

Development of Environmentally Conscious Products

Control and Reduction of Content of Substances of Concern

We at Toyota Industries are working to manage and reduce substances of concern in product design and development. Owing to the differences between our automobile and industrial businesses, the content of environmental regulations that apply to these products also changes. Reflecting the rapid enactment of environmental regulations aimed at automobile-related products and owing to the acknowledgment of the fact that such regulations will eventually be applied to other products, we are promoting a company-wide effort to manage and reduce the content of substances of concern in our products.

Complying with EU ELV^{*1}

■Investigation of Use of Four Banned Substances and Use of Alternatives

Under the EU's end-of-life vehicle directive (EU ELV), the use of lead, mercury, cadmium, and hexavalent chromium are to be banned in vehicles sold from July 2003. In preparation for this, we examined our own use of these substances and their content in our vehicles, engines, compressors, and electronic components as well as the use of alternatives. The results revealed no instances that would constitute an infringement of regulations at the time of their enforcement.

We are currently examining what effect the use of alternatives have on capital investment and product pricing and will make necessary design adjustments and switch to use of alternative substances in 2002.

■Company-wide Effort to Eliminate Use of Hexavalent Chromium

Of the four substances prohibited under EU ELV, the phasing out of hexavalent chromium will require the most stringent effort. Hexavalent chromium is widely used throughout the company in the chromate surface treatment of zinc plated nuts and bolts.

As a comprehensive effort against the use of hexavalent chromium, the headquarters took the initiative to examine our eight surface finishers and suppliers of plating solutions regarding the use and content of hexavalent chromium and presented the results to various departments within the company via the intranet. In addition, we had our hexavalent chromium solution suppliers give presentations three times on the latest developments in plating technology. The talks were attended by twenty-nine engineers in concerned departments.

■Presentation on Complying with EU ELV

We attended a total of five information sessions on responding to EU ELV held by our customers in FY 2001. We also held a total of eleven similar presentations in-house, directed at our employees in our automotive-related departments.

Seminars on Environmentally Conscious Design

As a follow-up to the seminars of FY 2000 we held environmental seminars, including presentations by guest speakers, on two occasions. The guest speakers gave presentations on the latest industry trends, including regulations on the use of hexavalent chromium and the development of lead-free soldering, etc., which proved to be very useful to the designers and engineers of automotive and auto component technical departments.

1st Seminar: July 2001	"Surface Treatments and Heat Treatments of Environmentally Conscious Automobiles" (58 attendees)
2nd Seminar: November 2001	"Environmentally Conscious Electronic Components" (77 attendees)



Environmental Seminar

Providing Employees with Information on Environmental Regulations via the Intranet

We established a Web site concerning environmental issues on the company intranet to allow our designers and engineers to view the results of the activities of the Product Technology Subcommittee in FY 2000. We regularly summarized our findings on environmental trends pertaining to our products and published them in five separate news reports during FY 2001. Company employees may also access information concerning such environmental seminars and the results of our surveys on surface finishing companies.

Sharing of Environmental Information over the Intranet



*1 EU's end-of-life vehicle directive (EU ELV): EU directive for reducing environmental impact and improving recyclability when scrapping used vehicles