

## **EXPLANATORY MEMORANDUM TO**

### **The Motor Vehicles (Construction and Use) (Amendment No. 2) Regulations (Northern Ireland) 2010**

**S.R. 2010 No. 181**

#### **1. Introduction**

- 1.1. This Explanatory Memorandum has been prepared by the Department of the Environment to accompany the Statutory Rule (details above) which is laid before the Northern Ireland Assembly.
- 1.2. The Statutory Rule is made under Articles 55(1), (2) and (6) and 110(2) of the Road Traffic (Northern Ireland) Order 1995 and is subject to the negative resolution procedure.
- 1.3. The rule is due to come into operation on 11 June 2010.

#### **2. Purpose**

- 2.1. The purpose of these Regulations is to reduce greenhouse gas emissions from air conditioning systems used in passenger cars and car-derived vans, generally termed "mobile air conditioning systems" or "MACs". This would be achieved by establishing mandatory standards for the retrofitting and filling of MACs in vehicles which are in service (standards for MACs fitted at the time the vehicle is manufactured being already dealt with by existing regulations).
- 2.2. The Motor Vehicles (Construction and Use) (Amendment No. 2) Regulations (Northern Ireland) 2010 implement Articles 6.1 and 6.2 of Directive 2006/40/EC which prohibit the retrofitting of MACs designed to contain refrigerants with a high global warming potential and the filling of MACs with such refrigerants. These requirements would apply initially to vehicles type approved on or after 1 January 2011 and subsequently, with certain exceptions, to any vehicles from 1 January 2017. A Transposition Note is attached at Annex A to clarify the implementation.

#### **3. Background**

- 3.1. Under the Kyoto Protocol 1997, the European Union committed to reducing greenhouse gas emissions to 8% below 1990 levels in the period from 2008 to 2012. The UK is subject to the burden-sharing agreement, which has a target of 12.5% reductions, equating to a 93 million tonne reduction of carbon dioxide (CO<sub>2</sub>).
- 3.2. As part of the wider effort action is also being taken to reduce emission of fluorinated gases (f-gases). These are man-made substances, which were introduced for use as refrigerants in air conditioning systems and other applications in the 1990s to reduce chlorofluorocarbons (CFCs) and hydro chlorofluorocarbons (HCFCs) which were considered to be seriously depleting the Earth's ozone layer.
- 3.3. However, it is considered that the advantages of f-gases are offset by their serious impact on global warming. Although they account for a relatively

small proportion of total EU greenhouse gas emissions, including CO<sub>2</sub>, their impact per kilogram emitted is vastly greater than CO<sub>2</sub> as they have a much greater global warming potential<sup>1</sup>. It is therefore considered that f-gases should only be used where other safe, technically feasible, cost effective and more environmentally acceptable alternatives do not exist.

- 3.4. The EU has accordingly adopted two separate mandatory measures aimed at substantially reducing f-gas emissions. Firstly, it has introduced a Regulation (Regulation (EC) No. 842/2006) which restricts, and in some cases bans, certain f-gases in specific, mainly industrial but also certain consumer product applications. Secondly, the EU has introduced Directive 2006/40/EC which lays down the requirements for the EC type approval or national type approval of vehicles as regards emissions from, and the safe functioning of, air conditioning systems fitted to vehicles. It also lays down provisions on retrofitting and refilling of such systems. The EU considered that provisions relating to air conditioning systems used in vehicles were best treated separately and included in the established European type approval system for new vehicles.
- 3.5. Directive 2006/40/EC specifies stricter controls on f-gases used in vehicle air-conditioning systems by banning the most environmentally destructive f-gases used in such equipment. The Directive applies to passenger vehicles with up to 9 seats and to light goods vehicles or car-derived vans.

#### **4. Matters of Special Interest to the Environment Committee**

- 4.1. None.

#### **5. Consultation**

- 5.1. The Department consulted on a draft of these Regulations in March 2010 and a total of 5 responses were received. One was in favour of the proposed amendment, three had no substantive comments and one respondent offered comment in response to questions asked in the document.
- 5.2. These stressed the need to communicate clearly the revised regulations to avoid air conditioning system repairs falling foul of the legislative changes due to a lack of understanding. This respondent also agreed to the exemptions proposed in the regulations.

#### **6. Position in Great Britain**

- 6.1. The GB equivalent Regulations are the Road Vehicles (Construction and Use) (Amendment) (No. 3) Regulations 2009 [SI 2009 No. 2196].

#### **7. Equality Impact**

- 7.1. A full EQIA was not required as it was not deemed to impact negatively on any of the groups identified by section 75 of the NI Act 1998.

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<sup>1</sup> “Global Warming Potential” expresses the climatic warming potential of a greenhouse gas relative to carbon dioxide. The standard GWP is calculated in terms of the 100 year warming potential of one kilogram of a gas relative to one kilogram of CO<sub>2</sub>.

## **8. Regulatory Impact**

- 8.1. The consultation did not result in any firm information on costs and benefits being made available and the position about such factors as the extent of retrofitting or the costs of compliant mobile air conditioners remains uncertain. It has not therefore been possible to prepare a regulatory impact assessment for these in-service requirements.

## **9. Financial Implications**

- 9.1. None.

## **10. Section 24 of the Northern Ireland Act 1998**

- 10.1. The proposed Regulations are not incompatible with Section 24 of the Northern Ireland Act 1998.

## **11. EU Implications**

- 11.1. The Regulations implement Directive 2006/40/EC which prohibit the retrofitting of MACs designed to contain refrigerants with a high global warming potential and the filling of MACs with such refrigerants.

## **12. Additional Information**

- 12.1. Not applicable.

**TRANSPOSITION NOTE  
THE MOTOR VEHICLES (CONSTRUCTION AND USE) (AMENDMENT No.  
2) REGULATIONS (NORTHERN IRELAND) 2010**

1. For the purpose of this note:-

"Directive 2006/40/EC" means Directive 2006/40/EC of the European Parliament and of the Council of 17 May 2006 relating to emissions from air conditioning systems in motor vehicles and amending Directive 70/156/EEC.

"The 1999 Regulations" means The Motor Vehicles (Construction and Use) Regulations (Northern Ireland) 1999 (S.R. 1999 No. 454) as amended.

"Global Warming Potential" (GWP) means the climatic warming potential of a fluorinated greenhouse gas relative to that of carbon dioxide.

"Fluorinated Greenhouse Gases" means hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride as referred to in Annex A of the Kyoto Protocol and preparations containing those substances, but excluding substances controlled under Regulation (EC) 2037/2000 of the European Parliament and of the Council of 20 June 2000 on substances that deplete the ozone layer.

"Vehicle" means passenger vehicles of no more than 9 seats and light goods vehicles with a reference (unladen) weight of 1305 Kg or less.

2. These Regulations do what is necessary to implement Article 6.1 and 6.2 of Directive 2006/40/EC.

<b>Directive 2006/40/EC</b>			
<b>Article</b>	<b>Objectives</b>	<b>Implementation</b>	<b>Responsibility</b>
Article 6.1	<p>This provision requires that, with effect from 1 January 2011, air-conditioning systems designed to contain fluorinated greenhouse gases with a global warming potential higher than 150 shall not be retrofitted to vehicles type approved from that date.</p> <p>With effect from 1 January 2017, such air conditioning systems shall not be retrofitted to any vehicles.</p>	<p>This provision is implemented by paragraphs (3) and (4) of regulation 74B, as inserted in the 1999 regulations by regulation 4 of these Regulations.</p>	<p>The Department of the Environment</p>
Article 6.2.	<p>This provision requires that air conditioning systems fitted to vehicles type approved on or after 1 January 2011, and to all vehicles first used on or after 1 January 2017, shall not be filled with fluorinated greenhouse gases with a global warming potential greater than 150.</p> <p>Refilling of air conditioning systems containing those gases which have been fitted to vehicles before 1 January 2017 are exempted from the requirements.</p>	<p>This provision is implemented by paragraphs (5) and (6) of Regulation 74B as inserted in the 1999 Regulations by regulation 4 of these Regulations.</p> <p>This provision is implemented by paragraph (10) of Regulation 74B as inserted in the 1999 Regulations by regulation 4 of these Regulations.</p>	