COMMISSION DIRECTIVE 2014/44/EU

of 18 March 2014

amending Annexes I, II and III to Directive 2003/37/EC of the European Parliament and of the Council on type-approval of agricultural or forestry tractors, their trailers and interchangeable towed machinery, together with their systems, components and separate technical units

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2003/37/EC of the European Parliament and of the Council of 26 May 2003 on type approval of agricultural or forestry tractors, their trailers and interchangeable towed machinery, together with their systems, components and separate technical units and repealing Directive 74/150/EEC [1], and in particular point (a) of Article 19(1) thereof,

Whereas:

(1) Directive 2003/37/EC sets up the type-approval system of agricultural and forestry tractors, bringing it in line with the rules on type-approval of motor vehicles.

(2) Directive 2000/25/EC of the European Parliament and of the Council of 22 May 2000 on action to be taken against the emission of gaseous and particulate pollutants by engines intended to power agricultural or forestry tractors and amending Council Directive 74/150/EEC [2] is one of the separate directives in the framework of the type-approval system set up by Directive 2003/37/EC. Directive 2000/25/EC has been amended in order to include several modifications to Directive 97/68/EC of the European Parliament and of the Council of 16 December 1997 on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery [3] concerning adaptation to technical progress, introduction of new emission stages, introduction of alternative type approval procedures and implementation of flexibility schemes.

(3) In order to take account of those amendments to Directive 2000/25/EC, the corresponding administrative provisions of Directive 2003/37/EC should be updated.

(4) Annexes I, II and III to Directive 2003/37/EC should therefore be amended accordingly.

(5) The measures provided for in this Directive are in accordance with the opinion of the Committee established in Article 20(1) of Directive 2003/37/EC,

HAS ADOPTED THIS DIRECTIVE:

Article 1

Annexes I, II and III to Directive 2003/37/EC are amended in accordance with the Annex to this Directive.

Article 2

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 1 January 2015 at the latest. They shall communicate to the Commission the relevant text of those provisions forthwith.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

Article 3

This Directive shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

Article 4

This Directive is addressed to the Member States.

Done at Brussels, 18 March 2014.

For the Commission

The President

José Manuel BARROSO

[1] OJ L 171, 9.7.2003, p. 1.
[2] OJ L 173, 12.7.2000, p. 1.
[3] OJ L 59, 27.2.1998, p. 1.

ANNEX

Annexes I, II and III to Directive 2003/37/EC are amended as follows:

(1) In Annex I, Model A is amended as follows:

(a) Section 3.2.2 is replaced by the following:

‘3.2.2. Measures taken against air pollution

3.2.2.1. Device for recycling crankcase gases: yes/no ([1])

3.2.2.2. Additional anti-pollution devices (if any, and if not covered by another heading)

3.2.2.2.1. Catalytic converter: yes/no ([1])

3.2.2.2.1.1. Make(s): .....

3.2.2.2.1.2. Type(s): .....

3.2.2.2.1.3. Number of catalytic converters and elements .....

3.2.2.2.1.4. Dimensions- and volume of the catalytic converter(s): .....

3.2.2.2.1.5. Type of catalytic action: .....

3.2.2.2.1.6. Total charge of precious metals: .....

3.2.2.2.1.7. Relative concentration: .....

3.2.2.2.1.8. Substrate (structure and material): .....

3.2.2.2.1.9. Cell density: .....

3.2.2.2.1.10. Type of casing for the catalytic converter(s): .....

3.2.2.2.1.11. Location of the catalytic converter(s) (place(s) and maximum/minimum distance(s) from engine): ....

3.2.2.2.1.12. Normal operating range (K): .....

3.2.2.2.1.13. Consumable reagent (where appropriate): .....

3.2.2.2.1.13.1. Type and concentration of reagent needed for catalytic action: .....

3.2.2.2.1.13.2. Normal operational temperature range of reagent: .....

3.2.2.2.1.13.3. International standard (where appropriate): .....

3.2.2.2.1.14. NO_x sensor: yes/no ([1])

3.2.2.2.2. Oxygen sensor: yes/no ([1])

3.2.2.2.2.1. Make(s): .....

3.2.2.2.2.2. Type: .....

3.2.2.2.2.3. Location: .....

3.2.2.2.3. Air injection: yes/no ([1])

3.2.2.2.3.1. Type (pulse air, air pump, etc.): .....

3.2.2.2.4. EGR: yes/no ([1])

3.2.2.2.4.1. Characteristics (cooled/uncooled, high pressure/low pressure, etc.): .....

3.2.2.2.5. Particulate trap: yes/no ([1])

3.2.2.2.5.1. Dimensions and capacity of the particulate trap: .....

3.2.2.2.5.2. Type and design of the particulate trap: .....

3.2.2.2.5.3. Location (place(s) and maximum/minimum distance(s) from engine): .....

3.2.2.2.5.4. Method or system of regeneration, description and/or drawing: .....

3.2.2.2.5.5. Normal operating temperature (K) and pressure (kPa) range: .....

3.2.2.2.6. Other systems: yes/no [1]

3.2.2.2.6.1. Description and operation: .....';

(b) Section 3.2.4 is replaced by the following

'3.2.4. Valve timing

3.2.4.1. Maximum lift and angles of opening and closing in relation to dead centres or equivalent data: .....

3.2.4.2. Reference and/or setting ranges [1]

3.2.4.3. Variable valve timing system (if applicable and where intake and/or exhaust)

3.2.4.3.1. Type: continuous or on/off [1]

3.2.4.3.2. Cam phase shift angle: .....'

(c) In Section 3.3.1.2 the table is replaced by the following:

	'Parent engine (*)	Engines within family (**)			
Engine type					
No of cylinders					
Rated speed (min^{-1})					
Fuel delivery per stroke (mm^3) for diesel engines, fuel flow (g/h) for petrol engines, at rated net power					
Rated net power (kW)					
Maximum power speed (min^{-1})					
Maximum net power (kW)					
Maximum torque speed (min^{-1})					
Fuel delivery per stroke (mm^3) for diesel engines, fuel flow (g/h) for petrol engines, at maximum torque					
Maximum torque (Nm)					
Low idle speed (min^{-1})					
Cylinder displacement (in % of parent engine)	100				

(*) For full details see Section 3.2.
(**) For full details see Section 3.4.'

(d) Section 3.4.2 is replaced by the following:

'3.4.2. Measures taken against air pollution

3.4.2.1. Device for recycling crankcase gases: yes/no ([1]) .....

3.4.2.2. Additional anti-pollution devices (if any, and if not covered by another heading)

3.4.2.2.1. Catalytic converter: yes/no ([1])

3.4.2.2.1.1. Make(s): .....

3.4.2.2.1.2. Type(s): .....

3.4.2.2.1.3. Number of catalytic converters and elements .....

3.4.2.2.1.4. Dimensions- and volume of the catalytic converter(s): .....

3.4.2.2.1.5. Type of catalytic action: .....

3.4.2.2.1.6. Total charge of precious metals: .....

3.4.2.2.1.7. Relative concentration: .....

3.4.2.2.1.8. Substrate (structure and material): .....

3.4.2.2.1.9. Cell density: .....

3.4.2.2.1.10. Type of casing for the catalytic converter(s): .....

3.4.2.2.1.11. Location of the catalytic converter(s) (place(s) and maximum/minimum distance(s) from engine): ....

3.4.2.2.1.12. Normal operating range (K): .....

3.4.2.2.1.13. Consumable reagent (where appropriate): .....

3.4.2.2.1.13.1. Type and concentration of reagent needed for catalytic action: .....

3.4.2.2.1.13.2. Normal operational temperature range of reagent: .....

3.4.2.2.1.13.3. International standard (where appropriate): .....

3.4.2.2.1.14. NO_x sensor: yes/no ([1])

3.4.2.2.2. Oxygen sensor: yes/no ([1])

3.4.2.2.2.1. Make(s): .....

3.4.2.2.2.2. Type: .....

3.4.2.2.2.3. Location: .....

3.4.2.2.3. Air injection: yes/no ([1])

3.4.2.2.3.1. Type (pulse air, air pump, etc.): .....

3.4.2.2.4. EGR: yes/no ([1])

3.4.2.2.4.1. Characteristics (cooled/uncooled, high pressure/low pressure, etc.): .....

3.4.2.2.5. Particulate trap: yes/no ([1])

3.4.2.2.5.1. Dimensions and capacity of the particulate trap: .....

3.4.2.2.5.2. Type and design of the particulate trap: .....

3.4.2.2.5.3. Location (place(s) and maximum/minimum distance(s) from engine): .....

3.4.2.2.5.4. Method or system of regeneration, description and/or drawing: .....

3.4.2.2.5.5. Normal operating temperature (K) and pressure (kPa) range: .....

3.4.2.2.6. Other systems: yes/no [1]

3.4.2.2.6.1. Description and operation: .....';

(e) Section 3.4.5 is replaced by the following:

'3.4.5. Valve timing

3.4.5.1. Maximum lift and angles of opening and closing in relation to dead centres or equivalent data: .....

3.4.5.2. Reference and/or setting ranges [1]

3.4.5.3. Variable valve timing system (if applicable and where intake and/or exhaust)

3.4.5.3.1. Type: continuous or on/off [1]

3.4.5.3.2. Cam phase shift angle .....'

(f) The following Section 3.5 is inserted:

'3.5 Engine power

3.5.1 Maximum net engine power: ..... kW, at ..... min^{-1} (in accordance with Directive 97/68/EC of the European Parliament and of the Council (*))

3.5.2 Rated net engine power: ..... kW, at ..... min^{-1} (in accordance with Directive 97/68/EC)

3.5.3 Optional: Power at the power take-off (PTO), if any, at the rated speed(s) (in accordance with OECD Code 2 or ISO 789-1:1990)

Standard PTO speed (min^{-1})	Corresponding engine speed (min^{-1})	Power (kW)
1-540		
2-1 000		
3-540 ECO		
4-1 000 ECO		

(*) OJ L 59, 27.2.1998, p. 1.'.

(2) In Annex II, Chapter C, Part II, Section 2 is replaced by the following:

'2. **Results of the exhaust emission tests**

Number of base Directive and most recent amendment applicable for EC type-approval. For a Directive with two or more application phases, indicate which phase:

.....

Variant/version: .....

a. NRSC/ESC/WHSC ([1]) final test results inclusive of DF (g/kWh)

	Variant/version	Variant/version	Variant/version
CO	..... g/kWh	..... g/kWh	..... g/kWh
HC	..... g/kWh	..... g/kWh	..... g/kWh
NO_x	..... g/kWh	..... g/kWh	..... g/kWh
$HC+NO_x$	..... g/kWh	..... g/kWh	..... g/kWh
PM	..... g/kWh	..... g/kWh	..... g/kWh
CO_2	..... g/kWh	..... g/kWh	..... g/kWh

b. NRTC/ETC/WHTC ([1]) final test results inclusive of DF (g/kWh) (*)

	Variant/version	Variant/version	Variant/version
CO	..... g/kWh	..... g/kWh	..... g/kWh
HC	..... g/kWh	..... g/kWh	..... g/kWh
NO_x	..... g/kWh	..... g/kWh	..... g/kWh
NMHC	..... g/kWh	..... g/kWh	..... g/kWh
CH_4	..... g/kWh	..... g/kWh	..... g/kWh
PM	..... g/kWh	..... g/kWh	..... g/kWh
NRTC hot cycle CO_2	..... g/kWh	..... g/kWh	..... g/kWh
NRTC hot cycle work	..... kWh	..... kWh	..... kWh

([1]) Delete where not applicable.
(*) Where applicable.'

(3) Part I, A, of Annex III is amended as follows:

(a) Section 3.6 is replaced by the following:

'3.6. Maximum net engine power: ..... kW, at ..... min^{-1} (in accordance with Directive 97/68/EC) ([1])

3.6.1. Rated net engine power: ..... kW, at ..... min^{-1} (in accordance with Directive 97/68/EC)

3.6.2. Optional: Power at the power take-off (PTO), if any, at the rated speed(s) (in accordance with OECD Code 2 or ISO 789-1:1990)

([1]) State the test method used;'

(b) Sections 15.1 and 15.2 are replaced by the following:

'15.1. NRSC/ESC/WHSC ([1]) final test results inclusive of DF:

CO: ..... (g/kWh) HC: ..... (g/kWh) NO_X: ..... (g/kWh)

$HC+NO_X$: ..... (g/kWh) Particulates: ..... (g/kWh) CO_2: ..... (g/kWh)

15.2 NRTC/ETC/WHTC ([1]) final test results inclusive of DF (g/kWh) (*)

CO: ..... (g/kWh) HC: ..... (g/kWh) NO_X: ..... (g/kWh)

$HC+NO_X$: ..... (g/kWh) Particulates: ..... (g/kWh) hot cycle CO_2: ..... (g/kWh) Cycle work for hot start w/o regeneration (kWh)

([1]) Delete where not applicable.
(*) Where applicable.'