

Commission Regulation (EU) 2016/1718 of 20 September 2016 amending Regulation (EU) No 582/2011 with respect to emissions from heavy-duty vehicles as regards the provisions on testing by means of portable emission measurement systems (PEMS) and the procedure for the testing of the durability of replacement pollution control devices (Text with EEA relevance)

Changes to legislation: There are currently no known outstanding effects for the Commission Regulation (EU) 2016/1718, ANNEX I. (See end of Document for details)

ANNEX I

Annex I to Regulation (EU) No 582/2011 is amended as follows:

(1) point 1.1.2 is replaced by the following:

- 1.1.2. If the manufacturer permits the engine family to run on market fuels that do not comply neither with Directive 98/70/EC of the European Parliament and of the Council⁽¹⁾ nor with CEN standard EN 228:2012 (in the case of unleaded petrol) or CEN standard EN 590:2013 (in the case of diesel), such as running on B100 (EN 14214), the manufacturer shall, in addition to the requirements in point 1.1.1, comply with the following requirements:
- (a) declare the fuels the engine family is capable of running on in point 3.2.2.2.1 of the Information Document as set out in Part 1 of Appendix 4., either by reference to an official standard or to a production specification of a brand specific market fuel not meeting any official standard such as those mentioned in point 1.1.2. The manufacturer shall also declare that the functionality of the OBD system is not affected by the use of the declared fuel;
 - (b) demonstrate that the parent engine meets the requirements specified in Annex III and in Appendix 1 of Annex VI to this Regulation on the fuels declared; the approval authority may request that the demonstration requirements be further extended to those laid down in Annex VII and Annex X;
 - (c) be liable to meet the requirements of in-service conformity specified in Annex II on the fuels declared including any blend between the declared fuels and the market fuels included in Directive 98/70/EC and the relevant CEN standards.

At the request of the manufacturer, the requirements set out in this point shall be applied to fuels used for military purposes.

For the purposes of point (a) of the first subparagraph where the emission tests are performed for demonstrating compliance with the requirements of this Regulation, a fuel analysis report of the test fuel shall be attached to the test report and shall comprise at least the parameters specified in the official specification of the fuel manufacturer.;

(2) point 1.1.5 is replaced by the following:

- 1.1.5. In the case of natural gas/biomethane engines, the ratio of the emission results “r” shall be determined for each pollutant as follows:

$$r = \frac{\text{emission result on reference fuel 2}}{\text{emission result on reference fuel 1}}$$

or

$$r_a = \frac{\text{emission result on reference fuel 2}}{\text{emission result on reference fuel 3}}$$

and

$$r_b = \frac{\text{emission result on reference fuel 1}}{\text{emission result on reference fuel 3}}$$

.”

(3) point 3.1 is replaced by the following:

- 3.1. In the case of an engine type-approved as a separate technical unit or a vehicle type-approved with regard to emissions and access to vehicle repair and maintenance information, the engine shall bear:
- (a) the trademark or trade name of the manufacturer of the engine;
 - (b) the manufacturer's commercial description of the engine.;
- (4) the following points 3.2.1.1 to 3.2.1.6 are inserted:
- 3.2.1.1. In case of a natural gas/biomethane engine one of the following markings to be placed after the EC type-approval mark:
- (a) H in case of the engine being approved and calibrated for the H-range of gases;
 - (b) L in case of the engine being approved and calibrated for the L-range of gases;
 - (c) HL in case of the engine being approved and calibrated for both the H-range and L-range of gases;
 - (d) H_t in case of the engine being approved and calibrated for a specific gas composition in the H-range of gases and transformable to another specific gas in the H-range of gases by fine tuning of the engine fuelling;
 - (e) L_t in case of the engine being approved and calibrated for a specific gas composition in the L-range of gases and transformable to another specific gas in the L-range of gases after fine tuning of the engine fuelling;
 - (f) HL_t in the case of the engine being approved and calibrated for a specific gas composition in either the H-range or the L- range of gases and transformable to another specific gas in either the H-range or the L-range of gases by fine tuning of the engine fuelling;
 - (g) CNG_{fr} in all other cases where the engine is fuelled with CNG/biomethane and designed for operation on one restricted gas fuel range composition;
 - (h) LNG_{fr} in the cases where the engine is fuelled with LNG and designed for operation on one restricted gas fuel range composition;
 - (i) LPG_{fr} in the cases where the engine is fuelled with LPG and designed for operation on one restricted gas fuel range composition;
 - (j) LNG₂₀ in case of the engine being approved and calibrated for a specific LNG composition resulting in a λ -shift factor not differing by more than 3 per cent the λ -shift factor of the G₂₀ gas specified in Annex IX, and the ethane content of which does not exceed 1,5 per cent;
 - (k) LNG in case of the engine being approved and calibrated for any other LNG composition;
- 3.2.1.2. For dual-fuel engines, the approval mark shall contain a series of digits after the national symbol, the purpose of which is to distinguish for which dual-fuel engine type and with which range of gases the approval has been granted. The series of digits will be constituted of two digits identifying the dual-fuel engine type as defined in Article 2, followed by the letter or

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letters specified in point 3.2.1.1 corresponding to the natural gas/biomethane composition used by the engine. The two digits identifying the dual-fuel engine types as defined in Article 2 are the following:

- (a) 1A for dual-fuel engines of Type 1A;
- (b) 1B for dual-fuel engines of Type 1B;
- (c) 2A for dual-fuel engines of Type 2A;
- (d) 2B for dual-fuel engines of Type 2B;
- (e) 3B for dual-fuel engines of Type 3B;

3.2.1.3. For diesel-fuelled CI engines, the approval mark shall contain the letter 'D' after the national symbol;

3.2.1.4. For ethanol (ED95)-fuelled CI engines the approval mark shall contain the letters 'ED' after the national symbol;

3.2.1.5. For ethanol (E85)-fuelled PI engines the approval mark shall contain 'E85' after the national symbol;

3.2.1.6. for petrol-fuelled PI engines the approval mark shall contain the letter 'P' after the national symbol.;

(5) in point 4.2, point (b) is replaced by the following:

- (b) as regards the compliance of the system ensuring the correct operation of NO_x control measures, the installation shall, according to Appendix 4 of Annex 11 to UN/ECE Regulation No 49, meet the manufacturer's installation requirements as specified in Part 1 of Annex 1 to that Regulation.;

(6) in Appendix 4, the ninth, tenth and eleventh paragraphs are replaced by the following:

In the case of application for EC type-approval of an engine or engine family as a separate technical unit the general part and Parts 1 and 3 shall be filled in.

In the case of application for EC type-approval of vehicle with an approved engine with regard to emissions and access to vehicle repair and maintenance information the general part and Part 2 shall be filled in.

In the case of application for EC type-approval of a vehicle with regard to emissions and access to vehicle repair and maintenance information the general part and Parts 1, 2 and 3 shall be filled in.;

(7) Appendix 9 is replaced by the following:

‘Appendix 9

EC Type-Approval Certification Numbering System

Section 3 of the EC type-approval number issued according to Articles 6(1), 8(1) and 10(1) shall be composed by the number of the implementing regulatory act or the latest amending regulatory act applicable to the EC type-approval. The number shall be followed by an alphabetical character reflecting the requirements of OBD and SCR systems in accordance with Table 1.

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TABLE I

| Character | NO _x OTL ^a | PM OTL ^b | CO OTL ^f | IUPR ^m | Reagent quality | Additional OBD monitors | Power thresholds requirements | Implementation dates: all types | Implementation dates: all vehicles | Implementation date of registration |
|----------------------------------|---|---------------------------------------|---------------------------------------|-----------------------|-----------------------|-------------------------|-------------------------------|---------------------------------|------------------------------------|---|
| A ^j B ^j | Row “phase-in period” of Tables 1 or Table 2 | Performance Monitoring ^c | N/A | Phase-in ^g | Phase-in ^d | N/A | 20 % | 31.12.2015 | 31.12.2015 | 18.2015 ⁱ 30.12.2016 ^j |
| B ^k | Row “phase-in period” of Tables 1 and 2 | N/A | Row “phase-in period” of Table 2 | N/A | Phase-in ^d | N/A | 20 % | 1.9.2014 | 9.2015 | 30.12.2016 |
| C | Row “general requirements” of Tables 1 or Table 2 | Row “general requirements” of Table 1 | Row “general requirements” of Table 2 | General | General | Yes | 20 % | 31.12.2015 | 12.2016 | 12.2018 |
| D | Row “general requirements” of Tables 1 or Table 2 | Row “general requirements” of Table 1 | Row “general requirements” of Table 2 | General | General | Yes | 10 % | 1.9.2018 | 9.2019 | |

Key:

- a “NO_x OTL” monitoring requirements as set out in Table 1 of Annex X for compression ignition and dual-fuel engines and vehicles and Table 2 of Annex X for positive ignition engines and vehicles.
- b “PM OTL” monitoring requirements as set out in Table 1 of Annex X for compression ignition and dual-fuel engines and vehicles.
- c “Performance monitoring” requirements as set out in point 2.1.1 of Annex X.
- d Reagent quality “phase-in” requirements as set out in point 7.1 of Annex XIII.
- e Reagent quality “general” requirements as set out in point 7.1.1 of Annex XIII.

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| f | “CO OTL” monitoring requirements as set out in Table 2 of Annex X for positive ignition engines and vehicles. |
| g | IUPR “Phase-in” requirements as set out in Section 6 of Annex X. |
| h | IUPR “General” requirements as set out in Section 6 of Annex X. |
| i | For positive-ignition engines and vehicles equipped with such engines. |
| j | For compression-ignition and dual-fuel engines and vehicles equipped with such engines. |
| k | Only applicable to positive-ignition engines and vehicles equipped with such engines. |
| l | Additional provisions concerning monitoring requirements as set out in paragraph 2.3.1.2 of Annex 9A to UNECE Regulation No 49. |
| m | IUPR specifications are set out in Annex X. Positive Ignition engines and vehicles equipped with such engines are not subjected to IUPR. |
| n | ISC requirement set out in Appendix 1 to Annex II. |
| | N/A Not applicable.’. |

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- (1) Directive 98/70/EC of the European Parliament and of the Council of 13 October 1998 relating to the quality of petrol and diesel fuels and amending Council Directive 93/12/EEC ([OJ L 350, 28.12.1998, p. 58](#)).’;

Changes to legislation:

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