Making protection effective-
Using Chemicals policy principles

Women and future generations are exposed to man-made chemicals everywhere and on a daily basis. These chemicals can be found in everyday consumer goods such as cleaning products, clothing, cosmetics, furniture and toys. They are added to products for technological reasons: to prevent computers from catching fire, make nail polish dry faster or stop paint from dripping. But they pervade our lives and even our bodies, and many are hazardous to human health and the environment. More than three hundred fifty synthetic chemicals have been detected in the human body.

Since the spread of toxic chemicals became apparent, scientific evidence has linked a variety of substances to diseases such as allergies, asthma, reproductive disorders and cancer, especially affecting women and children. Yet, the contamination of humans with such chemicals is only the tip of the iceberg. Before they enter the human body, they have been present in the environment for a long time already where they accumulate in animals and via the food chain.

Chemicals need to be regulated to protect humans and the environment from their long-term health effects. Any policy should, firstly, aim at generating information about chemicals and secondly, at reducing hazardous chemicals in and eliminating them from consumer products. This would reduce their use in manufacturing processes and consequently, their spread into the environment. In order to achieve this goal, chemicals policy and legislation needs to incorporate the following chemicals policy principles.

The Precautionary Principle- *When in doubt, play safe*

Research linking hazardous man-made chemicals to various diseases only shows the tip of the iceberg. In fact, the majority of chemicals used in everyday consumer products have never been investigated for their health and environment effects. This is crucial when we consider that the negative health effects of a substance may only become evident through the eventual illness of unsuspecting users. In addition, it is often very difficult to link exposure to a particular chemical at a given moment in a person's life to the disease that they are suffering from.

At the Rio Earth Summit in 1992, world governments agreed that the best way to protect the environment and humans from pollution is to act in a preventive manner by applying the precautionary principle. Principle 15 [i] of the Rio Declaration states that ***when there is a threat of serious and irreversible damage, accompanied by a lack of full scientific certainty, measures to prevent***

environmental damage should not be postponed. The principle is applied in both health and environmental spheres and offers an effective basis for action on hazardous chemicals. By the time science has generated bullet-proof evidence, if ever, that some hazardous chemicals cause irreversible damage to women's health and that of future generations it might be too late.

The Substitution Principle

It seems almost too evident to state it, but a chemical that is hazardous should not be used in a production process or end up in a consumer product. One way to address this problem is to replace a hazardous chemical by safer alternatives. Substitution can encompass chemical substitution, material substitution or functional substitution. The principle of substitution has been adopted in legislation on the European and the international level (e.g., in the new EU chemicals legislation REACH and the Stockholm Convention on Persistent Organic Pollutants). The substitution principle is one of the most effective ways to protect women and future generations from hazardous chemicals, because it targets the spread of hazardous chemicals at source.

The Polluter Pays Principle

Polluters need to take responsibility for the harm they cause to the environment and human health. In reality, however, society still ends up with the bill for cleanups of pollution. Chemical producers should be held legally and financially liable for the damage they cause to the environment and society. In this context, producers need to be required to "internalize" the costs for polluting and to make sure they use the safest available substance and technology. The EU has enshrined the polluter pays principle in EU legislation.

The Right to Know Principle

One of the main problems associated with the spread of hazardous chemicals is that we have very little or no data about their effects on environment and human health. We are exposed to them without our knowledge or consent.
Since the 1920s, when chemicals production began to develop into a major industry, companies have been able to produce without giving information about the chemicals they produce and their application in consumer goods. The little information they were required to pass on to the authorities was not disclosed to the public. The Right to Know principle ensures the public has access to such information. It thereby places industry activities under public scrutiny. In the EU, REACH gives consumers the right to find out about hazardous chemicals. At the UN level, the Arhus Convention and the Stockholm Convention on Persistent Organic Pollutants (POPs) give the public the legal means to find out about environmental pollution.

[i] United Nations. 1992. Rio Declaration on environment and development. [On-line] available at: http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=78&ArticleID=1163&l=en