

EUROPEAN COMMISSION DIRECTORATE-GENERAL ENVIRONMENT Directorate C - Climate Change & Air ENV.C.3 - Clean Air & Transport

> Brussels, 20 October 2009 M/456 EN

Mandate to CEN for the development of European standards to establish the petrol vapour recovery efficiency of new Stage II petrol vapour recovery equipment and the in-use performance of such equipment once installed at service stations.

## 1. MOTIVATION

The Commission adopted in November 2008 a proposal for a directive that would address the emissions of petrol vapour associated with the fuelling of motor vehicles at service stations in the EU (*so called Stage II petrol vapour recovery or PVR II*). The Council and the European Parliament reached an agreement on the draft legislation at first reading in May 2009 and the formal adoption of the Council and publication in the Official Journal is now awaited and expected after the Summer 2009.

The Directive will essentially require service stations to install technical equipment that recovers the petrol vapour which is displaced from the fuel tanks of motor vehicles during refuelling and covers new PVR II retrofit equipment, dispensers, hoses, nozzles etc.. More specifically:

- Article 4(1) of the new Directive would impose a requirement for PVR II equipment to recover at least 85% of the petrol vapour that would otherwise be emitted to the atmosphere. It is foreseen that these performance criteria be established by the equipment manufacturer prior to installation of the equipment at a service station. In addition, Article 4(2) requires the vapour/petrol ratio to lie in the range 0.95-1.05 where recovered petrol vapour is transferred to the service station's storage tanks.
- Article 5 of the Directive imposes a requirement on the Member States to ensure that a periodic check is undertaken of PVR II equipment installed at service stations. It is foreseen that a simplified check be performed from which an acceptable petrol vapour recovery efficiency can be inferred. In addition, the interval between checks can be lengthened to three years if automatic monitoring equipment is installed which shuts down the sale of petrol if the PVR II equipment malfunctions and this fault is not remedied within 7 days.
- Article [8] of the Directive permits the adoption of harmonised technical standards to support the implementation of Articles 4 and 5 as explained above.

Member States have until 1 January 2012 to transpose into national law the provisions of the Directive. This is also the date when new service stations and substantially modified existing stations will have to implement PVR II controls.

This mandate aims to support the implementation of the new PVR II legislation by manufacturers, service station operators and regulatory bodies by developing uniform

technical methods to assess the petrol vapour recovery efficiency of newly manufactured equipment as well as assessing the in-service performance of such equipment. Given the fixed dates in the Directive for the entry into force of key obligations, it is important that the technical methods be available at the earliest possible opportunity so as to support the Directive's requirements.

## 2. DESCRIPTION OF THE MANDATED WORK

CEN is asked to produce one or more European standards that, with reference to the new legislation on PVR II petrol vapour recovery, satisfy the following key requirements:

### 2.1. Measurement of the efficiency of original Stage II PVR equipment

A standard method is to be developed to support the implementation of Article 4(1) of the new Directive by which original equipment manufacturers of PVR II equipment can quantify the petrol vapour recovery efficiency under standardized and representative field conditions prior to the equipment's installation at service stations.

The standard method must take account of the following as far as is practically possible:

- The requirements of Article 4(1) and, where appropriate, Article 4(2) of the new Directive;
- Be capable of being applied to any of the various existing PVR II technologies including those incorporating automatic monitoring equipment which shuts off the sale of petrol from a dispenser if a fault is detected in the PVR II equipment (or in the automatic monitoring equipment itself) and this fault is not rectified within a given period of time (7 days in the Directive);
- Be flexible so as not to stifle the development of new innovative PVR II technologies;
- Comprise test procedures and test equipment that are representative of fuel systems of petrol-fuelled motor vehicles and petrol dispensing equipment in all Member States of the EU;
- Incorporate or build upon existing national standards such as the VDI 4205 used for the type approval/certification of original PVR II equipment;

#### **Deliverables**

A European standard with which original equipment manufacturers of PVR II equipment can enable quantification of the petrol vapour recovery efficiency of such equipment under standardized and representative field conditions.

### **Timelines**

CEN should endeavour to use the shortest possible procedure to develop the standards requested by this mandate, but in any case the completed standards should be delivered to the Commission within 3 years of the acceptance of the mandate.

## 2.2. In-service checks

A standard method is to be developed to support the implementation of Article 5 (and Article 4(2) where appropriate) of the new Directive so that Member State regulatory authorities, third parties or service station operators can undertake periodic checks on the functioning of installed PVR II equipment. Such checks would be technically simple to undertake in the field but would need to demonstrate a minimum petrol vapour recovery of 85% directly or indirectly by, for example, a measurement of the petrol vapour/petrol ratio.

The standard method must take account of the following as far as is practically possible:

- The requirements of Article 5 of the new Directive as well as Article 4(2) if appropriate;
- Be capable of being applied to any of the various existing PVR II technologies including those incorporating automatic monitoring equipment which shuts off the sale of petrol from a dispenser if a fault is detected in the PVR II equipment (or in the automatic monitoring equipment itself) and this fault is not rectified within a given period of time (7 days in the Directive);
- Be flexible so as to being capable of being applied to new innovative PVR II technologies;
- Comprise test procedures and test equipment that are representative of fuel systems of petrol-fuelled motor vehicles and petrol dispensing equipment in all Member States of the EU;
- Incorporate or build upon existing national standards such as the VDI 4205 used to assess the vapour/petrol ratio under simulated petrol flow conditions.

### Deliverables

A European standard which can be used by regulatory authorities, service station operators or third parties to perform periodic checks on the functioning of in-service PVR II equipment.

### **Timelines**

CEN should endeavour to use the shortest possible procedure to develop the standards requested by this mandate, but in any case the completed standards should be delivered to the Commission within 3 years of the acceptance of the mandate.

CEN is asked to ensure the compliance of the standards in 2.1 and 2.2 above with the requirements of the Community legislation on PVR II and to make the greatest possible use of existing national standards as the basis for the new European standard.

## **3. BODIES TO BE ASSOCIATED**

The elaboration of the standards must be undertaken in close cooperation with CECOD the European trade association for PVR II equipment manufacturers.

As appropriate, CEN will invite the representative organisations of consumers' interests (ANEC), environmental protection (ECOS), workers (ETUI-REHS) and small and medium-size enterprises (NORMAPME) to take part in the standardisation work.

# 4. EXECUTION OF THE MANDATE

CEN shall inform the Commission of the arrangements to be adopted for the execution of the work within three months of acceptance of this mandate. Such information will include a detailed list of standards to be developed.

CEN will forward to the Commission reports on the progress of the work at regular intervals of 12 months.

The standstill period referred to in Article 7 of Directive  $98/34/EC^1$  of 22 June 1998 will commence on acceptance of this standardisation mandate by CEN.

<sup>&</sup>lt;sup>1</sup> OJ L 204 of 21.07.98, p. 37, as amended by Directive 98/48/EC, OJ L 217 of 5.08.98, p.18.