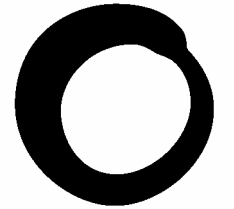


Briefing



**Friends of
the Earth**

Risky Chemicals: A guide for retailers and other downstream users

Friends of the Earth inspires solutions to environmental problems which make life better for people

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1. Introduction

We are exposed to industrial chemicals in our homes all the time, whether we like it or not. In recent years it has become clear that we know little about the safety of most of these chemicals. We continue to be exposed to chemicals that accumulate in and contaminate our bodies, and there are a range of health problems which may be associated with chemical exposures. The current regulatory system fails to protect either our health or the health of the environment.

The Safer Chemicals Campaign

This briefing explains the background to our “Safer Chemicals” campaign. As part of this work, we are asking retailers to sign a pledge committing to avoiding risky chemicals. Below we outline Friends of the Earth’s target groups of chemicals that retailers (and consumer product manufacturers) should be investigating with a view to eliminating their use in products as much as possible.

This briefing does *not* list of all problem chemicals – many chemicals not mentioned here are already the subject of legislation for example or relatively well understood (such as proven human carcinogens). Rather we are trying to shift attitudes towards a more precautionary approach, here focussing on those chemicals that persist in the environment, build up in the body (bioaccumulation), and/or can disrupt hormonal systems. Some pesticides also feature since many show hormone-like properties or act on the nervous system and are persistent. Our target groups of chemicals have emerged at the top of our priority list because we have followed ongoing research and debate in recent years. In most cases governments have already voiced concerns about these chemicals.

Neither can the list be regarded as complete. Because of the lack of knowledge about the effects of very many chemicals in use, it is of course possible that future research will reveal other chemicals to be hazardous. But for the moment, the groups of chemicals mentioned in section 4 of this briefing are those where currently we feel there is sufficient cause for concern to warrant voluntary action on their presence in consumer goods. We would be very interested to receive feedback from retailers about these lists since the list could evolve, and we are aware that our knowledge of chemicals in use in marketed goods is not complete.

Retailers may well want to keep under review all the chemicals in their products, and we include here a guide to important lists and categorisations of chemicals (Section 5). A more detailed briefing on chemicals from Friends of the Earth, cross-referencing various official lists and sources of information, is planned for the autumn 2002.

Are chemicals a problem?

Chemicals and their regulation are in focus at the moment. A number of research findings have come together recently, along with the realisation that chemicals are not well controlled and that more should be done to reduce the hazards.

Firstly, recent studies have highlighted that older chemicals (those that have been on the market before 1981) are *not* well regulated. Even for many high volume chemicals (those produced in quantities over 1000 tonnes per year), basic safety tests may not have been carried out¹. This leaves a considerable gap in our knowledge of the toxicity of many chemicals in everyday use. The European Commission has acknowledged that “*The lack of data on existing chemicals is a global concern*”².

Second, scientists are now recognising that some synthetic chemicals that are long-lived and which accumulate in bodies can mimic natural hormones (“endocrine disruptors”). Since the hormonal systems are extremely delicately balanced and affect such important functions as the development of the brain and reproductive functions, there is cause for alarm at our exposure to these chemicals. At the

same time, there are real concerns about a number of hormone-associated illnesses; rates of testicular, prostate and breast cancers have all been rising in recent decades, and no one knows why.

Many pesticides are also persistent, meaning that many foodstuffs carry residues of pesticides – and very often more than one at a time. Certain pesticides have endocrine-disrupting properties; others have the potential to affect the immune or nervous systems. Although pesticide use is regulated, the residue limits set are not necessarily “safe” or may be exceeded, and in any case there is great uncertainty about the long-term effects of exposure to a multiplicity of pesticides³.

Because many problem chemicals bioaccumulate, the developing child is exposed to them whilst in the womb via the placenta, and through breast milk⁴. Friends of the Earth believes that it is always best to breast feed a baby; the advantages to the immune system and general health are substantial. However, we are calling for chemicals which contaminate body fat or breast milk to be phased out, whether they are currently thought to be toxic or not. For example, PCBs, although now banned, are still present in humans and our food chain. Babies may be exposed to the PCBs in the womb or in breast milk, and this is believed to affect both physical and mental development⁵.

Finally, a report from Friends of the Earth (“Crisis in Chemicals”, updated⁶) predicts that over the next five to ten years or so scientific advances will enable us to identify individuals with susceptibilities to particular chemicals. This brings the prospect that industry will become much more vulnerable to litigation in the future.

Against this background, a broad review of chemicals policy is underway at EU level, although inevitably forthcoming legislation will take many years (decades) to implement. In the meantime, a number of chemicals pose a significant threat to human health and the environment and we are urging retailers to be aware of the problems and to develop strategies for action.

Environmental groups, including Friends of the Earth, have formulated a set of goals for chemicals policy, summarised in five points now known as the “**Copenhagen Charter**”. The Charter is further explained below in Section 3.

2. The Retailer Pledge

We consider that companies that use industrial chemicals, or sell them to consumers in their products, have a responsibility to ensure that they are using the safest possible chemicals. In reality, this means all retailers and consumer product companies should examine the chemicals that are being used in their products – whether sofas, baby toys or cosmetics. It should be in the best interests of retailers and product manufacturers to take a precautionary approach to the chemicals they use, and to encourage innovation towards safer chemicals and techniques.

In spring 2000 we began a survey of retailers and consumer product companies, asking about their use of a set of particularly risky chemicals, based on those that governments around Europe were highlighting as problems. The results of this survey have been revealing, demonstrating that many retailers have little idea what they are selling in their products or the potential problems that their use of chemicals could generate⁷.

We are now asking companies to sign a pledge committing them to take action on the issue. Marks & Spencer and the Co-op (CWS Retail) have become the first companies to sign the pledge. The Early Learning Centre, B&Q and Boots have also signed up.

Marks & Spencer stated that “...*action we have already undertaken and plan for the future is in keeping with the aspirations outlined in your Pledge*”⁸. At the time of signing the pledge, the Co-op stated: “*Following on from our strong policies that are delivering improved and reduced pesticide use,*

the Co-operative Group is committed to applying the same precautionary principle and controls to those chemicals that may have long term and adverse effects on health and the environment; chemicals that can be present in a wide range of food and grocery products.”

The pledge

The text of the pledge reads as follows.

“A responsible retailer would:

- *Using official lists, identify which man-made chemicals are suspected of building up in people’s bodies (bioaccumulation), or interfering with the hormone, immune or nervous systems.*
- *Produce a strategy to identify which of its own brand and branded products, including fruit and vegetables, contain these chemicals.*
- *Produce a timeline to phase out these chemicals from its own-brand products, with the aim of eliminating them in 5 years, starting with those chemicals which pose the greatest threat.*
- *Put pressure on manufacturers of branded products to do the same.*
- *Report publicly on progress on an annual basis.”*

Retailers who tackle the job now will be ahead of the game. Not only can retailers demonstrate a commitment to their customers and the environment but they will also be anticipating future EC legislation which will be designed to restrict uses of risky chemicals. We recognise that eliminating certain chemicals from supply chains may be a long process in some cases. Uncovering the presence, uses and/or sources of chemicals in goods through a supply chain is not necessarily a quick or easy task, and this preliminary work will need to be followed up with plans for action such as phase-out, looking for safer alternatives, and possibly needing negotiations with producers or others in the supply chain.

In general, Friends of the Earth cannot be absolutely prescriptive about the actions that retailers should take to ensure reduction and elimination of risky chemicals. For example, we may not even have information about their use or presence in particular articles due to lack of data or even because of secrecy by some commercial sectors. Some chemicals may be present because of historical or incidental contamination of the environment. So different chemicals may need different strategies. Becoming aware of problem chemicals in products used, sold or manufactured by a company is the first job.

A number of retailers have been able to develop strategies to tackle a broad range of chemicals⁹. Marks & Spencer, IKEA, CWS Retail (the Co-op) and B&Q are all companies who are already making considerable efforts to identify and phase out uses of chemicals of concern. Boots is also in the process of developing a chemical strategy.

Reporting on progress

Transparency (communication with the public) should be a key component of a strategy in our view, helping to inform consumers and building support for the actions. In addition to publication of the initial strategy (including on the Internet), we would recommend that retailers incorporate the following points in progress reports:

- The list of chemicals which have been highlighted for action in a) own-brand products; b) other products;
- The actions taken to ensure that the supply chain is aware of the concerns about the priority chemicals;

- Contact with Government – particularly the Department of Trade and Industry – to discuss concerns about poor regulation of chemicals;
- Measures taken to provide consumers with information on which chemicals are in the products they buy;
- Whether lists of chemicals (such as those in Section 5 in this briefing) have been reviewed for relevance, and the outcome;
- Monitoring results, where relevant (eg for pesticide residues);
- Achievement of any components of the strategy – and conversely a frank account of difficulties encountered or changes of approach.

3. What environmentalists want

In 1999 Friends of the Earth began a discussion with environment and consumer groups across Europe to formulate a common set of principles for the EU's chemical policy review. The agreed principles are now called the '**Copenhagen Charter**', and are supported by a large number of groups including WWF, the European Environmental Bureau (an umbrella group for European environmental groups) and the European Consumers Organisation BEUC (the umbrella group for consumer groups across Europe). The Charter states that there should be:

- 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.

The Charter has been welcomed by EU Environment Commissioner Margot Wallström, and supported by former Danish Environment Minister Svend Auken¹⁰. These five policies, taken together, would create a workable and precautionary regulation of chemicals, and greatly improve the situation:

- A right to know would ensure that all decisions are transparent, and that consumers and downstream users are allowed to make their own choices.
- A deadline for assessment of safety will get rid of the scandal of unassessed chemicals. We want safety assessment to use non-animal methods to the maximum extent possible¹¹;
- A phase out of persistent or bioaccumulative chemicals will stop the contamination of our bodies and environment, with chemicals having to rapidly break down into natural substances - with an exemption when these properties were an essential function in a specific application.
- Substitution will ensure that the safest possible chemicals - or techniques - are used.
- An end to releases of hazardous substances into the environment by 2020 will ensure that EU chemicals policy contributes towards the objectives of the internationally agreed OSPAR Convention, which aims to clean up marine pollution.

We believe that our proposals will create a forward looking, sustainable chemical industry - not an industry fighting to retain outdated, unsafe chemicals.

We are also working with animal protection groups such as Eurogroup for Animal Welfare (whose members include the RSPCA) to maximise the development and use of non-animal methods and ensure that the new regulations allow restrictions on chemicals with non-animal data¹².

The next few years will be crucial in the battle to get a safe regulatory system. It is too early to say which way the debate will go, though there are already some worrying signs. For example, it is clear that the chemical and other industries are still pushing for almost complete confidentiality about what chemicals are present in products.

4. Friends of the Earth’s target risky chemicals

Endocrine disrupting chemicals

As noted above, many chemicals are now under suspicion of interfering with the delicate balance of hormone systems. There is no absolutely definitive list of such chemicals, but the European Commission has produced a candidate list which provides a useful starting point¹³. Starting from a list of over 500 chemicals (not in itself exhaustive), an evaluation process resulted in a list of 60 chemicals with evidence of endocrine disrupting properties, plus high production volume and/or persistence, and of high concern with respect to exposure circumstances. A further 4 chemicals had similar properties, but were of medium exposure concern. A further 51 chemicals were considered to have *potential* for endocrine disruption, and were of high production volume and/or persistence. Many, but by no means all, of these chemicals are pesticides, some approved for use in the UK. Although the original document should be consulted for the full list (and it helpfully includes some information on uses of the chemicals), some notes follow on various groups of substances that are listed.

Pesticides

The EC priority list with respect to endocrine disruption properties (the list of 60 mentioned above) includes a number of pesticides. Pesticides on the list which are registered for agricultural use in the UK are atrazine, fentin acetate, dithiocarbamates (maneb, thiram, zineb), lindane, linuron, metam natrium and vinclozolin. Banned pesticides (in the UK at least), but which may still be present due to environmental contamination or on imports, on the list are: acetochlor, alachlor, chlordane, chlordecone (kepone), DDT, HCB, mirex, nitrofen, toxaphene. Such is the level of concern about the persistence of several of these chemicals that they are the subject of an international agreement for strict control or phase out¹⁴. Further information on the endocrine-disrupting pesticides is also available in a Friends of the Earth briefing¹³.

Bisphenol A

Bisphenol A is used in the manufacture of linings for food cans and lids, and is the main ingredient in polycarbonate plastics. Bisphenol A can imitate the female hormone, and low level exposures in developing female mice have been shown to advance their puberty¹⁵. Recent research has shown it can easily cross the placental barrier from mother to foetus in rats¹⁶, and it has also been found to contaminate human blood serum¹⁷. It has been estimated that 80-85% of food cans have linings containing bisphenol A, though there is no way consumers can tell which ones contain it. Recent Food Standards Agency research has shown that bisphenol A does migrate from can linings into food¹⁸. In January 2002 EU governments decided to classify bisphenol A as a “category 3” reproductive toxicant (causing concern) because of its possible effects on fertility, though the UK experts had proposed that it should be classified as category 2 (substances which “should be regarded as if they impair human fertility or cause developmental toxicity”)¹⁹.

Phthalates

Phthalates are a group of chemicals used as plasticisers in many PVC products (eg vinyl floor tiles, toys - though they are currently temporarily banned in toys designed to be put in the mouth of children under three), glues and inks and as solvents in cosmetics (they will not usually be listed on the label). Four commonly used phthalates, DEHP (a contaminant of house dust²⁰), DBP, BBP and DINP²¹ have been shown to disrupt the development of male sex organs in rats - they are all hormone disrupters, acting as anti-androgens (reducing or blocking male hormone action)^{22,23}. US researchers have found phthalates contaminating human urine, with the authors stating "*From a public health perspective, these data provide evidence that phthalate exposure is both higher and more common than previously suspected*"²⁴. A study on young Puerto Rican girls with premature breast development found that they had higher blood phthalate levels than unaffected girls²⁵. In January 2002 the EU decided to classify BBP as a category 2 fertility toxicant and a category 3 developmental toxicant¹⁹.

Alkyltin compounds

Alkyltin compounds such as tributyltin (TBT) (in the EC list) and dibutyltin (not in the EC list) are persistent and bioaccumulative chemicals used as preservatives, antibacterial agents and catalysts in the production of some plastics. They have been found in human blood²⁶ and liver²⁷, and have been shown to be hormone disrupters in human prostate cancer cells²⁸. They also have possible immunotoxic effects and cause hormone disruption to marine molluscs, making female whelks grow penises ('imposex'), devastating their populations²⁹. They have been used in anti-bacterial shoe insoles (eg Woolworths were selling them), and have been detected in nappies³⁰. The use of alkyltin compounds in marine anti-fouling paints will be globally banned from January 2003, under a new International Maritime Organisation convention³¹.

Alkylphenols

Alkylphenols are proven hormone disrupters - they can imitate the female hormone³². Only two specific chemicals are listed in the EC list (nonylphenol and 4-tert-octylphenol – with medium exposure concern), but there are concerns about other members of the group. There are safer substitutes available, for example alcohol ethoxylates. In January 2002 EU governments decided to classify nonylphenols as a category 3 reproductive toxicant in terms of both human fertility and development¹⁹. The EU 'existing chemicals' process will eventually ban the use of alkylphenols in many or most applications. However, this process is proceeding very slowly: for example, in December 2001 ENDS Report wrote of nonylphenol "*Six years have now passed since the chemical was placed on the EU priority list - and it could easily be another three before legislation is in force*"³³. Ahead of this prospect though, the Chemicals Stakeholder Forum in the UK has recommended a formal voluntary agreement to phase out nonyl- and octylphenols and their ethoxylates³⁴. Alkylphenol ethoxylates (eg nonylphenol ethoxylate, nonoxynol 9, octylphenol ethoxylate) are used as industrial detergents and in some paints and cosmetic products. Alkylphenol phosphites are used as UV stabilisers in some plastics.

Other chemicals with suspected endocrine disrupting properties

The following chemicals are not in the EC list: nevertheless evidence has accumulated with respect to their persistence and hormone mimicking properties.

Brominated flame retardants

Brominated flame retardants (BFRs) are a group of chemicals which are used as flame retardants in fabrics and plastics. Most textiles with flame proofing currently use brominated flame retardants. Most

brominated flame retardants are persistent and/or bioaccumulative, and several have been identified as endocrine disrupters. Contamination of human breast milk by one group, the PBDEs (polybrominated diphenyl ethers), is doubling every 5 years in Sweden³⁵ - one chemical in this group ('penta-BDE') is now being banned across Europe, but others are still in use³⁶. The World Health Organisation has called PBDEs "*not to be used where suitable replacements are available*"³⁷, whilst the Swedish and Danish Governments have called for PBDEs and another group to be phased out because of their accumulation in breast milk and blood³⁸. Research commissioned for the UK Chemicals Stakeholder Forum has identified penta-BDE, hexabromocyclododecane and tetrabromobisphenol A as substances of "greatest concern" with potential for exposure over a wide scale in the UK³⁹.

Artificial musks

Artificial musks are artificial fragrances added to perfumes, laundry detergents etc. There are two main groups, the nitro musks and the polycyclic musks, both of which are persistent and bioaccumulative and are widespread contaminants of the environment and the human body, for example being found in breast milk⁴⁰. The human body metabolises musk xylene to some extent, and one of the chemicals produced has been found to be a female hormone mimic⁴¹; two of the polycyclic musks have also been found to imitate the female hormone⁴². A third group of artificial musks, the macrocyclic musks, are more similar to natural musks, and are being marketed as more environmentally acceptable than nitro and polycyclic musks, but there is not much information available. FOE does not support the use of natural musks; the use of musks is not essential and illegal trade in musk is contributing towards the decline of populations according to WWF⁴³.

Neurotoxic chemicals

Pesticides

A large number of pesticides are anti-cholinesterase compounds which interfere with nerve impulses, and are therefore neurotoxic. The organophosphate and carbamate families of pesticides all have anti-cholinesterase properties. Examples are chlorpyrifos and aldicarb, both still approved for use in the UK. Aldicarb is also suspected of being toxic to the immune system⁴⁴.

Metals

It is worth mentioning that a number of metals are also recognised as neurotoxic. Although subject to much regulation already, there may still be uses resulting in consumer exposure and which should be reduced as much as possible. Lead, mercury and high doses of manganese are all neurotoxic⁴⁵. Lead, mercury (and cadmium) are also immunotoxic.

Other persistent/bio-accumulating chemicals

Triclosan

Triclosan (sometimes marketed under the name 'Microban') is a chlorinated organic anti-bacterial chemical which has been added to a wide range of products, including washing up liquids, dishcloths and chopping boards. It has recently come to our attention that triclosan is also being used as a preservative in some cosmetics and similar products. Triclosan is now being detected as a contaminant in human breast milk and fish⁴⁶, which demonstrates its poor breakdown in the environment and its

ability to contaminate our bodies. Governmental environment and other agencies in Sweden, Denmark, Finland and Germany have issued press statements discouraging people from using antibacterial household and personal hygiene products^{46,47}. Some recent research has suggested that triclosan has possible endocrine disrupting activity⁴⁸.

Plastic additives

A number of plastic additives approved for food contact have been identified as chemicals of “greatest concern” according to the criteria (for persistence, bioaccumulation and toxicity or “equivalent concern”) adopted by the UK Chemicals Stakeholder Forum (CSF)³⁹, although a need for further information has been noted. The three listed are considered to be in use in the UK and with an expectation of widespread exposure. The additives are:

- 2-Ethylhexyl 10-ethyl-4,4-dioctyl- 7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (CAS No. 15571-58-1);
- 2-Ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (CAS No. 27107-89-7);
- Tris(2,4-di-tert-butylphenyl) phosphate (CAS No. 31570-04-4).

A further substance, Pigment Yellow 83 (CAS No. 5567-15-7), an azo pigment used in plastics such as PVC and also in printing, paints and industrial coatings, is also listed as a substance of “greatest concern”.

Friends of the Earth does not have information about their use in the UK, apart from the information provided to the CSF. But all these four substances are undergoing hazard assessment, and we suggest that retailers keep a watching brief on these.

5. Lists of risky chemicals

There are already a number of prioritised lists of substances, produced in response to various environmental and/or health concerns. Here we highlight some lists that might be helpful for retailers compiling a list of chemicals for action. We do not list specific pieces of legislation apart from a couple (the Water Framework Directive (2000/60/EC) which identifies priority water pollutants, and the UK's CHIP Regulations which are a useful source of hazard information).

Note that probably all lists are subject to amendment as new information about chemicals is obtained. There is considerable overlap from one list to another; although the starting points (ie the initial “basket” of substances for screening varies as do the exact criteria). Friends of the Earth is also producing a detailed cross-referenced list of chemicals in the autumn 2002.

UK Chemicals Stakeholder Forum list of “Chemicals of Concern”

The Chemicals Stakeholder Forum (CSF) is an advisory body established by the Government in order to help formulate policy on chemicals and their uses (but excluding pesticides). It is made up of a range of representatives from industry, consumers, NGOs, unions, retailers and others. Twice yearly meetings are held in public.

The Forum has established a set of criteria (based on persistence, bioaccumulation and toxicity) in order to identify “chemicals of concern”. As noted above, these criteria have been applied to approximately one thousand chemicals listed in an international database (IUCLID – see the section

below on the EU priority lists), resulting so far in identification of approximately 100 chemicals for further consideration. Some of these may not be relevant in the UK, but further information is needed, and the project is not completed yet.

The listed chemicals and criteria can be found in Annex D to paper CSF/02/32:
www.defra.gov.uk/environment/chemistrat/stakehol/11062002/pdf/csf-02-32.pdf

Swedish “Observation List”

The Swedish “Observation List” lists approximately 250 substances (as “examples”) requiring particular attention and which are used in significant amounts (at least one tonne in Sweden). It is emphasised that the chemicals on the list do not necessarily have to be treated as prohibited, but that users should be aware of the risks involved in certain circumstances. Pesticides are excluded as they are the subject of a separate “approved use” system in Sweden (as in the UK).

The list also contains some indications of the uses of the substances. The criteria for inclusion are also listed for each substance. These include a number of environmental and human health concerns such as acute and chronic toxicity, carcinogenicity, mutagenicity and ozone depleting potential.

www.kemi.se/publikationer/obs_eng/defaulte.htm

Danish “List of Undesirable Chemicals”

This lists 68 undesirable chemicals (or groups of chemicals) which should be avoided or restricted in use according to the Danish Environmental Protection Agency.

www.mst.dk/chemi/01040000.htm

Dutch list of “Very High Concern” chemicals

As part of the Strategy on Management of Substances, the Dutch government is preparing priority lists of chemicals. The work is ongoing, but will categorise substances according to categories of “very high concern, high concern, concern, no concern, no data (therefore of concern)”. A preliminary list of substances of “expected very high concern” has been produced, numbering 59 substances and which can be found in the progress report of December 2001.

Home page: www2.minvrom.nl/pagina.html?id=5086

Progress report: www2.minvrom.nl/docs/internationaal/somsvoortgengels.pdf

EU candidate endocrine disrupters list

As discussed in Section 4 above, this report shows research classifying candidate substances with respect to their potential for causing hormonal disruption and expected exposure levels.

The complete report is at: www.europa.eu.int/comm/environment/docum/01262_en.htm

OSPAR priority chemicals

OSPAR is the short name for the “Convention For The Protection Of The Marine Environment Of The North-East Atlantic” (signed in Oslo/Paris). Concerns over marine pollution caused by persistent chemicals have led to international agreement on a priority list of hazardous chemicals - OSPAR List of Chemicals for Priority Action. Originally, twenty-six individual and groups of substances were listed, including a number of our priority groups such as brominated flame retardants, phthalates and alkylphenols. Further chemicals have been added in 2001 and 2002⁴⁹.

Water Framework Directive (2000/60/EC)

Under this Directive, which takes forward the work of the OSPAR Convention at EU level, the European Commission has proposed a number of water pollutants of concern in a “list of priority substances” (Decision 2455/2001/EC). Out of the list, 11 substances are already designated as “priority hazardous substances” and are destined for elimination, and a further eight are under review so may end up in this category. The aim is to “progressively reduce” pollution by the remaining priority substances. There are no specific restrictions yet on these substances except where they are the subject of other legislation, although the Commission intends to adopt water quality standards and emission controls.

Background: www.europa.eu.int/comm/environment/water/water-dangersub/pri_substances.htm
Legal text (consolidated): europa.eu.int/eur-lex/en/consleg/pdf/2000/en_2000L0060_do_001.pdf

EU Priority list

Under the Dangerous Substances Directive, chemicals (starting with the “High Production Volume” chemicals, HPVC) have been screened and placed on a priority list for risk assessment if there is sufficient concern. The screening process incorporates technical data and expert judgment, plus a “rapporteur” (country) is needed to conduct the detailed risk assessment. The process has resulted in four “priority lists” comprising 140 substances. These chemicals are undergoing risk assessment, but rather slowly, and it is at least partly in response to the slow pace of this work that chemicals policy is now under review at EU level. The work is managed by the European Chemicals Bureau in Italy; as part of this work they maintain “IUCLID”, the International and Uniform Chemicals Information Database, which stores physico-chemical and toxicological information. The HPV chemicals database is available on CD-ROM.

The process and the lists of substances can be found at: <http://ecb.jrc.it/existing-chemicals/>

Pesticides

Pesticides are the subject of numerous classifications and pieces of legislation. The Pesticides Action Network UK have produced a “List of Lists”, which shows which pesticides are on which lists.

“The List of Lists” (November 2001, £5) from PAN-UK, 020 7274 8895.

IARC – carcinogens

The World Health Organisation’s International Agency for Research on Cancer has classified a number of chemicals (and “agents”) with respect to their cancer-causing potential. Class 1 carcinogens are proven human carcinogens (meaning that there is evidence from human populations); Class 2A are probable human carcinogens and 2B, possible human carcinogens. The “monographs” database lists substances in the various categories and is at: www.iarc.fr

The UK “Approved Supply List”

The Chemicals (Hazard Information and Packaging for Supply) Regulations (CHIP) are aimed at supply and packaging of chemicals so those handling chemicals will be familiar with this legislation. The Approved Supply List (based on EU-wide agreed hazard assessment) lists many chemicals and shows what labelling information is necessary for which chemicals. A series of “risk phrases” details the hazard classification of the chemical, and includes whether a substance is carcinogenic, mutagenic or toxic to reproduction (with further sub-categories). The list is subject to amendment.

The Approved Supply List is available from: *HSE Books, Tel: 01787 881165 Fax: 01787 313995.*

6. Keeping up-to-date with the science and policy

The Safer Chemicals Campaign web site

Information for retailers (and including this briefing) is available from the following page:

www.foe.co.uk/campaigns/safer_chemicals/resource/retailers.html

More general expert information, including position papers, are available at:

www.foe.co.uk/campaigns/safer_chemicals/resource/experts.html

You may also find the media information useful:

www.foe.co.uk/campaigns/safer_chemicals/resource/media.html

Chemicals Stakeholder Forum and other committees

As noted above, this forum is an advisory body to the Government on chemicals policy. Amongst a number of members, the British Retail Consortium is represented. Minutes and papers are all available at the web site.

The Advisory Committee on Hazardous Substances (ACHS) (sponsored by DEFRA) provides advice (amongst other roles) to the CSF.

The Health and Safety Commission's Advisory Committee on Toxic Substances (ACTS) advises the HSC on hazards and risks arising from toxic substances used in the work place.

CSF home page: www.defra.gov.uk/environment/chemistrat/stakehol/index.htm

ACHS home page: www.defra.gov.uk/environment/chemistrat/achs/

ACTS home page: www.hse.gov.uk/foi/openacts.htm

Pesticides Safety Directorate

The PSD is responsible for regulating pesticides in the UK. Its home page is at:

www.pesticides.gov.uk.

Environment Daily

A daily e-mail update on environmental news around the EU. It provides up-to-date coverage of the regulatory processes, for example, covering the debate on the regulation of phthalates in baby toys and the gradual phase-out of brominated flame retardants.

Temporary free subscriptions are available, and a searchable web archive is provided:

www.environmentdaily.com

ENDS Report

An in-depth monthly examination of environment news, with a UK focus, including updates on new problem chemicals and latest regulatory changes. An impeccable source of information on developments in environmental policy.

It is available as a monthly magazine in hard copy and/or on-line. Temporary free web subscriptions are available, and subscribers have access to a searchable web archive: www.endsreport.com.

Environmental Health Perspectives

A peer-reviewed scientific journal that publishes many of the key research papers examining the effects of chemicals on health, and also includes features on various aspects of environment and health. Some parts of the web site are free, including abstracts of all research articles: <http://ehis.niehs.nih.gov/>

Environmental Science and Technology

This is a peer-reviewed scientific/technical journal of the American Chemical Society:
<http://pubs.acs.org/journals/esthag/index.html>

The Society also has a Green Chemistry Institute, concerned with the design of chemicals to reduce or eliminate hazardous substances:
<http://chemistry.org/portal/Chemistry?PID=acsdisplay.html&DOC=greenchemistryinstitute\index.html>

Pubmed Medline

A free, continuously updated, searchable archive of abstracts of research articles covering thousands of research journals. A useful way of searching for published information about chemicals. A service of the US National Library of Medicine: www.ncbi.nlm.nih.gov/PubMed/

EurActiv.com

A free web site specialising in news on European policy. Their 'Links Dossier' on the chemicals policy review is at: www.euractiv.com/cgi-bin/cgint.exe/441275-507?714&1015=9&1014=ld_chem&-tt=en

European Commission documents

The European Commission maintains a portal, known as "Europa", which is the gateway to a vast array of information on the European Union. Community law ("Eur-Lex") is at: <http://europa.eu.int/eur-lex/en/index.html>; search engines help to find relevant documents by keyword. The chemicals section of the environment section is at: http://europa.eu.int/eur-lex/en/com/reg/en_register_15102050.html

The progress of proposals and deliberations of the European Parliament, can be followed at the "PreLex" site: <http://europa.eu.int/prelex/apcnet.cfm?CL=en>

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