

COMPLIANCE MONITORING OF COMPANIES MARKETING CHEMICAL SUBSTANCES IN SWEDEN

THORAN, KARIN¹ and SIIRALA, KIRSTI²

¹ Head of Inspections Division, National Chemicals Inspectorate, Sweden

² Dr., Senior Inspector, National Chemicals Inspectorate, Sweden

P.O. Box 1384, S-171 27 Solna, Sweden

SUMMARY

The legal basis for chemicals control in Sweden, and for enforcement regarding companies marketing chemical substances are described. A campaign with focus on car care products, which included a survey of chemical preparations on the market, inspections of supplying companies, information activities aimed at producers, users and retailers, is described.

This combination of activities was all over important for the results of the campaign, which led to less hazardous preparations, in many cases due to substitution of hazardous substances or to products withdrawal from the market.

One important way to prevent risks posed by chemical substances in preparations is to hinder them from entering the market.

1 INTRODUCTION: CHEMICALS CONTROL IN SWEDEN

The use of chemical products contributes to the diffuse dissemination of chemical substances to the environment in addition to exposure risk to humans. The main objective for chemicals control in Sweden is to prevent injury to man and the environment caused by the use of chemical products.

The *Act (1985:426) on Chemical Products* is the legal basis for chemicals control in Sweden. The Act takes into account the need for health protection in the occupational and consumer use areas as well as protection of the environment. The emphasis of the Act is put on the *marketing stage* of chemical products, but all other stages of the life-cycle are considered.

The Act places the main responsibility for chemicals control on manufacturers and importers of chemical products. They are responsible for assessing the products, for replacing hazardous products by less hazardous ones and for providing adequate information about the hazardous properties to the users. The obligation of product substitution is put on users as well as on producers and is based on Section 5 of the Act:

Anyone handling or importing a chemical product shall take such steps and otherwise observe such precautions, as are necessary to prevent or minimize harm to human beings or to the environment. This includes avoiding chemical products for which less hazardous substitutes are available.

The National Chemicals Inspectorate (KemI) is the governmental agency responsible for controlling the observance of the Act on Chemical Products. One important task for the Inspectorate is to ensure that manufacturers and importers of chemical products fulfill their obligations according to the legislation and regulations. Other tasks for the Inspectorate are to increase the knowledge regarding the effects of chemicals and to follow the presence and flow of chemicals in society.

The Inspectorate monitors compliance and the inspection targets are the manufacturers and importers who market chemical products. These companies are found in the Swedish products register to which all producers and importers have to report their products. At present there are about 50,000 products registered by 2,300 companies

Main control issues are product assessments, including investigations of both health and environmental effects, product substitutions and the quality of the product information. Identification of inadequate compliance will be followed by requirements for improvement which, if necessary, can be connected to injunction with the penalty of fine. Violations are notified to the police.

2 ENFORCEMENT CAMPAIGN WITH FOCUS ON CAR CARE PRODUCTS

An enforcement campaign focusing on car care products was carried out from 1989 to 1992. The starting point was a survey of car care products on the market which was reported in 1990 (1). This activity was initiated by the Inspectorate and executed by two contracted consultants. According to the report, over 400 different car care products covering about 90 product types (cleaning agents, rust protection products, varnish, etc.) were found on the market. Car cleaning products were studied separately in more detail and described in another report (2).

The number of motor vehicles in Sweden is about 3.6 million cars and 300,000 trucks and buses for a population of 8.7 million. The car represents a considerable cost, and the need for good maintenance demands current and immediate protective care and repair of the car. The Swedish climate is an important factor when considering the need for car care; high humidity creates rust, icy roads are made safer by road salts or spikes on tires which, in turn, causes problems with corrosion and asphalt dirt, unless the cars are frequently cleaned and protected. Large amounts of petroleum solvents and tensides are used in car cleaning products.

2.1 Inspections

In 1990-91 an inspection project was carried out including 25 companies, producers and importers marketing car care products (3). Companies were selected mainly from the Swedish product register, and the selection was based on numbers of products and volumes reported. Some companies known to authorities as less serious concerning chemicals control matters were also selected for the project. The companies represented about 800 products, from which 375 were selected for a closer check. These products contained about 140 various chemical substances hazardous to health or to the environment. The inspections focused on the competence of chemicals control at the companies, their work with product assessment and product development concerning hazardous substances, and the quality of the product information.

The requirements on substitution of hazardous products involved 65 products from 13 companies. The very harmful substances at focus for substitution requirements were chlorinated solvents (methylene chloride, 1,1,1-trichloroethane, trichloroethylene), short-chained glycol ethers and hydrofluoric acid.

The outcome of the substitution work was that the harmful substance in 25 products was substituted, 3 products were reformulated, 18 products were withdrawn from the market, and for 16 products the companies presented satisfactory schedules for product development.

The inspection requirements on product information resulted in more complete information and improved quality, which will increase the possibilities for the user to make better product choices.

A second inspection project in 1992-93 included car cleaning products from 20 manufacturers who represented more than 75% of the market. The requirements focused on investigation, assessment and product information regarding the environmental effects of the chemical substances, based on the regulations on criteria for environmental hazards of chemical substances (KemI Regulations 1992:2, Regulation on classification and labelling in connection with transfer of chemical substances dangerous for the environment). Hazardous environmental properties, such as unsatisfactory biodegradability, can be found for many tensides. It resulted in a more complete product information about the environmental effects which could serve as a basis for product choice. During this period the amount of petroleum solvents in car cleaning products decreased to more than half the amount.

2.2 Communications and outreach

The survey report (1) was given much attention in the media due to a press conference arranged by the Inspectorate, which contributed to increasing public knowledge.

Local municipal authorities in the municipalities increased their knowledge in the product field and showed a growing interest in car care products. Many local authorities carried out control activities and supported users, retailers and consumers.

In collaboration with the Swedish Consumer Agency the Inspectorate produced a brochure on car cleaning aimed for the public. The message in the brochure covered advice on environmentally sound car cleaning and product selection, and pointed out the importance of using as mild and as low an amount as possible of chemicals when cleaning the car in the street or yard. The brochure was distributed to a large extent by the petrol station companies.

The Inspectorate's knowledge in this product field was also utilized in the work with criteria on ecolabelling of car care products.

3 CONCLUSIONS

A combination of activities, such as increase of knowledge and information, authority requirements on the supplying companies together with the demands from users, workers as well as consumers, has shown to be an effective way to generate less hazardous products representing less hazards to health and the environment.

REFERENCES

1. Car Care Products - Possibilities for Changes. A Pilot Study. Report from the Swedish National Chemicals Inspectorate, January 1990 (in Swedish).
2. Environmentally Designed Degreasing of Motor Vehicles. Report from the Swedish National Chemicals Inspectorate, December 1990 (in Swedish).
3. Car Care Products - A Supervision Project. Report from the Swedish National Chemicals Inspectorate, March 1992 (English summary).