed by Council Directive 2013/59/EURATOM (OJ No L 13, 17.01.2014, p 1 from 6 February 2018.

(**2**) **This Table includes values for the most common natural and artificial radionuclides; these are precise values, calculated for a dose of 0,1 mSv, an annual intake of 730 litres and using the dose coefficients laid down in Annex III, Table A of Directive 96/29/Euratom. Derived concentrations for other radionuclides can be calculated on the same basis, and values can be updated on the basis of more recent information recognised by the Secretary of State.**

Origin	*Nuclide*	*Derived concentration*
	Pu-239/Pu-240	0,6 Bq/1
	Am-241	0,7 Bq/1
	Co-60	40 Bq/1
	Cs-134	7,2 Bq/1
	Cs-137	11 Bq/1
	1-131	6,2 Bq/1

(i) This Table allows only for the radiological properties of uranium, not for its chemical toxicity.