



Public Health
England

Protecting and improving the nation's health

Review of the UK's regulatory framework governing the management of radioactive liquids

Purpose

To review the UK approach of regulating liquid discharges, particularly those containing very low levels of radionuclides.

It include all industries, e.g. nuclear, non-nuclear and NORM.

Aim is to learn from experience in other countries

Questionnaire with 5 questions sent out via ERPAN, OSPAR, European Norm Association and IAEA's WASSC

Task 3 Arrangements in other countries

Question 1 Does your country have exclusion, exemption or clearance provisions for liquids containing very low levels of artificial radionuclides?

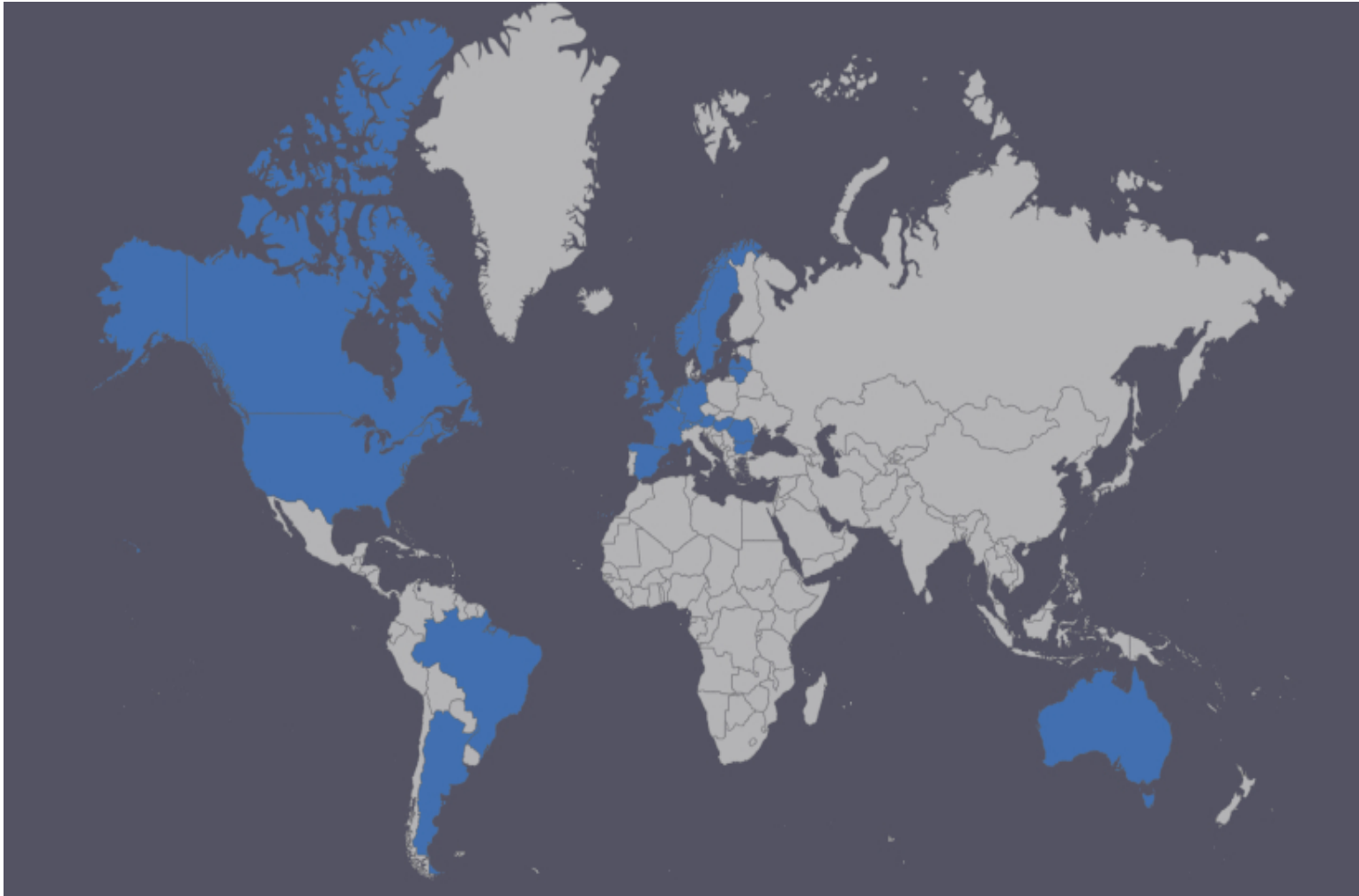
Question 2 Does your country have exclusion, exemption or clearance provisions for liquids containing very low levels of NORM radionuclides?

Question 3 How is the discharge of radioactive liquids (from non-exempt practices) regulated in your country

Question 4 Does your country make any distinction between liquids with different properties ?

Question 5 Do you have any requirements or guidance in relation to when an undertaking should carry out measurement to determine if a liquid is classed as radioactive?

Responses – 20 countries



Clearance levels

No clearance values and/or provisions for liquids

Argentina, Latvia, Lithuania, Spain

USA (allows for case-by-case basis considering potential impacts to humans and the environment)

Based on IAEA GRS Part 3 or EU BSSD (IAEA RSG-1.7 artificials)

Australia (mid-2019), Bulgaria, Canada, Germany, Ireland, Romania, Sweden, Switzerland

Belgium (can apply for clearance license if conc > values – need an impact study to demonstrate compliance with dose constraint of 10 $\mu\text{Sv}/\text{year}$)

Alternative arrangements

Austria, France, Hungary, Netherlands, Norway

Liquid types

- In general liquids with hazardous properties other than radioactivity (e.g. acidity, toxicity) also require authorisation from the relevant regulator or disposing of according to the relevant legislation
- Countries that distinguish between aqueous and non-aqueous liquids for discharges purposes:
 - France
 - Argentina, Australia, Austria, Canada only allow for aqueous discharges (Canada non-aqueous on case-by-case basis)
 - Germany – differences between: oils, oil-containing liquids, organic solvents and coolants; and other liquids
 - Restrictions on miscibility/dispersibility/solubility in water: Ireland, Romania, Spain, USA
 - Belgium – draft legislation - when not applicable for release in sewers or surface waters (chemical composition)

Progress

All information collated will be attributed by country rather than who responded.

Currently collating the report and we will share the report with respondents and other interested parties such as ERPAN and the IAEA early'ish' in 2019

Many thanks

Please contact if any queries

KELLY.JONES@PHE.GOV.UK or call Kelly on (44) 1235 825268

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