Environment and human health: impact of polyvinyl chloride PVC. Green paper

2000/2297(COS) - 26/07/2000 - Non-legislative basic document

PURPOSE: to present the Green Paper on Environmental issues of PVC. CONTENT : the two objectives of this Green Paper are, firstly, to present and assess on a scientific basis, the various environmental issues including related human health aspects that occur during the life cycle of polyvinyl chloride (PVC) and secondly, to consider, in view of sustainable development, a number of options to reduce those impacts that need to be addressed. This should serve as a basis for a consultation with stakeholders in order to identify practical solutions to health and environmental issues raised by PVC. The Commision considers, on the basis of the analysis presented in this Green Paper, that the contamination of the environment by lead and cadmium should be avoided as much as possible. The Commission is in favour of a reduction of the use of cadmium and lead as stabilisers in PVC products. A number of measures could be envisaged and should be assessed in the light of their potential enviromental and economic implications: 1) Legislative phase-out or other risk reduction measures for cadmium and/or lead with the possibility of temporary derogations; 2) Implementation of the voluntary commitment of the PVC industry on cadmium; 3) Development of further voluntary commitments for lead. In addition, the use of phthalates in PVC applications raises issues, described above, which could be addressed through a number of measures, including legislative or voluntary risk reduction measures. These potential measures should be assessed in the light of their environmental and economic implications. The Commission considers, on the basis of the analysis in its Green Paper and given the present low recycling rate, that recycling of PVC should be increased. This could be done through a range of measures, which could be used separately or in combination. Their potential environmental and economic implications should be assessed. These potential measures include: 1) Mandatory collection and recycling targets for some relevant PVC waste streams; 2) Voluntary commitment of the industry to improve and finance, totally or partially, the collection and the recycling of some relevant PVC waste streams; 3) Recommendations to Member States with the objective of establishing and developing separate collection of PVC waste and other demolition waste; 4) Development of appropriate standards that allow the use of recycled PVC materials; 5) Marking of plastic products as a useful tool to facilitate the separation of PVC waste from the general waste stream and development of other methods for plastic identification and sorting; 6) Development of innovative recycling processes for certain post-consumer PVC waste. The recycling of PVC waste containing heavy metals raises specific issues due to the potential dilution of heavy metals into new and possibly wider range of products. Some potential measures could be envisaged to address these issues. Thesemeasures should be assessed in the light of their potential environmental and economic implications. They include: 1) Legislative instruments to restrict the mechanical recycling of PVC waste containing lead and cadmium; 2) Specific conditions for this recycling, such a recycling in the same type of application, the control of the placing on the market of recyclates, the marking of the recycled products and the control of the use of heavy metals; 3) No specific conditions for this recycling. As regards the incineration of PVC waste, the Commission considers that this raises a number of issues. A range of measures could be envisaged to address these issues and should be assessed in the light of their potential environmental and economic implications. Finally, the Commission considers that the landfilling of flexible PVC waste raises some issues. A range of measures could be envisaged to address these issues and environmental and economic implications of these measures should be considered. On the basis of the analyses presented in this paper and based on the outcome of the consultation process, the Commission will present at the beginning of 2001 a Communication setting out a comprehensive Community strategy on the environmental issues of PVC.