

# COMMENTS ON THE PVC GREEN PAPER

## PORTUGUESE ADMINISTRATION

### 1 The use of additives in PVC

In order to give PVC the properties needed in different applications, various additives must be used. The Commission has opened discussion on two categories of those additives:

- stabilisers
- plastifiers

Certain stabilisers contain heavy metals, including lead (Pb) and cadmium (Cd).

The Commission has indicated a number of ways of responding to concerns, and reducing Pb and Cd levels:

- legislation
- voluntary agreements on Cd
- new voluntary agreements on Pb

inviting comment on which of these should be used, and what the timetable should be.

Regarding stabilisers, the following should be noted:

- so far, as the Commission itself has recognised, no exhaustive risk assessment has been completed on the use of Cd and Pb compounds as PVC stabilisers;
- notwithstanding the studies already carried out and mentioned in the document, in view of the lack of scientific certainty recognised by the Commission itself, it is not possible to quantify the environmental effects of substitution of Pb and Cd in global emissions;  
The Commission has even suggested that there is some doubt whether the general substitution of these stabilisers would have a particularly significant effect on total environmental emissions of Pb and Cd;
- the Pb used in manufacture of stabilisers accounted for only 3% of total European consumption in 1995;
- with the signature of a Europe-wide Voluntary Agreement in March 2000 covering the entire PVC industry, the industry has already committed itself to gradually eliminating the use of Cd by 2001;
- the European Stabiliser Producers' Association (ESPA) has committed itself to carrying out risk assessments on lead-base stabilisers, since studies to date have proved inconclusive.

#### Question 1: Additives — Cd and Pb

a) Cd-based stabilisers

A Voluntary Agreement exists covering the entire European PVC industry, from production to final transformation, to gradually eliminate the use of Cd-based stabilisers by March 2001. Under the circumstances, no legislative measures are needed other than to restrict the import of Cd-based stabilisers and products containing them.

Should it be concluded that there exists a real risk requiring additional legislation, Portugal believes such legislation should be framed under existing instruments, e.g. Directive 76/769/EEC or worker health and safety legislation.

We do not think there is a case for new legislation applicable specifically to one product — PVC —the inherent use of which has not been shown to be hazardous.

b) Pb-based stabilisers

The Green Paper states that the Scientific Committee on Toxicity, Ecotoxicity and the Environment is working on the question of the risks arising from the use of Pb in general, and that no opinion has yet been issued on the potential risks of Pb either to human health or to the environment.

In the absence of conclusive studies on the risks of using Pb compounds, the ESPA itself has agreed to undertake a risk assessment of these products as part of the CEFIC and ICCA programmes. They also support work investigating and developing alternative stabilisers.

Here, too, the voluntary approach thus seems the most appropriate, since no legislative measures can be contemplated until suitable risk assessment work has been completed and the results published.

Under the circumstances, and for these two types of stabiliser, Portugal's view is that:

- Any decisions regarding new measures to reduce the risks associated with the use of Cd and Pb stabilisers should be taken only after completion of the risk-assessment research currently under way;
- Additional restrictions on the use of these compounds should take account not only of that research, but also of other studies of equivalent level into substitute products and the analysis of costs and benefits;
- In the current state of affairs, the voluntary approach seems the most suitable.

## **Question 2 — Phthalates**

So long as the risk-assessment studies have not been concluded, it seems premature to proceed further than with the specific legislation on phthalates and their possible substitutes currently under discussion. This relates to only six phthalates and their use in the manufacture of toys and baby-care goods.

The specific risks which have been identified are associated with the phthalates and not with PVC itself. For this reason, as in the case of Cd and Pb compounds, it seems inappropriate to approach the problem from the standpoint of PVC.

Any measures adopted should be based on the risk assessment studies and be framed under existing instruments, e.g. Directive 76/769/EEC. Portugal does not believe that an approach from the standpoint of the material is justified: if followed, it would imply a comparative study with alternative materials throughout the useful life of every application.

## **2 Waste**

### **Question 3: Waste management**

Regarding the measures proposed by the Commission, Portugal considers that:

- 1 The Union's approach to waste management has hitherto been from the standpoint of the product or application (e.g. packaging, scrap cars, electrical and electronic equipment, etc.) and not of the material.

Since no comparative studies have been submitted on the recycling of the same products when made of PVC or other material, a materials-based approach does not seem to us to be justified. For this reason, compulsory targets should be established for the collection and recycling of certain relevant flows of PVC waste.

- 2 The PVC industry should not be the only one to have to finance the collection and recycling of waste.

This already puts it at a competitive disadvantage with other industries manufacturing alternative products — other polymers, timber, aluminium, etc.

Furthermore, collection and recycling may not be the exclusive responsibility of the PVC industry: other local and regional bodies may be involved.

In the specific case packaging waste, a scheme is being implemented in Portugal, as elsewhere in Europe, for the collection, sorting and transport of waste for reprocessing. PVC evidently falls within the scope of the scheme.

Municipalities are responsible for collection and sorting, and are paid to do so by manufacturers and packagers. There is thus no need to set up parallel schemes specifically for PVC.

Voluntary initiatives in respect of specific applications may be encouraged, as is already done at European level. The particularities of each country must be borne in mind.

- 3 There is no reason to set up specific rules on PVC demolition waste. See 1.
- 4 The norms to be established must take account of the characteristics and properties of the products, as a function of their application and not of the materials used in their manufacture.

The same goes for all other materials.

- 5 We see no objection to marking goods made of PVC, so long as the same is required of goods made from the other materials and alternatives.

6 No objection.

Portugal's direct answer to Question 3 is thus as follows:

- An increase in the volumes of material recycled is the desired outcome of the Directives on "end-of-life vehicles", "electrical and electronic equipment" and "landfill".
- No new measures should be implemented without an objective assessment of the principal environmental impacts of PVC and of alternative materials throughout the useful life of the application.

### **3 Recycling**

#### **Question 4: Mechanical recycling of PVC waste containing Pb and Cd**

For the three measures proposed, Portugal's comments are as follows:

- First, we recall that according to the study commissioned by the Commission, the environmental impact attributable to Pb compound stabilisers is barely significant since the consumption of Pb in this domain is only 3% of total European Pb consumption.

In addition, for the reasons set out in answer to Question 1, as regards Pb we do not consider it appropriate to implement specific measures for the recycling of goods containing these compounds.

- There is already an industry undertaking to gradually eliminate use of Cd by 2001.
- Legislation restricting the recycling of goods containing Cd does not seem to us to be the right answer. Quite the contrary: the recycling of these goods should be promoted and made subject to specific conditions, which should preferably be established by the industry itself on a voluntary basis.

The industry's own efforts in this domain show that the solutions chosen have been advantageous not only in environmental terms, but also economically.

#### **Question 5: Chemical recycling**

The chemical recycling option is still under development. For the present, the industry's voluntary initiatives are the most appropriate and should be encouraged.

For the present we see no justification for measures on chemical recycling, either compulsory or in the form of recommendations.

### **4 Incineration**

#### **Question 6: Incineration**

On the range of measures proposed by the Commission, Portugal's view is that:

In the light of the studies quoted by the Commission (BERTIN and AEA), PVC does not interfere with the normal working of urban waste incineration plant provided they are operating in accordance with applicable regulations.

The additional costs resulting from any necessary operations to neutralise the hydrochloric acid produced (which would not in fact be necessary if the acid were returned to the industry) should be evaluated for comparison with the cost of the CO<sub>2</sub> emissions resulting from the incineration of other organic matter.

We thus see no need for specific measures to divert PVC waste for recycling.

## **5 Landfill**

### **Question 7: Landfill disposal**

Independent studies on landfill disposal of PVC-based goods do not agree with the conclusions of the Green Paper.

Although there is no unequivocal scientific view on the question, there is no case for specific measures on PVC.

## **6 Horizontal strategy**

### **Question 8: Horizontal strategy**

- Any policy for the substitution of PVC would have to be buttressed by an exhaustive and objective assessment of the environmental impacts not only of PVC but of all its potential replacements, throughout their life cycle.
- At EU level studies are currently under way on Risk Assessment of certain additives mentioned in the Green Paper.

Any Legislation prior to the conclusion of those studies would be in conflict with the guidelines for implementing the Principle of Precaution recommended by the Commission in its communication of 2 February 2000.

- With an eye to sustainable development this material should be considered from a broader point of view, including its economic and social aspects and not merely its environmental aspects.

Any measures to be implemented would have to be based on an analysis of the benefits and disadvantages inherent in the material and proportionate to the risks we are seeking to avoid.

It should be noted that in Portugal the PVC industry involves some 150 SMEs employing around 4500 people with a total turnover of around Esc 100 billion.

In Portugal, PVC is the second most demanded polymer, accounting for around a quarter of total consumption.

- The prospect of a horizontal strategy for PVC as outlined by the Commission should be treated with the strongest reservations, given that the risk assessments have not been concluded for PVC or any of its alternatives.

We believe that the Commission should promote comparative studies of alternative materials taking account of the entire life-cycle of each application, and not just its end of life.

Only then should the measures appropriate to each application be evaluated.

In view of the foregoing we consider that the initiatives already adopted by the European PVC industry should be encouraged, the more so since the approach contributes to promoting the sharing of know-how, and stimulating the spirit of enterprise, innovation and investment, all of which are restrained by the legislative approach.

Legislation may be considered should the agreements not attain the desired results, and should there exist a credible scientific basis supporting the measures proposed. Those measures should, in all events, be proportionate to the risks whose reduction is being sought.