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REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

Report on the implementation and review of Directive 2004/42/EC of the European Parliament and of the Council on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC

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1. INTRODUCTION

On 21 April 2004, Directive 2004/42/EC of the European Parliament and the Council on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC (hereinafter "the Paints Directive") was adopted.

The purpose of the Paints Directive is to limit emissions of volatile organic compounds (hereinafter "VOC") due to the use of organic solvents in certain paints and varnishes, as well as in vehicle refinishing products[1] in order to prevent or reduce air pollution resulting from the contribution of VOC to the formation of ground-level ozone. It aims to complement measures to be taken at national level in order to ensure compliance with the VOC emission ceilings as set out in Directive 2001/81/EC on national emission ceilings for certain atmospheric pollutants (hereinafter "the NEC Directive").

The products covered by the Paints Directive are paints and varnishes applied to buildings, their trim and fittings and associated structures for decorative, functional and protective reasons as well as products for vehicle refinishing.

To this end, the Paints Directive requires that the products falling under its scope and which are placed on the market after 1 January 2007 have a VOC content not exceeding the limit values set out in its Annex II. For paints and varnishes, stricter VOC limit values have applied in a second phase since 1 January 2010.

Article 14 of the Paints Directive required Member States to transpose the Directive into their legislation by 30 October 2005 at the latest. A summary of the state of transposition of the Directive is given in section 2 of this report.

Articles 6 and 7 of the Paints Directive require that Member States set up a monitoring programme to verify compliance and regularly report to the Commission on the results of the monitoring programme. On the basis of this information the

[1] 'vehicle refinishing products' are defined as the products listed in the subcategories mentioned in Annex II(B) of the Paints Directive. They are used for the coating of road vehicles as defined in Directive 70/156/EEC, or part of them, carried out as part of vehicle repair, conservation or decoration outside of manufacturing installations

implementation in Member States has been assessed and an overview of the main findings is given in section 3 of this report.

Article 9 of the Paints Directive invites the Commission to submit to the European Parliament and the Council a report examining:

- the potential for reduction of the VOC content of products outside the scope of the Paints Directive including aerosols for paints and varnishes;

- the possible further reduction of the VOC content limits set by the Directive for vehicle refinishing products; and

- any new element relating to the socio-economic impact of the application of the limit values set out in Annex II of the Paints Directive, which apply from 1 January 2010 (Phase II).

The outcome of this analysis is summarized in section 4 of this report.

2. TRANSPOSITION

The deadline for transposing the Paints Directive into national legislation expired on 30 October 2005. Whilst few Member States met this deadline, all Member States completed transposition for the whole national territory shortly after that date.

The Commission has not identified any major instances of non-conformity of the Member States' transposing legislation.

3. IMPLEMENTATION

3.1. Introduction

Article 7 of the Paints Directive requires Member States to report the results of their monitoring programme to demonstrate compliance with the Directive. It also requires Member States to report on the category and quantity of products licensed according to Article 3(3) of the Directive. The first report, covering the year 2007, had to be submitted to the Commission by 30 June 2008. For this purpose, a common format was developed and adopted by the Commission[2].

Reports have been received from 26 Member States and are available on the EUROPA website[3].

3.2. Member States monitoring programmes and inspections (2007)

The general assessment of the reports submitted by Member States revealed that despite some information gaps due to the limited time that had passed since the entry into force of the Directive, some useful information on the monitoring practices in certain Member States could be extracted.

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2 Commission Decision 2007/205/EC of 22 March 2007 (OJ L 91, 31.3.2007, p. 48)

3 http://ec.europa.eu/environment/air/pollutants/paints_ms_reporting.htm

The administrative organisation of the competent authorities responsible for ensuring implementation of the Paints Directive varies significantly among the Member States. Some Member States have centralized the competences within one national body, while others have assigned the co-ordination, monitoring and infringement responsibilities to three separate national bodies, and still others have national bodies for co-ordination and regional offices for monitoring and infringement. In cases where several authorities are involved, Member States usually clearly distinguish the respective areas of competence or ensure a coordinated approach.

The reported number of inspections of manufacturers, importers, wholesalers, retailers and operators in 2007 varied between zero and 540, with most Member States reporting between 10 and 100 site visits. However, this does not give information on the share of the market covered. The specific actions taken with regard to inspection vary significantly between Member States. No information was available on the split between site visits for checking compliance with the VOC limits and site visits for checking compliance with the requirements concerning labelling.

Several cases of non-compliance were found during the inspections. The number of breaches of the VOC limits was generally below 5% of the cases, while breaches of the labelling requirements were more frequent and often around 20%.

Concerning the application of Article 3(3) of the Paints Directive, only one Member State reported that individual licences were granted for the sale and purchase of products which will be applied for restoration and maintenance of buildings and vintage vehicles designated as being of particular historical and cultural value, but which do not meet the VOC limit values. All of the other Member States either reported that they have not foreseen the option to grant such licences or that no applications for such licences had been received in 2007.

Several Member States provided some comments concerning difficulties encountered during the implementation of the Paints Directive. The main implementation challenges reported were a lack of administrative resources for monitoring and an insufficient number of (accredited) analytical laboratories. The most commonly reported interpretation issues were related to the scope of the Directive (definitions), the classification of products within a particular subcategory and the interaction with Directive 1999/13/EC[4] (hereinafter "the VOC Solvent Emissions Directive") as explained in section 3.3.

3.3. Interaction with the VOC Solvent Emissions Directive

Several Member States reported some difficulties due to the overlap of the scope of the Paints Directive with the VOC Solvent Emissions Directive. According to Article 3(2) of the Paints Directive, Member States are allowed to exempt from compliance with the VOC limits any products sold for exclusive use in an activity covered by the VOC Solvent Emissions Directive and carried out in a registered or authorised installation according to Articles 3 and 4 of that Directive. As a consequence, paints and varnishes within the same product category (e.g. for wood coating activities)

[4] OJ L 85, 29.3.1999, p. 1

may be subject to different VOC requirements depending on their use. Whereas the VOC content of those paints which are solely used for activities within installations complying with the VOC Solvent Emissions Directive is not limited by the Paints Directive, similar paints which are used outside those installations need to be compliant with the VOC limits of the Paints Directive.

Monitoring the final use of the exempted products and ensuring that these paints are only used in compliant installations is challenging for the competent authorities. Enforcement becomes more difficult where different activities, some of which are covered by the VOC Solvent Emissions Directive and some which are not, are all carried out within one installation.

From the implementation reports, a number of procedures aiming to ensure a correct application of Article 3(2) of the Paints Directive could be identified, with variations observed among the Member States. This included labelling requirements for non-compliant products, the need for the purchaser to provide proof that the products will be used only in installations covered by the VOC Solvent Emissions Directive and a requirement to list customers buying non-compliant products.

3.4. Commission support to implementation

The Commission has been working with representatives of the Member States in the Committee referred to under Article 12 of the Paints Directive to clarify questions concerning the interpretation and implementation of the Directive. In this context, some elements needing further clarification were identified, such as certain definitions, the scope of the different subcategories of paints and varnishes, the labelling requirements in Article 4 and the classification of certain vehicle refinishing products. A number of these issues have been clarified already through Commission guidance[5], while the others have been considered during the review of the Directive and will be tackled through further guidance.

Furthermore, Commission Directive 2010/79/EU of 19 November 2010[6] has introduced an additional standard concerning the analytical methods for assessing compliance with the VOC limit values, which will allow checking compliance in a more cost effective way.

3.5. Conclusions concerning implementation

At the time of gathering the data for this report (covering the year 2007), the implementation of the Paints Directive in the Member States was still in its very early stages as the VOC limits from Annex I only apply since 1 January 2007. Furthermore, a one year transitional period was granted by Article 3, allowing non-compliant products produced before 1 January 2007 to be placed on the market.

The information received so far under Article 7, shows that many Member States have established programmes for monitoring compliance of the products placed on the market. However, the Commission has indications that in 2007 several Member States were still behind schedule in setting up their inspection programmes. The

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5 http://ec.europa.eu/environment/air/pollutants/paints_faq.htm

6 OJ L 304, 20.11.2010, p. 18

adequate monitoring of manufacturers and importers is of particular importance for ensuring compliance with the Directive's VOC limits and labelling obligations. Improvements to the monitoring programmes and practices are therefore required and Member States will be encouraged to share their experiences and mutually learn from established best practices.

It is expected that a more thorough evaluation of Member States' compliance with the Directive's monitoring obligations will be possible on the basis of the second national implementation reports under Article 7, covering the year 2010 which are due by 30 June 2011.

4. REVIEW OF THE DIRECTIVE

4.1. Introduction

4.1.1. Review clause

Article 9 of the Paints Directive calls for a review of the Directive to identify possible further reduction potentials. Amendments to be assessed include an extension of its scope to other products and the introduction of stricter VOC limit values for vehicle refinishing products. Additionally, it asks for examining any additional socio-economic impacts arising from the Directive's implementation which were not recognised during the preparation of the Directive.

To support this review, the Commission contracted an external consultant. The study, running during 2008 and 2009, involved all of the key stakeholders. It looked at a variety of options to extend the scope of the Paints Directive and increase VOC reduction. For a range of products, which were identified as possible candidates to be included under the scope of the Directive, the benefits and costs of such inclusion were assessed[7].

4.1.2. Thematic Strategy on Air Pollution and NEC Directive

The implementation and review of the Paints Directive needs to be seen in the context of the implementation of the EU policies regarding air pollution, in particular the Commission's 2005 Thematic Strategy on Air Pollution (hereinafter "the Thematic Strategy")[8] and the NEC Directive. One of the major objectives of these instruments is the reduction of ground-level ozone concentrations in order to protect human health and ecosystems. Ground-level ozone and other photochemical oxidants are formed through the reaction of VOC, nitrogen oxides and carbon monoxide in the presence of sunlight.

The Thematic Strategy has set interim objectives for 2020, taking into account the costs of the measures and their associated benefits. These objectives are expressed as "progress to be achieved" in comparison with the situation in the year 2000. For

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7 The final report of the study is available at http://circa.europa.eu/Public/irc/env/paints_directive/library?l=/review_2008_2009/contract

8 Communication from the Commission to the Council and the European Parliament: Thematic Strategy on air pollution (COM(2005) 446 final), 21.09.2005

ground–level ozone, the objectives are a reduction of the number of cases of premature mortality by 10% and a reduction of the area of forest ecosystems where ozone concentrations exceed the critical levels by 15%. The Thematic Strategy indicated that achieving these objectives would require VOC emissions in 2020 (in the EU-25) to be 51% below the 2000 levels. Current legislation on VOC emissions, including the Paints Directive, is expected to contribute significantly to achieve reductions towards the overall objectives on VOC emissions. The latest EU wide assessment[9] indicates that by 2020 the existing legislation would nearly halve the total emissions in 2000 thereby closely approaching the objective set out in the Thematic Strategy on Air.

There are indications that a few Member States might encounter problems with achieving their VOC ceiling in 2010 as required under the NEC Directive. However, Member States only have to report emissions two years in arrear and final emission inventories for 2010 are not yet available.

4.1.3. VOC emissions from the use of products covered by the Paints Directive

Articles 7 and 8 of the NEC Directive require the Member States to annually report their national emission inventories and projections for 2010 for the pollutants covered by the Directive. These reports show that the 2008 VOC emissions from the application of coatings for the EU-27 were 1 379 kilotonnes (kt), which is about 16,6% of the total VOC emissions reported. Although the reports include disaggregated emission data[10], the classification of activities used does not allow the determination of precise figures of the VOC emissions due to the use of products covered by the Paints Directive.

Those emissions and their future evolution were estimated, based on production data and forecasts provided by the concerned industry federation[11]. This indicated that the total 2006 VOC emissions due to the use of decorative paints covered by the Directive were around 410 kt. Emissions are expected to decrease to 373 kt in 2010 due to the stricter limit values coming into force. However, they are projected to increase again to 470 kt in 2020, mainly due to increased consumption. For vehicle refinishing products, emissions were estimated to be 56 kt in 2007 and were projected to increase to 62 kt in 2020.

4.2. Options for scope extension

During the review, the environmental, economic and social impacts of seventeen options for a possible extension of the scope of the Paints Directive were assessed. This involved extensive consultation of stakeholders and Member States.

One of the products assessed were aerosols for paints and varnishes, which are explicitly mentioned in Article 9 of the Directive. The option of including such paints in the scope of the Directive was found to have a very small VOC reduction potential (26 kt/y in case of complete substitution). Furthermore, this product group

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9 NEC scenario analysis report nr. 7, http://ec.europa.eu/environment/air/pollutants/pdf/nec7.pdf

10 In relation to paints, a distinction is made in the reports between "Decorative coating application" (category 3.A.1), "Industrial coating application" (3.A.2) and "Other coating application" (3.A.3).

11 European Council of producers and importers of paints, printing inks and artists' colours (CEPE)

comprises a high variety of product types used for different purposes, which would make defining appropriate VOC limits difficult and monitoring complex. Introducing limit values for the VOC content of these products in the Directive would in fact require switching to other coating systems, but the existing alternatives may cause a loss of product performance. A phase out of the aerosols for paints and varnishes was therefore considered to be inappropriate.

Amongst the other options considered, the highest potential for VOC reduction (126 kt/y) was expected from introducing a VOC limit value (10%) for deodorants and antiperspirants. However, this measure was not recommended as it would de facto ban the use of aerosol- and pump-type spray systems and the existing alternatives seem to have limited acceptance from consumers. Further research to allow the development of alternative spraying systems for deodorants is therefore needed before considering this option further.

None of the remaining options were estimated to reduce VOC emissions by more than 40 kt/year. For the non-coating products in particular, there is a lack of knowledge on the anticipated market evolution and consumer behaviour to fully assess the potential effects of their inclusion in the scope of the Directive.

4.3. Stricter VOC limit values for vehicle refinishing products

Annex II(B) of the Paints Directive sets out the maximum VOC content of vehicle refinishing products. The feasibility and impacts of strengthening the VOC limit values for each of the vehicle refinishing product subcategories have been assessed. The overall conclusion from this assessment was that it would not be appropriate to propose stricter VOC limit values for these coatings:

– For most of the subcategories it was found not to be feasible to lower the limit values, either because no products with lower VOC content are expected to be available on the market soon or because of a lack of appropriate test methods;

– For the topcoats and for the special finishes, the options for optimizing the current requirements were estimated to deliver a VOC reduction of only about 3,5 kt/year while potentially increasing the administrative burden because of more complicated monitoring.

4.4. Socio-economic impacts of the Phase II limit values

The review also looked at possible new socio-economic impacts, which had not been predicted or assessed during the preparation of the Directive (in 1999-2002).

The only relevant impact identified was related to the costs for (re-)labelling products coming under the scope of the Directive. This issue was considered relevant also in the light of a possible scope extension. The total costs for labelling were estimated by the industry federation at around €600 million. An additional cost of €141 million was estimated for take-back and destruction of non-compliant products. These costs could possibly have been reduced by extending the transitional period during which sales of non-compliant products are still allowed (e.g. two years instead of one year).

5. CONCLUSION AND OUTLOOK

On the basis of the preliminary information from Member States on the implementation of the Directive in the first years following its transposition, it can be seen that monitoring systems to ensure compliance were established. However, several Member States have struggled to set up their systems in time and therefore improvements to the current monitoring programmes and practices are required by sharing experiences and establishing best practices, before firm conclusions on detailed impacts on VOC emissions can be drawn. Further information on these aspects is being gathered from Member States through the second national implementation reports. Those will be the basis for the second Commission report on the implementation of the Directive.

As required under the review clause of the Directive, an assessment was performed on measures that could potentially result in a further reduction of VOC emissions, i.e. the widening of the scope of the Directive and the tightening of its VOC limit values for vehicle refinishing products. However, even regulating a very wide range of different products would deliver only modest potential emission reductions and this would come with significant implementation problems, as well as with increased administrative burden and costs. In particular, important concerns remain with regard to the uncertain impacts on consumer behaviour and the likely increase of the administrative burden of regulating non-coating products. Furthermore, according to the latest results of the integrated assessment modelling, a strengthening of the existing VOC emission reduction measures seems not to be required to achieve the intermediate objectives of the Thematic Strategy. This will be further assessed over the coming years as part of the ongoing work related to the review of the Thematic Strategy. Therefore, amending the scope or limit values of the Paints Directive is not justified at this stage.