gtz PROKLIMA

Phasing Out CTC

By C.J. Mathew

German Technical Cooperation (GTZ), helps industries to identify alternatives to carbon tetrachloride. Carbon tetrachloride (CTC) finds applications across a vast range of industry segments like the manufacture of capital goods, the maintenance of equipments, offset printing and the textile industry etc. Its solvency power, its non-flammability and low cost have made it a very popular solvent.

Why phase out?

But once evaporated, it rises up high in the atmosphere and on reaching an altitude of approx 15km; it begins destroying the ozone later. Ozone's unique physical properties allow it to act as our plant's sunscreen, providing an invisible filter for protecting all life forms from the sun's damaging UV-B (ultraviolet) rays. UV-B can cause diseases such as skin cancer and eye cataract. The rays also cause to suppress the immune system in human beings. Besides, it also has harmful effects on fish and other ocean life, causing an imbalance on the aquatic ecosystem.

Ever since CTC came into industrial use there have been serious health concerns. High exposure to CTC can cause damage to the lungs, liver, kidneys, and the central nervous system. CTC has proven to cause cancer in animals and is possibly carcinogenic on humans.

The Montreal Protocol To preserve the ozone layer, India along with 191 countries across the globe decided to phase out ozone depleting substances such as CTC and CFCs under the Montreal Protocol. The Government of India (GoI) ratified the Montreal Protocol on Substances that Deplete the Ozone layer in 1992. The Ministry of Environment and Forests (MoEF) has the overall responsibility for implementation of the Montreal Protocol in India. In this task GoI is assisted by World Bank and bilateral partners are France, Germany and Japan. Within this framework, German Technical Cooperation (GTZ), mandated by France and Germany, provides assistance to industries in phasing out CTC consumption.

The accomplishment of reduction targets may technically be achieved by regulatory interventions. However, a guiding principle of the Implementation of the Montreal Protocol is to ensure that, in the course of change over, no undue burdens arise for affected industries.

GTZ-Proklima is an initiative to realize the successful change over. It analyses the industrial requirements, identifies suitable alternatives and evaluates their cost and performance. In essence, GTZ-Proklima endeavours to enable small scale industries to take informed decisions on the substitution of CTC.

GTZ-Proklima has already lent a helping hand to the textile industry where CTC is used as a fabric stain remover. It has identified and tested 30 alternative stain removers and assessed their performances and cost effectiveness. The results confirm that for fabric cleaning ample choice of replacements, costing less than CTC, exists. GTZ-Proklima has shared the results with the textile industry through seminars, brochures and a dedicated website. A training package aimed at enhancing worker's skills in handling alternative stain removers, is currently under preparation.

Future

"Let's remember that the future of our planets as well as humankind is in our hands." As we have moved into the twenty-first century, it becomes clearer that in order to improve living conditions, we must protect the natural environment and resources that allow us to survive on earth. By permitting to continue the practices devastating environment, we are giving our children a bleak and hazardous future.

The depletion of the Ozone layer and its consequences on earth is a major environmental and economic issue we face today, let us give this critical matter a deep thought. Our small act of "Cleaning for the Environment" can heal our Planet Earth.

Source: Vyavasaya Keralam, May 2007

National CTC Phase-out Plan, GTZ Proklima, Delhi
http://www.ctc-phaseout.org/