



Mission earth: Cutting CTC use high on agenda

by Atindra Bose

Increase in industrial production of substance such as solvents are destabilizing the protective blanket of the atmosphere - the ozone layer. The layer fits snugly round the earth's surface and filters hazardous UV-B rays from the sun's radiation.

In order to save the further depletion of the ozone layer, India along with 189 countries has agreed to phase out all such substances under the Montreal Protocol.

India is phasing out such harmful solvents such as carbon tetrachloride (CTC) which is harmful to health and environment. The production of CTC has already been reduced and by the end of 2009 it will no longer be available. CTC is a solvent used across a wide range of industries. High solvency, low cost and non-flammability have made it a very popular solvent in industries such as offset printing, metal and engineering, electroplating, PCB assembly, fire extinguishers, oxygen and gas bottlers, power stations, RAC, steel plants, printed circuit boards, electrical contractors, diamond polishing and spinning mills. CTC is probably used in many other areas as well.

However, CTC is closely associated with health risks. Its inhalation leads to dizziness and nausea. It is classified as a possible carcinogenic. It also rises high in the atmosphere and depletes the ozone layer. Such depletion threatens the life on the earth.

Thousands of industries need to rapidly substitute CTC with suitable alternatives. GTZ-Proklima, in collaboration with Textile Committee, has identified and assessed more than 30 substitute stain removers for the textile industry and has disseminated the findings. Its "Solvent Alternatives" booklet present non-ODS solvents available in the market along with properties and health hazards associated with their usage.

GTZ-Proklima has initiated operations in Gujarat. Awareness seminar for industries are being conducted with the industrial associations and large industries. Snapshots of industries taken prior to seminar confirmed the use of CTC in metal, engineering and any other sector. Depletion of ozone layer has social, environmental and economic impact. The UV-B radiation can affect plant growth and productivity. Phytoplankton are microscopic plants that form the basis of the marine food chain. These are particularly susceptible to increase in the UV-B radiation. Most importantly, high exposure levels of UV-B radiation can weaken the human immune system and can cause skin cancer, cataract and eye cancer.

Let us join hands to find solution to this global problem that threatens the very existence of life on the earth.

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