COPENHAGEN CHEMICALS CHARTER

CHEMICALS UNDER THE SPOTLIGHT
INTERNATIONAL CONFERENCE
COPENHAGEN, 27-28 OCTOBER 2000

European Consumers´ Organisation

European Environmental Bureau

Danish Consumer Council

Danish Society for the Conservation of Nature

Danish Ecological Council

We – the signing organisations – propose the following five demands for the future EU chemicals policy

The 5 key demands for a better EU chemicals policy

1

A full right to know – including what chemicals are present in products

2

A deadline by which all chemicals on the market must have had their safety independently assessed. All uses of a chemical should be approved and should be demonstrated to be safe beyond reasonable doubt

3

A phase out of persistent or bioaccumulative chemicals

4

A requirement to substitute less safe chemicals with safer alternatives

5

A commitment to stop all releases to the environment of hazardous substances by 2020

Organisations supporting the five demands:

Published by:
The European Environmental Bureau (EEB), The European Consumers' Organisation (BEUC), The Danish Consumer Council, The Danish Society for the Conservation of Nature and The Danish Ecological Council

Text: Mette Boye, The Danish Ecological Council.

The production of this publication is supported by the European Environment Agency.

1

A full right to know – including what chemicals are present in products

The public has a right to know how and where hazardous chemicals are used and what chemicals are present in products, including their packaging. This information will help individuals to make informed personal choices about which products they wish to buy. Today, such information is generally not available because of the serious lack of data on chemicals and their effects on human health and the environment. As a consumer it is not possible to get exact information on what chemicals are used in which products. Consequently it is often impossible to make informed choices and avoid products containing chemicals that are suspected of causing harm to our health and/or the environment.

Full right to know, however, also means that as citizens in democratic countries we have the right to know how decisions are made and be certain that all interests are balanced. Today, the chemicals industry has an extensive and unjustifiable influence on EU chemicals policy compared to other stakeholders. Due to lack of resources, consumer and environmental organisations are not able to participate in the decision-making process on equal terms with industry.

Data is needed on chemicals

In order to provide citizens and consumers with information on chemicals it is necessary to promote data gathering on chemicals.

In general, data is missing on most chemicals on the European market. Over 100,000 chemicals were registered in the European Inventory of Existing Commercial Substances (EINECS) in 1981. The current estimate of marketed chemicals varies from 20,000 to as many as 70,000 (Danish Board of Technology, 1996). The effects of the man-made chemicals that surround us in our daily lives are by and large unknown. Most chemicals have never been assessed in terms of their harmful effects on health and environment. It has been estimated that for more than 85% of the 2,500 High Production Volume Chemicals (i.e. substances used in volumes greater than 1,000

tonnes per producer/importer per year) little or nothing is known (Allanou et Al., 1999) and it is likely that the situation for chemicals produced in lower volumes is worse.

Currently chemical substances are generally tested and classified one by one, based on available data only. If available data do not allow a judgement as to whether or not a substance should be classified as dangerous, no obligation exists for producers and importers of existing substances (i.e. substances already on the market before 1981, which is about 99% of all substances) to generate new data.

Data gathering on all relevant chemicals must be promoted in order to provide information for consumers, as well as for authorities, scientists and downstream users of chemicals and chemical products.

Speed up data gathering - make use of modelled data

Making use of modelled or predicted data could be a partial solution to the global lack of data on chemicals. If no experimental data are available, the properties of chemicals can sometimes be predicted by comparative studies of chemicals belonging to the same structural groups. These studies could be more or less simple comparisons based on “common knowledge” among chemists about closely related chemicals (group classification). They could also be more complicated calculations based on models derived from databases with data on large numbers of chemicals. These calculations are based on the so-called QSAR- model. QSAR means: Quantitative Structure-Activity Relationship.

The chemical industry, particularly the pharmaceutical industry, already applies QSAR screenings for many different purposes, and some authorities have also used QSAR for predicting properties of non-assessed chemicals. In fact, numerous relevant QSAR-results already exist for non-assessed chemicals, and many of these data predict that non-assessed chemicals *would* be classified dangerous if they were assessed.

Not every chemical can be tested by QSAR. It mainly works for single organic substances, and not all effects can be modelled. However, it is possible to compute a range of effects such as persistence, ability to bioaccumulate, toxicity to fish and ability to cause cancer with a quite high degree of certainty for up to 50 – 60,000 organic chemicals. In the absence of experimental data, these chemicals should be classified according to their predicted values.

Moreover, efforts should be made to predict the effects of chemicals that do not fit into the QSAR models by grouping chemicals and comparing structural relationships. In doing so chemicals should generally be classified as the most dangerous of the tested substances in their group. These exercises may cause some chemicals to be over-classified, but in consideration of consumers and the environment, industry should be able to prove these chemicals safe beyond reasonable doubt. In this respect such an approach may be seen as a partial reversal of the burden of proof.

It is important to note, however, that predictions can only be used to identify possible hazards, and not to draw the conclusion that no hazard exists. Moreover, the use of QSAR should not cause a delay in the production of experimental data.

In addition, it is necessary to improve the current self-classification system, under which about 4,000 chemicals have been classified and labelled by the importer or producer under his/her own responsibility. If all available quality controlled QSAR data were made publicly accessible, producers would be encouraged to improve their self-classifications on the basis of these data and thereby more data would be generated.

Public access to information on chemicals

We are exposed to hazardous chemicals via many different sources. One very influential source is pollution. The general public is often unaware of industrial pollution, and therefore cannot demand specific actions to reduce exposure. In the US however, where releases from point sources are being measured and published in the so-called Toxic Release Inventories (TRI's), such actions have led to reduction of emissions. The Toxic Release Inventories are publicly available databases of information on releases and transfers of toxic chemicals from manufacturing facilities, and their primary function is to inform communities, citizens, employees and industry of potential chemical releases and environmental waste generated by facilities in their community.

Modelled on the USA's Toxic Release Inventories, the EU has recently decided to create a harmonised EU register of pollution from major industrial plants: - "The European Pollutant Emission Register" (EPER) in the hope that this will lower industrial pollution in Europe. NGOs have welcomed this initiative, but want it to cover a sufficiently wide range of chemicals.

However, local sources of pollution are not the only way in which we are exposed to pollution. Increasingly, we are exposed to man-made and possibly hazardous chemicals through the products we buy, eat and wear. In the last decades the focus on environmental problems has

partly shifted from a main focus on point sources, wastewater discharges and toxic smoke to a more integrated approach looking at diffuse emission through the whole lifecycle of products containing hazardous substances.

The new EU chemicals policy must also ensure that hazardous substances are not present in every-day products, or have to at least give consumers the possibility to make informed choices about the products they buy, including their packaging. Today a limited number of products on the European market have their chemical content on potentially hazardous substances independently checked. These are the eco-labelled products with e.g. the European flower, the Nordic Swan or the German Blue Angel. Eco-labelled products comply with requirements regarding their chemical content, agreed by all stakeholders including environmental NGOs and therefore choosing eco-labelled products is a way of avoiding hazardous chemicals.

There are several ways of providing better information to the general public as well as downstream commercial users of chemicals. One way for the authorities to provide information on hazardous chemicals and promote the substitution of hazardous chemicals is to publish a so-called Observation list or a list of Undesirable substances as a signal to industry and users. So far Norway, Denmark and Sweden have published such lists. The so-called Product Registers also make it possible for the authorities to offer a collection of information on chemical substances to users and industry. The aim of Product Registers is to collect, register and inform about chemical substances contained in products that are being imported, produced or used. Product Registers can be a tool within the framework of an Integrated Product Policy and can contribute to increased awareness of product related pollution.

The forthcoming EU chemicals policy must ensure that the relevant information on hazardous substances, which are being discharged to the environment or contained in products, is generated and is available to the public. To that end, the use of the internet incorporating different levels of information, stating the uncertainties and providing also for alternative solutions and products, can be a very useful tool.

Transparent decisions – public participation

As it was mentioned earlier, in the new chemicals policy, transparent decisions and public participation need to be ensured. Changes in legislation and administration should guarantee balanced and active participation of all stakeholders including the environment and consumer NGOs at all levels of the decision making process. Furthermore, transparency in procedures, decisions and in a continuous and comprehensive communication between producers, citizens,

scientists, regulators and policy makers, is a prerequisite for the public to participate and make informed choices.

To sum up, the new EU chemicals policy should include efforts to assure the public's right to know what chemicals are present in the products we buy, including their packaging. Today we are in the unsatisfying situation that little or nothing is known on the effects of more than 85% of the 2,500 high production volume chemicals and it is likely that the situation for chemicals produced in lower volumes is worse. The EU chemicals policy should speed up data gathering and one way of doing this is to make use of modelled data. Data on chemicals must be generated and must be accessible to consumers, authorities and downstream users of chemicals. Information on chemicals can also be provided, via Toxic Release Inventories, better labelling of products, product registers, lists of undesirable substances and searchable internet pages.

2

A deadline by which all chemicals on the market must have had their safety independently assessed. All uses of a chemical should be approved and should be demonstrated to be safe beyond reasonable doubt

In the latest years reports from the US Environment Protection Agency (EPA) and the European Chemicals Bureau, ECB, have stated that only 14 % of all substances used in the greatest quantities had the minimum set of safety testing. For many high volume chemicals data are lacking all together (Swedish Ministry of Environment, 2000). The lack of data on chemicals is a fundamental flaw in the current EU system.

Various initiatives for providing data on chemicals have been taken. The US environmental authorities have initiated a programme that aims to provide data for 2800 high production volume chemicals before 2004. Industry is responsible for the data gathering. The International Council of Chemicals Associations (ICCA) has taken an initiative to provide data for about 1000 substances before 2005. And in addition the European Chemicals Industry Council (CEFIC) has agreed to contribute to a voluntary initiative to provide hazard assessments of the data being published.

Industry's voluntary commitments to provide data and hazard assessments on chemicals are welcomed. However, the protection of consumers and the environment in the EU should not rely solely on voluntary schemes. A better approach would be to set up legally binding deadlines implying that all chemicals not assessed by the deadline will be removed from the market until a proper assessment is in place. The question is, for how long should we accept non-assessed chemicals on the market and how much time should we offer the chemicals industries to get the assessments done? A reasonable deadline could be the year 2005 for all HPV chemicals and 2010 for chemicals produced in lower volumes.

Moreover, data requirements for existing substances must be the same as for new substances. Consumers who buy the chemical must be able to have the same information about the products no matter how long the products have been on the market

Approval schemes

Today most chemicals are regulated via a “negative list system”. Substances are marketed freely unless authorities impose a ban or certain restrictions. Currently pharmaceuticals, pesticides, biocides and food additives must be approved before they can be placed on the market. In the new chemicals policy a number of additional product groups should be marketed subject to approval schemes. Approvals should generally be given for specific time periods and specific uses only. The first targets should be products of concern for which substitution by more environment and consumer friendly substances is already possible (e.g. detergents, fragrances, cosmetics, paints, plastics and varnishes).

Approval schemes require many resources within the administrative system, and these schemes as such may not also guarantee that no hazardous chemicals are marketed. On the contrary, the schemes may have the effect of justifying the use of hazardous substances. However, one positive consequence of the current approval schemes is that the total number of marketed chemicals in each product group can be reduced considerably, even by a factor of 10, without restricting the users’/consumers’ freedom of choice between different chemical ‘options’ (Bro-Rasmussen, 1999). Moreover, adequate data on both hazards and production volumes should be a precondition for authorising chemicals, and effective approval schemes will make the application of both the principle of precaution and the principle of substitution feasible when products are evaluated. (The principle of substitution has already been included in the Biocides Directive, where comparative assessments must be performed to establish which chemicals are best for any purpose).

The new chemicals strategy should include efforts to design flexible and effective authorisation bodies with adequate resources allocated to the relevant authorities. In doing so, it is important to limit the transition period. The backlog will not be solved automatically unless a deadline is set, by which all chemicals must be reviewed by the authorising bodies.

To sum up, we cannot continue to accept the fact that most of the chemicals on the European market are non-assessed. A reasonable deadline could be the year 2005 for hazard assessments of all HPV chemicals and 2010 for chemicals produced in lower volumes. Moreover, the EU chemicals policy should include a gradual expansion of the approval scheme approach.

3

A phase out of persistent or bioaccumulative chemicals

Persistent and bioaccumulative chemicals are of special concern, as these chemicals remain in the environment and organisms for a long time. Persistent chemicals are long-living, stable chemicals in the environment in the sense that they degrade slowly. A persistent substance is thus highly resistant to the various processes in the environment, which would lead to degradation of other less resistant substances. A substance is bioaccumulative if it is readily available for uptake by other living organisms, but is only slowly metabolised or otherwise eliminated. The substance can thereby be accumulated in organisms in higher concentrations than in their environment or food.

Persistent and bioaccumulative chemicals are still in routine use all over the planet and increasingly found in human bodies. A recent report from the World Wildlife Fund shows that over 350 of these chemicals can now be found in the human body (WWF-UK, 1999). When it comes to persistent and bioaccumulative chemicals – and chemicals in general – it must be kept in mind that some parts of the human population are far more susceptible to chemical exposures, including developing foetuses, babies, children and those with certain genetic variants.

The current situation in which more and more persistent and bioaccumulative chemicals are being found in human beings and animals all over the world is unacceptable. A phase-out of all persistent and bioaccumulative chemicals would reduce the continued contamination of our bodies and our environment.

A main objective of the new EU chemicals strategy should be to aim for no emissions, discharges and losses to the environment with regard to dangerous substances. In line with the precautionary principle, all substances that are supplied to the general public or released to the natural or working environment should be inherently safe beyond reasonable doubt. In these cases focus should always be on hazard reduction rather than exposure control. In closed systems or where the properties of certain substances are an essential function in a specific application, it maybe reasonable, in some cases, to accept the use of certain dangerous chemicals. However, even closed systems have weaknesses. For instance the group of hazardous chemicals called PCBs

(Polychlorinated Biphenyl's) have generally been used in "closed" systems, but they are widespread in the environment today.

The new strategy should ensure that persistent and bioaccumulative substances are not released to the environment. Likewise, skin sensitizers, CMRs (Carcinogenic, Mutagenic, toxic to Reproduction) and other substances that are hazardous to human health should not be found in consumer products. These substances should be subject to total or partial bans based on existing knowledge of their properties. Chemicals to be regulated in this manner could be selected by setting up general cut-off criteria for persistence, ability to bioaccumulate and relevant adverse toxic effects. Here, experience can be drawn from the ongoing OSPAR DYNAMEC process of selecting chemicals, which are to be regulated according to the OSPAR Convention, as well as from current developments in the national chemicals policies of the Netherlands and Sweden, where such efforts are already in progress.

To sum up, the new strategy in line with the precautionary principle, should ensure that chemicals with high persistence or bioaccumulative effects should not be released to the environment, unless their properties are an essential function in a specific application. or Likewise, skin sensitizers, CMRs and other substances that are hazardous to human health should not be found in consumer products.

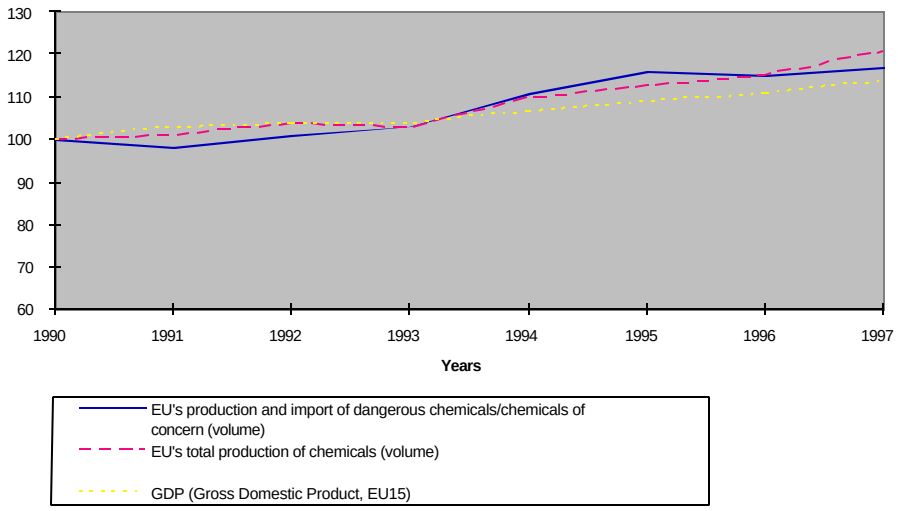
4

A requirement to substitute less safe chemicals with safer alternatives

The global consumption of industrially produced chemicals has skyrocketed over the past decades. In 1930 the production of organic chemicals was approximately 1 million tons a year. Today it is about 400 million tons a year (EEA and UNEP, 1998). Europe is the largest producer of chemicals worldwide, accounting for about one third of the world's production. If current trends and policies continue, there could be a growth of 30% to 50% in chemicals output for most of the EU countries by 2010 as a result of increasing economic activity, including road transport and agricultural production (EEA, 1999).

A first step on the way to a sustainable use of chemicals could be to reduce the production of hazardous chemicals , something which can also inspire chemicals producers to search for alternative substances and substitute with less hazardous substances.

The Western European chemicals production has been growing roughly in line with GDP until 1993 when it began to grow faster. The figure below shows that the hazardous chemicals' share of GDP has been rising in the period of 1990-97. European production and import of "dangerous chemicals/ chemicals of concern" compared to total chemicals production and GDP. (EEA, 1999).



In the new EU chemicals policy, a requirement should be to make use of the principle of substitution, which aims to substitute less safe chemicals with safer alternatives. It is important that once a less harmful substance or material has been acknowledged, the old substance or material is no longer allowed. Today, industry is under no obligation to use the safest available chemicals. The list of “undesirable substances” mentioned under bullet point 1 can also be a tool to avoid use of the most hazardous chemicals.

The new chemicals strategy should devise new ways of integrating the substitution principle into practical legislation and administration. Practically this can be done by using approval schemes for specific product groups e.g. detergents, through an Integrated Product Policy and when providing public information, but it is still very important that producers and importers introduce in their everyday practises the principle of substitution.

To sum up, the new EU chemicals policy should include efforts to make use of the principle of substitution. Today industry is not required to use the safest chemicals available and the new EU chemicals policy should make sure that the safest possible chemicals – or techniques – are used.

5

A commitment to stop all releases to the environment of hazardous substances by 2020

The chemicals policy of the EU should enable Member States to comply with international conventions. However, the “Generation target” – an important international obligation – has not been incorporated into the chemicals policy at the EU level although this is a prerequisite for its success. The “Generation target” is a commitment to stop all releases of hazardous substances by the year 2020 and it was agreed on at the 4th North Sea Conference of Ministers in 1995 in Esbjerg:

“The Ministers agree that the objective is to ensure a sustainable, sound and healthy North Sea ecosystem. The guiding principle for achieving this objective is the precautionary principle. This implies the prevention of pollution of the North Sea by continuously reducing discharges, emissions and losses of hazardous substances thereby moving towards the target of their cessation within one generation (25 years) with the ultimate aim of concentrations in the environment near background values for naturally occurring substances and close to zero concentrations for man-made synthetic substances”.

In 1998 the generation target was also included in the OSPAR convention of the North Atlantic.

In order to determine exactly which substances are “hazardous substances” and how to set priorities for their handling, a “dynamic selection and prioritisation mechanism” (DYNAMEC) has been initiated under OSPAR. The DYNAMEC procedure is an automated selection process, which uses previously agreed criteria on persistence, toxicity and ability to bioaccumulate. Unfortunately the DYNAMEC procedure is not legally binding and currently the DYNAMEC concept is not reflected in EU policy.

In 1997 the Swedish government stated that the objective of the Swedish environmental policy is a non-toxic environment – thereby in line with the above generation goal. To achieve the

environmental quality objective of a non-toxic environment, the Swedish government issues the following guidelines on chemicals policy:

1. New products introduced onto the market should be largely free from:
- Man-made organic substances that are persistent and liable to bioaccumulate, and from substances that give rise to such substances
- Man-made substances that are carcinogenic, mutagenic and endocrine-disruptive – including those which have adverse effects on the reproductive system
- Mercury, cadmium, lead and their compounds

2. Metals should be used in such a way that they are not released into the environment to a degree that causes harm to the environment or human health
3. Man-made organic substances that are persistent and bioaccumulative can occur in production processes only if the producer can show that health and the environment will not be harmed

In June 2000 the generation target was included in the EU's water framework directive.

To sum up, the new EU chemicals policy should include efforts to enable Member States to comply with international conventions. The generation target must be incorporated into EU chemicals policy and supported by the new EU chemicals policy.

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