

**EXPLANATORY MEMORANDUM TO**  
**THE CARRIAGE OF DANGEROUS GOODS (AMENDMENT) REGULATIONS 2019**  
**2019 No. [XXXX]**

**1. Introduction**

1.1 This explanatory memorandum has been prepared by the Department for Business, Energy and Industrial Strategy and is laid before Parliament by Command of Her Majesty.

**2. Purpose of the instrument**

2.1 This Instrument amends the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (S.I. 2009/1348) in order to transpose the radiological emergency preparedness and response requirements contained in the Euratom Basic Safety Standards Directive (2013/59/Euratom) (the “Directive”) in relation to the transport of radioactive materials in the UK by road, rail and inland waterway.

2.2 The Instrument also updates a cross reference in the Transfrontier Shipment of Radioactive Waste and Spent Fuel Regulations 2008 (S.I. 2008/3087) as the Directive was a consolidating directive and the previous ambulatory provision does not therefore continue.

2.3 The Instrument also reinstates a previously revoked provision that implements an EU Directive on volatile organic compound (VOC) emissions resulting from the storage of petrol and its distribution.

**3. Matters of special interest to Parliament**

*Matters of special interest to the Joint Committee on Statutory Instruments*

3.1 None.

*Matters relevant to Standing Orders Nos. 83P and 83T of the Standing Orders of the House of Commons relating to Public Business (English Votes for English Laws)*

3.2 The territorial application of this instrument includes Scotland and Wales.

**4. Extent and Territorial Application**

4.1 The territorial extent of this instrument is England and Wales and Scotland.

4.2 The territorial application of this instrument is England, Wales and Scotland.

**5. European Convention on Human Rights**

5.1 Parliamentary Under Secretary of State, Minister for Business, Energy and Industry, Richard Harrington MP has made the following statement regarding Human Rights:

“In my view the provisions of The Carriage of Dangerous Goods (Amendment) Regulations 2019 are compatible with the Convention rights.”

## 6. Legislative Context

- 6.1 The Instrument is made principally to transpose new requirements set out in the Directive. The Directive consolidates and updates five directives and a European Commission recommendation, including the 1996 Basic Safety Standards Directive (Council Directive 96/29/Euratom<sup>1</sup>). The Directive incorporates subsequent publications from the International Commission on Radiological Protection, which were published in 2007<sup>2</sup>, and increases harmonisation between the Euratom regime and the International Basic Safety Standards issued by the International Atomic Energy Agency (IAEA)<sup>3</sup>.
- 6.2 The Directive sets out standards in respect of radiation protection in different areas, including in relation to workers (“occupational exposures”), the public (“public exposures”) medical and dental patients (“medical exposures”), as well as for nuclear emergency preparedness and response. Much of the Directive has already been implemented into UK legislation, including by means of the Ionising Radiations Regulations 2017<sup>4</sup>, the Ionising Radiations Regulations (Northern Ireland) 2017<sup>5</sup>, the Ionising Radiations (Medical Exposures) Regulations 2017<sup>6</sup>, the Ionising Radiation (Medical Exposures) Regulations (Northern Ireland) 2017<sup>7</sup>, the Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2018<sup>8</sup> and the Ionising Radiation (Basic Safety Standards) (Miscellaneous Provisions) Regulations 2018<sup>9</sup>.
- 6.3 As this Instrument only transposes new requirements contained in the Directive concerning emergency preparedness and response arrangements for the transport of radioactive materials, the Department intends to make a further set of regulations – to be known as the Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPIR) – to implement the remaining emergency preparedness and response aspects of the Directive i.e. in relation to nuclear licenced sites and other sites that hold radioactive material. These regulations are intended to be laid in early 2019.
- 6.4 The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (CDG) are the main regulations governing the transport of radioactive materials in Great Britain. The CDG regulates the transport of dangerous goods, but there are specific sections which deal with class 7 goods (radioactive) material. Regulation 24 of, and Schedule 2 to, the CDG sets out the current regulatory requirements in relation to preparing for and responding to radiological emergencies which occur during the carriage of radioactive material. This Instrument substitutes a new regulation 24 of, and Schedule 2 to, the CDG.
- 6.5 Although the Euratom Treaty does not apply to defence activities, the Ministry of Defence (MOD) has taken a policy decision to apply, where practicable, the Directive to defence activities. In general MOD is bound by health, safety and environmental

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<sup>1</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1502202246211&uri=CELEX:31996L0029>

<sup>2</sup> <http://www.icrp.org/publication.asp?id=ICRP%20Publication%20103>

<sup>3</sup> [http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1578\\_web-57265295.pdf](http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1578_web-57265295.pdf)

<sup>4</sup> <http://www.legislation.gov.uk/ukxi/2017/1075/contents/made>

<sup>5</sup> <http://www.legislation.gov.uk/nisr/2017/229/made>

<sup>6</sup> <http://www.legislation.gov.uk/ukxi/2017/1322/made>

<sup>7</sup> <http://www.legislation.gov.uk/nisr/2018/17/contents/made>

<sup>8</sup> <http://www.legislation.gov.uk/id/ukxi/2018/428>

<sup>9</sup> <http://www.legislation.gov.uk/ukxi/2018/482/contents/made>

protection requirements; however, in certain circumstances, including for CDG, exemptions may apply. Where an exemption or derogation does apply, MOD policy is to produce outcomes that are, so far as reasonably practicable, as least as good as those required by UK legislation. As such, these Regulations apply to ‘carriage of class 7 goods’, which includes both the civil carriage of class 7 goods i.e. carriage of such goods otherwise than for the purposes of the Secretary of State with responsibility for defence (see section 73 of the Energy Act 2013), and the carriage of such goods for specified military purposes i.e. where the goods are not carried by vehicles or wagons belonging to or under the responsibility of one of the armed forces (see regulation 7 of these Regulations).

- 6.6 This Instrument is being made using powers under the Energy Act 2013 and the Health and Safety at Work etc Act 1974. The CDG were made under powers in the 1974 Act (and so are health and safety regulations for the purposes of Part 1 of that Act) and the European Communities Act 1972. The 2013 Act effectively carved “the radioactive material transport purposes” out of the general purposes of Part 1 of the 1974 Act, in relation to which health and safety regulations may be made. To the extent that the changes made by this Instrument apply to the civil transport of radioactive materials (within the meaning of section 73 of the 2013 Act), the Department relied on powers under the 2013 Act. To the extent that the changes made by this Instrument apply to defence activities, the Department relied on powers under the 1974 Act. For completeness, the changes made by regulations 4 to 7 are made in reliance of powers under the 1972 Act.
- 6.7 The updating of the Transfrontier Shipment of Radioactive Waste and Spent Fuel Regulations 2008 is made under section 2(2) of the European Communities Act 1973.
- 6.8 As this Instrument contains regulations made under section 74 of the 2013 Act and under section 15 of the 1974 Act, as per section 82(3A) of the 1974 Act, section 113 of the 2013 Act applies to these regulations. Section 113(2)(a) and (3)(c) provide for the affirmative procedure to be used if nuclear regulations include provision creating a new offence by virtue of section 75 of the 2013 Act. As regulation 32A(1)(a) of the CDG specifies that ‘It is an offence for a person to contravene any provisions of these Regulations as they apply to the civil carriage of class 7 goods’, and this Instrument entirely replaces Schedule 2, which makes provision in relation to the carriage of class 7 goods and creates obligations which the existing Schedule 2 did not, the Department took the view that this constitutes a new offence for the purposes of section 113(2)(a) and (3)(c), warranting the use of the affirmative procedure.
- 6.9 The provisions of these Regulations that apply to the control of VOC, and insofar as the provisions of these Regulations apply to the carriage of class 7 goods for defence purposes, are made under powers in the 1974 Act. As such they are health and safety regulations for the purposes of Part 1 of that Act. In accordance with section 33(1)(c) of that Act, it is an offence for a person to contravene any health and safety regulations or any requirement or prohibition imposed under any such regulations.
- 6.10 A Transposition Note is submitted with this Explanatory Memorandum.

## 7. Policy background

### *What is being done and why?*

- 7.1 The policy objective is to ensure that members of the public are protected from exposure to ionising radiation in line with the requirements of the Directive and that the required standard of protection is achieved efficiently.
- 7.2 The amendments include broadening the definition of ‘emergency’ to be more explicit and include risks to quality of life, property and the environment, reflecting the IAEA definition.
- 7.3 This Instrument introduces the definition of an ‘emergency worker’ for the first time in UK law where the key requirement is for appropriate information and training, proportionate to their role. The Instrument introduces a National Reference Level of no greater than 100mSv over a year which means emergency plans will need to prioritise keeping doses below this level. Requirements for emergency plans have been updated to include a duty to provide a handover report in the transition from an emergency exposure situation to the recovery phase and introduce the requirement for the competent authority (the regulator) to provide prior information to the public about the nature and effect of a radiation emergency. There will be a 12-month implementation period for compliance with these new requirements.
- 7.4 This Instrument will strengthen Great Britain’s emergency preparedness and response arrangements for transport of radiological materials. It will improve public protection and reduce adverse consequences in the event of an emergency. It also consolidates emergency preparedness and response requirements for the transport of radioactive materials into the CDG.
- 7.5 The Instrument will also reinstate previously revoked provisions that implement an EU Directive on VOC emissions resulting from the storage of petrol and its distribution. The requirements for VOC vapour recovery systems in such tanks will be contained within the Approved Tank Requirements document. The vapour recovery system consists of equipment fitted to road tankers, service stations and terminals to prevent the release of VOC to the atmosphere. Instead, VOC are processed at an appropriate facility. Whilst loading road tankers, VOC are removed from the tank and transferred to the terminal, and thence onto the processing facility. Whilst unloading road tankers, VOC from service stations are introduced into the tank to maintain an appropriate pressure and prevent formation of a vacuum. The previous provisions were revoked by the Petroleum (Consolidation) Regulations 2014 following the 2014 consultation by the Health and Safety Executive (HSE), “CD264 – Consultation on proposals for the consolidation of petroleum legislation.” Reinstating this requirement into legislation provides legal certainty and mitigates the risk of EU challenge.
- 7.6 This Instrument will also make minor amendments to the quantities and concentrations of consignments of radioactive waste and spent fuel that will trigger the need for an authorisation under regulation 3 of the Transfrontier Shipment of Radioactive Waste and Spent Fuel Regulations 2008. This is in line with changes made at EU level by the Directive and maintains parity with the trigger levels in other Member States.
- 7.7 This Instrument also updates a cross-reference in the Transfrontier Shipment of Radioactive Waste and Spent Fuel Regulations 2008. The cross-reference was to the directive which was consolidated into the Directive. Because the Directive was a

consolidation rather than an amendment, the existing ambulatory provision did not apply properly and this reference needed to be updated.

## **8. European Union (Withdrawal) Act/Withdrawal of the United Kingdom from the European Union**

- 8.1 This instrument does not relate to withdrawal from the European Union nor trigger the statement requirements under the European Union (Withdrawal) Act.

## **9. Consolidation**

- 9.1 The Department does not intend to consolidate the relevant legislation at this time.

## **10. Consultation outcome**

- 10.1 The Department for Business, Energy and Industrial Strategy (BEIS), MOD and HSE conducted a joint UK-wide public consultation on the proposals for transposing the emergency preparedness and response requirements in the Directive from 5 October to 15 November 2017 (six weeks). The consultation asked seven questions which included one on the CDG changes. This question sought views on the proposed amendments to the CDG and accompanying Regulatory Triage Assessment, which outlined the impacts of the amendments on businesses.
- 10.2 The Department received 71 consultation responses from professional bodies, industry associations, private and public sector organisations engaged in radiological transport activities and from individual respondents from across the UK. Thirty-one of these respondents commented on the CDG question. The majority of consultees supported the proposals.
- 10.3 Most respondents welcomed the proposed changes to the CDG as a means of strengthening Great Britain's emergency preparedness and response arrangements for radiological emergencies. They welcomed that the proposals would bring the UK into step with the latest IAEA best practice in terms of safety standards. Respondents agreed it was logical to remove transport requirements from REPPIR, which will clarify the situation to duty holders.
- 10.4 The full Government response to the consultation was published on 22 October 2018.
- 10.5 The Department for Transport consulted separately between August and September 2018 on its EU exit Instrument and the VOC amendments being introduced by this Instrument. Copies were also sent to stakeholders, including industry associations, other Government departments and agencies, individual safety advisors and businesses. HSE Northern Ireland were also consulted. Seven responses were received, and respondents were content that the proposed changes neither created any significant benefits nor disadvantages to industry.
- 10.6 The Department for Transport received two questions about the reintroduction of the VOC requirements. These are set out below with the planned responses:

**Q.1** Why is the reference to the Approved Tank Requirements concerning the provisions for vapour recovery systems of mobile containers carrying petrol to be contained in the "Radioactive Substances, Carriage of Dangerous Goods and Transportable Pressure Equipment (Amendment) Regulations 2019" being drafted by BEIS? Why can't this reference be made via an amendment to "The Carriage of Dangerous Goods and Transportable Pressure Equipment (Amendment) (EU Exit) Regulations 2019" (CDG 2019) or The Petroleum (Consolidation) Regulations 2014?

**Government response:** This is being done separately, as part of a general update to the Carriage of Dangerous Goods Regulations and as a result has been included with those in the SI being drafted by BEIS. This is not being done by the CDG 2018 amendment because that deals solely with amendments that are necessary as a result of EU exit. Our approach has been to avoid the potential for confusion caused by combining EU exit provisions and general updates in the same regulations. Also, because our EU exit regulations and the BEIS regulations are likely to be made in quick succession it did not make sense to add a third discrete Statutory Instrument (renewing the VOC link) into that period in addition to these two.

**Q.2** What further work will be done to revise and the reintroduce Approved Tank Requirements?

**Government response:** We have separately noted and are dealing with the respondent's request for further work in this area. Re-establishing the link to the VOC Directive (94/63/EC) allows this aim to be achieved.

## **11. Guidance**

- 11.1 The Office for Nuclear Regulation is developing non-statutory guidance to assist duty holders with their compliance with the regulations. The guidance will be published following an informal consultation in 2019.

## **12. Impact**

- 12.1 The impact on business of these changes will be minimal. The proposed changes will affect the approximately 1300 carriers and consignors involved with the transport of radioactive materials in Great Britain. The main regulatory burden of this measure is the cost to businesses of familiarising themselves with the CDG amendments. Familiarisation costs will include reading and understanding the legislative changes; providing advice to others in the organisation where necessary; assessing compliance against new arrangements; and making necessary revisions to emergency arrangements. The familiarisation process will allow businesses to revise their emergency plans to include the new National Reference Level. The duty to provide prior information is being placed on the Office for Nuclear Regulation and therefore will not impact businesses at all. These regulatory changes will be in line with existing emergency arrangements guidance. It is assumed that businesses already comply with this guidance because failure to do so may result in regulatory action that could damage their ability to trade and operate. Therefore, any associated cost of complying with these regulatory changes, beyond familiarisation, will be negligible. There is no significant impact on charities or voluntary bodies.
- 12.2 Industry will have a 12-month transitional period to familiarise themselves with the amendments and become compliant.
- 12.3 The 'Approved Tank Requirement' provisions included on behalf of the Department for Transport will have no impact on industry. The requirement for a VOC system is already implemented by industry for loading and unloading fuel, the infrastructure being set up such that neither loading nor unloading may commence unless the vapour recovery system is appropriately engaged. Putting the requirement into legislation provides legal certainty and mitigates the risk of EU challenge.
- 12.4 There is no significant impact on the public sector.

12.5 An Impact Assessment has not been prepared for this Instrument because of the low level of impact per business. A de minimis assessment has been prepared and is available from BEIS' Better Regulation Unit.

### **13. Regulating small business**

13.1 The legislation applies to activities that are undertaken by small businesses. All businesses, regardless of size, will be required to familiarise themselves with these regulatory changes. However, the overall impact on businesses will be very minor and familiarisation with the changes will be a one-off activity.

### **14. Monitoring & review**

14.1 The regulation does not include a statutory review clause and, in line with the requirements of the Small Business, Enterprise and Employment Act 2015 Richard Harrington has made the following statement:

“In my view it is not appropriate in the circumstances to make provision for review in the Carriage of Dangerous Goods (Amendment) Regulations 2018. The Regulations are not anticipated to have an impact greater or less than +/- £5million (net annualised) on business, and there are no factors that make it particularly desirable to include a statutory review clause in these Regulations.”

### **15. Contact**

15.1 Kahla Niemann at the Department for Business, Energy and Industrial Strategy, telephone: 0207 215 8714 or email: [Kahla.Niemann@beis.gov.uk](mailto:Kahla.Niemann@beis.gov.uk), can be contacted with any queries regarding the Instrument.

15.2 Graham Webber at the Department for Business, Energy and Industrial Strategy can confirm that this Explanatory Memorandum meets the required standard.

15.3 Richard Harrington at the Department for Business, Energy and Industrial Strategy can confirm that this Explanatory Memorandum meets the required standard.