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## • Household Chemical Waste Collections

**South Australia:** Licensed professional waste management contractors are setting up temporary collection points (timetable in this website). The next date is: 26<sup>th</sup> June City of Unley, then 4 dates in July, 1 each in Aug, Sept, Oct and Nov. For information phone: Zero Waste SA on 61-8-8204-1961. From: [www.environment.sa.gov.au/zerowaste/haz\\_waste.html](http://www.environment.sa.gov.au/zerowaste/haz_waste.html)

**Victoria:** EcoRecycle Victoria, with regional waste management groups and local government, runs free household chemical collections. ph: InfoLine on 1800-353-233, ph: +61-3-9639-3322 or email: [mailbox@ecorecycle.vic.gov.au](mailto:mailbox@ecorecycle.vic.gov.au). The next dates are 17<sup>th</sup> July Banyule City Council, and two on the 31<sup>st</sup> July, then 12 more locations to the end of 2004. From [www.ecorecycle.vic.gov.au](http://www.ecorecycle.vic.gov.au) & select "Household Chemical Collection".

**NSW:** Resource NSW runs a Household Chemical Collection program. There are dates for Northern Sydney; Southern Sydney; Western Sydney; Central Coast; Central West; Hunter; and Illawara, until the end of 2004. For details phone the Clean Out Info Hotline 1300-787-870; or email: [chemical.cleanout@resource.nsw.gov.au](mailto:chemical.cleanout@resource.nsw.gov.au). From: [www.resource.nsw.gov.au/index-RNSW.htm](http://www.resource.nsw.gov.au/index-RNSW.htm)

## Hazmat & Environment Notes are prepared by:

Jeff Simpson

Hazardous Materials Consultant  
Editor & Publisher

I have edited and published this newsletter since 1985, initially within the Aerospace Industry, and then to all industry using chemicals since 1991.

I work as a Regulatory Affairs and Hazardous Materials Consultant and try to put my concern about chemicals into practice, and influence everyone to make better choices of, and better use of chemicals.

My approach is to provide a short, succinct note on each hazardous material issue, sufficient to allow you to make a decision of whether it is relevant to you. If you need more information contact details / website / etc are provided.

I encourage all readers to make comment on draft regulations, codes and standards.

Screen

ISSN: 1441-5534

## Hazardous Substances

### • European Environment & Health Action Plan 2004-2010

“We cannot select the quality of air we breathe or always protect ourselves from exposure to pollutants that may build up in our bodies – sometimes even before we are born. Recent studies on the environment and health link include estimates that each year between six and nine thousand French city dwellers die prematurely because of air pollution and that about one sixth of the total burden of death and disease for children can be attributed to environmental factors”.

“This Action Plan for the period 2004-2010 is designed to give the EU the scientifically grounded information needed to help all 25 EU Member States reduce the adverse health impacts of certain environmental factors and to endorse better cooperation between actors in the environment, health and research fields.”

It is based on the European Environment and Health Strategy released in June 2003 which advised:

“Although much progress has been made in improving the quality of air, water and soil, the situation remains far from satisfactory. Today, there is evidence that factors such as particulate matter in the air, noise and ground-level ozone damage the health of thousands of people every year. Thousands of man-made chemicals, including pesticides, persist in the environment, accumulating over time and we do not know enough about their long-term effect on our health. Although a range of specific policy actions are being taken to address those problems, by themselves they are not sufficient to deal with the complex, cumulative interaction between our environment and our health.”

The Strategy “is based on the fact that we need to **scale** up our efforts so that we, in line with the objectives of sustainable development, protect human health with special emphasis in the most vulnerable groups in society. It is based on 5 key elements and has been called “**SCALE**”; where: S stands for **Science**, and indicates that the strategy will draw together the knowledge from a wide range of networks and stakeholders in the fields of environment and health. It will focus on **Children**, a particularly vulnerable population to environmental hazard. It aims at raising **Awareness** on urgent health needs. In addition, the strategy will make use of the **Legislation** and will include a constant **Evaluation** to verify the efficacy and cost effectiveness of the actions in terms of the reduction of the environment-related health problems.”

“The first cycle (2004-2010) aims to establish a good understanding of the link between:

- Childhood respiratory diseases, asthma, allergies
- Neurodevelopment disorders
- Childhood cancer
- Endocrine disrupting effects

and their related environmental factors including: indoor & outdoor air, dioxins, heavy metals, endocrine disrupters, electromagnetic fields and the urban environment.”

From the Action Plan and the Strategy downloadable at: [europa.eu.int/comm/environment/index\\_en.htm](http://europa.eu.int/comm/environment/index_en.htm)

### • Formaldehyde IS Carcinogenic to Humans

The working group, convened by the IARC Monographs Programme, concluded that formaldehyde *is carcinogenic to humans*. Previous evaluations, based on the smaller number of studies available at that time, had concluded that formaldehyde was *probably carcinogenic to humans*, but new information from studies of persons exposed to formaldehyde has increased the overall weight of the evidence.

From IARC Press Release No. 153, 15<sup>th</sup> June 2004. Go to [www.iarc.fr/pagereoot/PRELEASES/pr153a.html](http://www.iarc.fr/pagereoot/PRELEASES/pr153a.html).  
With thanks to Brian Parkinson for alerting this to me.

### • July 2004 UN GHS Sub-Committee Meeting

The UN Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals Meeting on the (14-16 July 2004). Two areas in particular are of interest are:

1/ Updating of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

- (a) Physical Hazards
- (b) Health Hazards
  - (i) Revision of Chapter 3.1 (Acute toxicity)
  - (ii) Toxic Gas Mixtures (TGM)
  - (iii) Water Activated Toxicity (WAT)
  - (iv) Revision of Chapter 3.8 (Specific Target Organ Systemic Toxicity/Single Exposure)
  - (v) Aspiration Hazards
  - (vi) Miscellaneous
- (c) Environmental Hazards
  - (i) Ozone Depleting Substances
  - (ii) Terrestrial Toxicity
  - (iii) Miscellaneous

2/ Development of guidance for implementation

- (a) Precautionary Statements (PS)

- (b) Safety Data Sheets (SDS)
- (c) Labelling

From the UNECE website, GHS Upcoming Meetings on:  
[www.unece.org/trans/main/dqdb/dgsubc4/activities.html](http://www.unece.org/trans/main/dqdb/dgsubc4/activities.html)

then select [Annotated agenda](#) for the seventh session of the Sub Committee of Experts GHS (14-16 July 2004) and related [documentation](#), which includes all the above areas, in particular the Guidance Documents.

## • UK Chemicals Stakeholder Forum 2003 Report

Established in 2000 under the UK Government's Chemicals Strategy, the Forum (consisting of a diverse range of stakeholders) advises ministers on how industry can reduce risks from chemicals that are hazardous to the environment and human health. The key issues are Persistence, Bioaccumulation and Toxicity. The 2002-2003 Report also includes Annex 2: Forum List of 111 Chemicals of Concern p17-33. The UK Dept for Environment Food & Rural Affairs runs this forum. The Report is a 690Kb pdf file.

From [www.defra.gov.uk/news/2004/040519b.htm](http://www.defra.gov.uk/news/2004/040519b.htm)

The basis of the List is further detailed at: [www.defra.gov.uk/environment/chemicals/csf/concern/index.htm](http://www.defra.gov.uk/environment/chemicals/csf/concern/index.htm).

The list is intended to raise questions and invite input.

## • Amendment to Code of Practice for Asbestos

On 31 December 2003 a nation-wide prohibition on the import and use of all forms of asbestos took effect. Draft copies of the new and revised NOHSC documents are still available on the NOHSC website. Comment has now closed. They include:

- Public Comment Paper on the proposed amendments to the Code of Practice and supporting Guidance Material for asbestos;
- Preliminary Regulatory Impact Statement (PRIS);
- Draft *Code of Practice for the Safe Removal of Asbestos* [NOHSC: 2002(2004)];
- Draft *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Dust* [NOHSC: 3003(2004)]; and
- Draft *Code of Practice for the Management and Control of Asbestos in Workplaces* [NOHSC:2018(2004)].

From: [www.nohsc.gov.au/publiccomment/AsbestosCOP.htm](http://www.nohsc.gov.au/publiccomment/AsbestosCOP.htm).

## NICNAS (Industrial Chemicals)

### • Community Engagement Forum Created

The Community Engagement Forum has been established to assist the NICNAS office improve public access to chemical safety information and address aspects of the community's right to know in relation to the control and use of industrial chemicals.

Timely access to chemical safety information is an essential element in maintaining the trust of civil society while balancing the needs and views of the key stakeholders. It arose from NICNAS's low regulatory concern chemicals reform initiative and the need to maintain an ongoing dialogue with the public.

The Chair is: **Dr Margaret Hartley**, Director, NICNAS & Office of Chemical Safety,

The Members are: **Ms Jane Bremmer**, Coordinator of the Alliance for a Clean Environment (ACE); **Dr Bro Sheffield-Brotherton**, Co-founder and Chairman of Directors, Sustainable Solutions Pty Ltd; **Associate Professor Christopher Winder**, BA (Hons), MSc, PhD, FSIA, Associate Professor in Chemical Safety, School Safety Science, University of New South Wales; **Cr Colleen Hartland**, Councillor for the City of Maribyrnong, Melbourne; and **Ms Sue Penniciuk**, BA, MEnvSc, Co-coordinator, OHS Unit, Australian Council of Trade Unions (ACTU).

For more details on the members download the April NICNAS Matters [www.nicnas.gov.au/publications/#matters](http://www.nicnas.gov.au/publications/#matters).

For information contact: **Griffin D'Costa**, CEF Secretariat, ph: 02-8577-8894, email: [griffin.dcosta@nicnas.gov.au](mailto:griffin.dcosta@nicnas.gov.au).

**Note: The Review of the Existing Chemicals Program** has been delayed about the 3 months to allow the recently formed Community Engagement Forum to make input on this Review. For details on this Review contact Jane Weder, ph: 02-8577-8896, email: [jane.weder@nicnas.gov.au](mailto:jane.weder@nicnas.gov.au).

### • Polybrominated Biphenyls (PBBs) and Tris (2,3-Dibromopropyl) Phosphate

PBBs include:

- Hexabromobiphenyl CAS No. 36355-01-8
- Octabromobiphenyl CAS No. 27858-07-7
- Decabromobiphenyl CAS No. 13654-09-6

Tris (2,3-dibromopropyl) phosphate is CAS No. 126-72-7

This call for information was directed to:

- manufacturers, formulators and users of the above mentioned chemicals or products containing the chemicals; and
- any person and organization with information about the trade, use and restrictions in Australia of these chemicals.

An "Importing Country Response" is required under the Rotterdam Conventions for these chemicals which are Prior Informed Consent (PICs) Listed Chemicals.

*Comment: The Rotterdam Convention* provides for a national decision-making process on the import of chemicals, and disseminates those decisions to participating countries. It also provides for importing countries to receive information on a PIC listed chemical being exported from a country that has banned or severely restricted it on human health and/or environment grounds.

PBBs and tris (2,3-Dibromopropyl) Phosphate are potentially used as flame retardants.

*Comment:* An Australian information paper on the Rotterdam Convention can be accessed on the NICNAS website at: [www.nicnas.gov.au/foreign/](http://www.nicnas.gov.au/foreign/)

Information can also be accessed from the Rotterdam Convention web site at: [www.pic.int](http://www.pic.int).

Country-specific information regarding import responses, including Australian importing responses to date, can be accessed from the Rotterdam Convention's database at: <http://193.247.37.6/Reports/ICRsP.asp>.

*Organisations and persons who believe they have relevant information contact Dr Sneha Satya (ph: 02-8577-8895 email: [sneha.satya@nicnas.gov.au](mailto:sneha.satya@nicnas.gov.au)) or Dr Jane Weder (ph: 02-8577-8895 email: [jane.weder@nicnas.gov.au](mailto:jane.weder@nicnas.gov.au)).*

*From Chemical Gazette 6 April 2004*

## Therapeutic Goods (Medicines)

### • Regulatory Guidelines for Complementary Medicines, Part II

Draft ARGCM Part II of the *Australian Regulatory Guidelines for Complementary Medicines* (ARGCM) is intended to provide guidance on the Listing of medicines in the Australian Register of Therapeutic Goods. There are several interesting drafts available for download.

Call for Comment (200Kb pdf)

Listed Complimentary Medicines (784Kb pdf)

App. 1 - Electronic Listing Facility User Guide (1.02Mb pdf)

App. 2 - Colourings for Use in Medicines (159Kb)

*From [www.tga.gov.au/consult/2004/argcmp2\\_dr.htm](http://www.tga.gov.au/consult/2004/argcmp2_dr.htm)*

### • TGA Strategic Management Information System (SIME)

The TGA SIME project is an initiative to improve the way in which regulatory information is managed. SIME will establish a framework where information is recorded once.

*Editor's Comment:* It is of very useful to be able to look up the *Australian Register of Therapeutic Goods Public Access to ARTG Entries about Medicines*. It can be accessed at [www.tgasime.health.gov.au](http://www.tgasime.health.gov.au) and click on the *Australian Register of Therapeutic Goods* entry, the 7<sup>th</sup> point down on the left side.

*From: [www.tga.health.gov.au/sime/whatsime.htm](http://www.tga.health.gov.au/sime/whatsime.htm)*

## Agricultural & Veterinary Chemicals

### • APVMA CCC E-Bulletin Issue 1 April 2004

This newsletter is produced, by the APVMA Community Consultative Committee, to provide members of the Australian community with regular updates on issues of interest. Contents for the 1<sup>st</sup> April 04 issue are:

1. Reporting adverse experiences with pesticides
2. Review of CCA-treated timber
3. Review of labelling
4. Regulatory science standard
5. Spray Drift
6. Committee concerns
7. Committee business

*To receive a regular e-mail alert for future editions of the APVMA Community E-bulletin go to: [www.apvma.gov.au/community/ccc\\_ebulletin1.shtml](http://www.apvma.gov.au/community/ccc_ebulletin1.shtml)*

*From the APVMA: [www.apvma.gov.au/community/CCC.shtml](http://www.apvma.gov.au/community/CCC.shtml)*

## • Regulatory Science Standard

The APVMA is developing a Good Regulatory Science practice Standard. It wants to know what the community expects from regulatory science. To date the committee has suggested the standard should incorporate global environmental principles such as the precautionary principle and intergenerational equity. Adequate resources should be provided for community consultation and grounds for withholding information on the basis of commercial business information should be clearly defined.

### *Draft Definition of Regulatory Science Quality*

'Protecting the health and safety of people, animals and the environment and supporting agricultural and livestock industries by making sound science-based regulatory decisions regarding pesticides and veterinary medicines within a framework of accepted international risk assessment and risk management practices.

Sound science is based on a contemporary understanding of science, identification and analysis of issues, use of logic, and documentation of risk assessment and risk management advice and decisions'.

### *Expected Outcomes of the Discussion*

Community Consultative Committee perceptions and comments that will be considered in the development of an APVMA Good Regulatory Science Practice Standard.

Download the Discussion Paper and the National Toxics Network Response as pdfs from: [www.apvma.gov.au/community/rsq\\_discussion\\_paper.pdf](http://www.apvma.gov.au/community/rsq_discussion_paper.pdf) and: [www.apvma.gov.au/community/ntn\\_rsq\\_response.pdf](http://www.apvma.gov.au/community/ntn_rsq_response.pdf).

From APVMA CCC E-Bulletin Issue 1 April 2004

## • Suspension of Approvals of the Active Constituent Benomyl

The approval and registrations for Benomyl have now been suspended effective from 20 October 2003 until **31 December 2004**.

The APVMA has received advice from OCS that Benomyl causes impairment of reproduction and development in laboratory animals, and that women of childbearing age should avoid contact with Benomyl.

The APVMA has initiated the reconsideration of Benomyl to assess the concerns relating to human health and to seek information to address the remaining data gaps for Benomyl.

A person already in possession of existing stocks of the suspended product may supply that product only if:

- a copy of the MSDS for the product accompanies the product; and
- the following FAISD warning statement, written in prominent font and colour capable of attracting the attention of users, is securely affixed to the container:

**"Contains benomyl which cause birth defects in laboratory animals. Women of child bearing age should avoid contact with benomyl".**

For information contact Ron Hogg, Pesticides Review Manager, the APVMA ph: 02-6272-3213 or email: [chemrev@apvma.gov.au](mailto:chemrev@apvma.gov.au)

From [www.apvma.gov.au/gazette/gazette0404.shtml](http://www.apvma.gov.au/gazette/gazette0404.shtml)

## • Changes to the Approval of Agricultural Active Constituents

At the time of product registration, product applicants are now required to demonstrate the quality of the active constituent(s) used in their products by providing to the APVMA batch analysis results for each source of active, together with details of the analytical method(s) used to generate those results. The batch analysis results will be assessed for compliance with the relevant APVMA standard for each constituent.

From 1 May 2004 the previous practice of providing approval numbers for sources of active constituents with or without letters of support is no longer accepted.

Product registrants now have the responsibility for ensuring that the quality of active constituents in their products is maintained and will be required, via conditions of registration, to maintain batch analysis records for each batch of active constituent used in registered products.

*Editor's Comment:* It is good practice for previously registered products to apply the same principles.

### **Requirements and Guidelines**

"Chemistry Requirements"

"Additional Explanatory Notes in the Agricultural Manual, and Guidelines for Record Keeping".

Dr Paul Sethi, Chemistry Manager, Chemistry and Residues Program at the APVMA; ph: 02-6272-3987  
fax: 02-6272 3551; Email: [paul.sethi@apvma.gov.au](mailto:paul.sethi@apvma.gov.au).

From [www.apvma.gov.au/gazette/gazette0404.shtml](http://www.apvma.gov.au/gazette/gazette0404.shtml)

Update 11 June 04: **Approval of Ag Active Constituents**

The APVMA has refined Part 2.4.3 of the Agricultural Requirements - Chemistry and Manufacture regarding submission of batch analysis data and has refined the Conditions of Active Approval and Product Registration that were published in May 2004. After public comment **these refinements** will be implemented on the 1<sup>st</sup> July 04.

**Seminars** for industry have been delayed until after 1<sup>st</sup> July 04. Contact Paul Sethi for details.

From [www.apvma.gov.au/tgac/ag\\_ga\\_june\\_04.shtml](http://www.apvma.gov.au/tgac/ag_ga_june_04.shtml)

## • Pool & Spa Devices Below are Not Registered

Because the APVMA was unable to show that silver and copper ion based pool and spa sanitising devices are effective, by themselves, for the control of disease causing microorganisms that can readily grow or be transmitted in pools and spas, the following devices were advised as not registered by the APVMA in the 1 June 04 Ag&Vet Gazette:

1/ Enviro-Swim System; 2/ Floatron; 3/ Nature 2; 4/ The Nature Spa Purifier; 5/ Aquabrite System; 6/ Aquavic Flowcells; 7/ Oxyclear Ioniser; 8/ Bioniser Pool Management System; 9/ Questa Poolfresh System.

From: [www.apvma.gov.au/gazette/gazette0406.shtml](http://www.apvma.gov.au/gazette/gazette0406.shtml)

## Dangerous Goods

### • Draft 7<sup>th</sup> Australian Dangerous Goods Code

The Draft 7<sup>th</sup> Edition has been delayed and I hope to see it available in August 2004 for public consultation. The new edition will carry a wide number of updates and amendments and follows a similar format to "[UN Recommendations on the Transport of Dangerous Goods - Model Regulations' Thirteenth Edition](http://www.unece.org/trans/danger/publi/unrec/rev13/13files_e.html)" which is available at [www.unece.org/trans/danger/publi/unrec/rev13/13files\\_e.html](http://www.unece.org/trans/danger/publi/unrec/rev13/13files_e.html).

When available it will be able to be accessed from the Australian Govt Dept of Transport & Regional Services website: [www.dotars.gov.au/transreg/str\\_dgoodsum.htm](http://www.dotars.gov.au/transreg/str_dgoodsum.htm).

### • Class 9 Environmentally Hazardous Dangerous Goods

Part 2.9.3 of the UN 13<sup>th</sup> Edition now includes the criteria for Environmentally Hazardous Class 9 Dangerous Goods.

These less hazardous criteria will capture a significant number of extra Environmentally Hazardous Class 9 Dangerous Goods, as the criteria start at the >1 - ≤10 mg/L LC<sub>50</sub> / EC<sub>50</sub> / ErC<sub>50</sub> but not degradable or can bioaccumulate level, rather than the current IMDG Environmentally Hazardous (Marine Pollutant) <1 mg/L LC<sub>50</sub> / EC<sub>50</sub> / ErC<sub>50</sub> but not degradable or can bioaccumulate level.

However when the IMDG Code picks up the UN 13<sup>th</sup> Edition it will then include the >1 to ≤10 mg/L LC<sub>50</sub> / EC<sub>50</sub> / ErC<sub>50</sub> but not degradable or can bioaccumulate level Environmentally Hazardous Dangerous Good, as will the ADG Code 7<sup>th</sup> Edition when it finally comes into place.

The basic elements for classification of environmentally hazardous substances (aquatic environment) are:

- acute aquatic toxicity;
- potential for or actual bioaccumulation;
- degradation (biotic or abiotic) for organic chemicals; and
- chronic aquatic toxicity.

Substances shall be classified as "environmentally hazardous substances (aquatic environment)", if they satisfy the criteria for Acute I, Chronic I or Chronic II.

*Acute I:* <1 mg/L LC<sub>50</sub>(fish) / EC<sub>50</sub>(crustaceae) / ErC<sub>50</sub>(Algae)

*Chronic II:* >1 to ≤10 mg/L LC<sub>50</sub> / EC<sub>50</sub> / ErC<sub>50</sub> and the substance is not rapidly degradable and/or the log K<sub>ow</sub> ≥ 4 (unless the experimentally determined BCF <500), unless the chronic toxicity NOECs are > 1 mg/l

*Editor's Comment:* It is time for us all to have a close look at our products and make sure we have adequate data available to undertake these classifications.

Obtain Part 2: from [www.unece.org/trans/danger/publi/unrec/rev13/13files\\_e.html](http://www.unece.org/trans/danger/publi/unrec/rev13/13files_e.html).

### • Handbook of Explosion Prevention and Protection

**Editors:** Martin Hattwig & Henrikus Steen; **Publ:** Wiley-VCH; 716 p Hardback; 2004; **ISBN:** 3527307184; **Price:** Aus \$466.

For mixtures of flammable gases, vapours, dusts, mists and droplets with air or other gaseous oxidizing agents, and their initiation.

This is the English and revised version of the German book "Handbuch des Explosionsschutzes". It covers the current state of technology combined with data gained through experimentation, allowing practitioners to apply explosion protection according to any given situation. It has been written for scientists and engineers in research and safety organisations dealing with this area.

It is intended to enable understanding of the basics of the relevant risks and the measures against the explosions as well as their limits, but does not give an exhaustive understanding of the phenomena or relevant standards. Some areas not covered are: the explosive and chemically unstable substances; and the formation and dispersion of flammable substances (e.g. gases) in air.

The Contents main headings are:

- Explosion Processes (60p);
- Ignition Processes (210p);
- Properties of Reactive Gases and Vapours (Safety Characteristics) (108p);
- Properties of Combustible Dusts (Safety Characteristics) (40p);
- Properties of Flammable Mists and Foams (62p);
- Measures of Explosions Protection & Prevention (130p);
- Fundamentals of Understanding and Judging Explosion Risks (30p); References (48p).

Prepared by 25 authors (20 German, 2 Swiss, 1 USA, 1 French, 1 UK) and 2 editors, from key Institutes in this area.

*Jeff Simpson's Comment:* A well put together technical reference book that will enable me to better understand this key area

*Extracts from the Preface and Contents and modified by Jeff Simpson after reviewing the book*

Available from John Wiley & Sons, Aust, ph: 1800-777-474 / 02-9856-0200, website: [www.johnwiley.com.au](http://www.johnwiley.com.au), email: [Sydney@johnwiley.com.au](mailto:Sydney@johnwiley.com.au).

From: [www.wiley-vch.de/publish/en/books/](http://www.wiley-vch.de/publish/en/books/) search ISBN.

## Environmental Notes on Chemicals

### • BASF Eco-Efficiency Analysis,

At the PACIA National Convention, on the 31<sup>st</sup> May 2004, Andreas Kircherer, from BASF, described how BASF has developed a computer "Eco-Efficiency Analysis" system so that BASF can systematically compare alternative products, or alternative process, or alternative locations for a facility, etc and make better decisions of which has the least Social, environmental and economic impact "**SEEBalance**" **Assessment**" (the social component is just being added to the model).

"This involves carrying out an overall study of alternative solutions to include a total cost determination and the calculation of ecological impact over the entire lifecycle."

Each aspect of the environmental, economic and social components included can have its weighting changed according the country where the analysis is done. This is a very useful model to be able to sort out the high environmental impact products, to be phased out as replacements are developed; or find the low environmental impact products and look at ways to reduce costs so they can be made economically possible to market.

A Powerpoint Presentation "More Sustainable Products with Eco-Efficiency Analysis" and several supporting pdf documents (see below) can be downloaded from the publications area of:

[www.sustainability.basf.com/en/sustainability/oekoeffizienz](http://www.sustainability.basf.com/en/sustainability/oekoeffizienz)

1/ Eco-efficiency Analysis by BASF: The Method

2/ Assessment of Toxicological Risks for Life Cycle Assessment and Eco-efficiency Analysis

3/ An Eco-efficiency Analysis

*From the PACIA Conference Paper & the BASF Website*

### • Rotterdam Convention: Prior Informed Consent

Prior Informed Consent Procedure For Certain Hazardous Chemicals and Pesticides In International Trade, to prohibit, from 17<sup>th</sup> August 2004, any export without written permission.

It covers 23 Active Constituents (plus their salts, esters and isomers) as in the Ag&Vet Chemical June 2004 Gazette:

2,4,5-T; Benomyl and carbofuran and thiram (as a single formulation); Binapacryl; Captafol; Chlordimeform; Chlorobenzilate; Dinoseb and its salts; DNOC and its salts; Ethylene Dibromide (EDB); Ethylene Dichloride; Ethylene Oxide; Fluoroacetamide; HCH (mixed isomers); Lindane (□-BHC, □-HCH); Mercury Compounds; Methamidophos; Methazole\*; Methyl-Parathion; Monocrotophos\*; Parathion (Ethyl)\*; Pentachlorophenol; Phosphamidon; tribufos\*

\* Additional information is required on application to export chemicals indicated by an asterisk.

From [www.apvma.gov.au/gazette/gazette0406p38.pdf](http://www.apvma.gov.au/gazette/gazette0406p38.pdf)

### • Stockholm Convention: POPs (Persistent Organic Pollutants).

The Stockholm Convention prohibits, from 17 August 2004, import, manufacture, use and export of the chemicals specified below. Continued use of Mirex will be allowed under a specific exemption registered under the Convention. Use in laboratory-scale research or as a reference standard will require written authorization.

This covers a list of 9 Active Constituents or Chemical Products as in the Ag&Vet Chemical June 2004 Gazette:

Aldrin (HHDN); Chlordane; DDT (pp'-DDT); Dieldrin (HEOD); Endrin; Heptachlor; Hexachlorobenzene (HCB); Mirex; Toxaphene (Camphechlor). CAS No.s in Gazette.

For both the **Rotterdam Convention** and the **Stockholm Convention**, as further information is available, it will be on the [www.daff.gov.au](http://www.daff.gov.au) website; emailed to subscribers of APVMA news information; and notified in a future Gazette.

Contact Dept of Agriculture, Fisheries & Forestry: Julia Rymer, ph: 02-6272-4837; email: [julia.rymer@daff.gov.au](mailto:julia.rymer@daff.gov.au)

From: [www.apvma.gov.au/gazette/gazette0406p38.pdf](http://www.apvma.gov.au/gazette/gazette0406p38.pdf)

## Publications

### • Hazardous Laboratory Chemicals Disposal Guide, 3<sup>rd</sup> Edition

**Author:** Armour, Margaret-Ann; **Publisher:** Lewis Publishers; 581 page Paperback; 2003; **ISBN:** 1566705673; **Price:** Aus \$230 approx.

It includes 301 individual entries and now includes 15 pesticides commonly used in greenhouses. Emphasis is placed on disposal methods that turn hazardous waste material into non-toxic products; or for most of the solvents included, being sent for recycling or incineration.

Methods fall into several categories, including: acid/base neutralization, reaction by oxidation or reduction, precipitation of toxic ions as insoluble solids, and controlled evaporation or burning.

Information listed for each chemical in the handbook includes: Physical, Chemical and Physiological Properties; Hazardous Reactions; Spill and Waste Disposal Procedures; sufficient to handle the chemicals safely with appropriate precautions and personal protection.

The hazardous reactions information, may also assist in developing a plan of action for emergencies such as the spill of any of the chemicals listed.

The disposal procedures are aimed at trained laboratory personnel with small quantities of waste (typically <50gm) to be reacted: The methods should not be used for larger quantities unless a qualified chemist has shown it is safe to increase the scale.

In the preface Margaret-Ann Armour starts with:

“The information contained in this guide has been compiled from sources believed to be reliable, accurate, and representative of the best opinion on the subject as of 2002. While every reasonable effort has been made to provide dependable information, I cannot assume responsibility for the validity or completeness of all chemical references given or for the consequences of their use.”

*Jeff Simpson's Comment:* A useful reference to start understanding chemical disposal reactions for those in laboratories, and of use for those wanting to learn more as MSDSs currently has very little useful information provided by manufacturers.

*Extracts from the Preface and Introduction and modified by Jeff Simpson when reviewing the book.*

Available from DA Information Services ph: 03-9210-7777, email: [service@dadirect.com.au](mailto:service@dadirect.com.au),

From: [www.dadirect.com/Books/](http://www.dadirect.com/Books/) and search by ISBN

### • Google News Alerts (BETA)

A news service from Google. You can have your key words / phrases for your interests searched on, and then 4-5 lines and weblinked source of the stories with this focus are delivered to you by email as they occur or once a day.

I have found the following phrases to yield useful news stories: “dangerous good”, “hazardous substance”, using quote marks which means the combination of words must be found. Otherwise the words may be anywhere in the article, as have set up for ‘hazardous chemical’, and ‘dangerous chemical’.

You can also use an advanced search to more accurately specify phrases / countries or ignore certain words, at [http://news.google.com/advanced\\_news\\_search](http://news.google.com/advanced_news_search). I have used this for “dangerous substance” not “drug” and “UK”.

I would be interested to have other useful word combinations passed on to me that you find useful on this news service. Currently I am trying “chemical classification”.

Go to [www.google.com/newsalerts?hl=en](http://www.google.com/newsalerts?hl=en) and [http://news.google.com/advanced\\_news\\_search](http://news.google.com/advanced_news_search)

## Standards

All Standards and Drafts are from [www.standards.com.au](http://www.standards.com.au)

## • New Current Australian Standards

**AS 2252.2-2004: Biological Safety Cabinets - Laminar Flow (Class II)** General construction and performance requirements. 28 April 2004, 15 pages, ISBN 0-7337-5874-6. Cost \$45.54

**AS/NZS 2430.3:2004: Classification of Hazardous Areas - Examples of Area Classification.**

Published: 20th May 2004.

Part 1 - General, 8 pages, \$36.43,

Part 2 - Vehicle workshops, vehicle parking, fuel dispensing stations and aircraft hangars, 28 pages, \$51.88

Part 3 - Flammable Liquids, 15 pages, \$45.54

Part 4 - Flammable Gases, 16 pages, \$45.54

Part 5 - Refineries and major processing plants, 8p, \$36.43

Part 6 - Laboratories, including fume cupboards and flammable medical agents, 6 pages, \$27.72

Part 7 - Landfill gas, sewage treatment and sewage pumping plants, 9 pages, \$36.43

Part 8 - Surface coatings and adhesives, 10p, \$36.43

Part 9 - Miscellaneous, 17 pages, \$51.88

**AS 4332-2004: The Storage and Handling of Gases in Cylinders.** It applies to stores where individual gases are kept, and to stores where more than one type of gas is kept. 30<sup>th</sup> April 2004, 52 pages, \$89.10 pdf.

**Emergency Procedure Guides:** All are 2 pages each, costing \$21.40 each as pdf files, \$23.80 hardcopy, publ: 3 June 2004.

**AS 1678.2C1-2004 Group text EPG for Class 2 substances - Non-flammable, compressed gas**

**AS 1678.3C1-2004 Group text EPG for Class 3 substances - Flammable liquids of a lesser hazard**

**AS 1678.4A1-2004 Group text EPG for Class 4.1 substances - Flammable solids; substances liable to spontaneous combustion; and substances that in contact with water emit flammable gases**

**AS 1678.8A1-2004 Group text EPGs for Class 8 substances - Corrosive substances.**

**AS 1678.6.0.015-2004 Emerg Proc Ed Guide - Beryllium powder and beryllium compound, N.O.S.**

**AS/NZS 2243.10:2004 Safety in Laboratories - Storage of Chemicals.** 1<sup>st</sup> June 2004, 30 pages, \$61.40 for a pdf, ISBN: 0-7337-6045-7

## • New Draft Australian Standards

**DR 04256: Safety in Laboratories – General.** 28th April 04, 36 pages, free pdf, C'tee – CH-026.

**DR 04281 CP: Emergency Procedure Guide - Transport - Part 2.1.010: Butadienes,** inhibited, 2p, free pdf, CH-009.

## • ISO Standards

**ISO 3679:2004: Determination of Flash Point - Rapid Equilibrium Closed Cup Method.** 1<sup>st</sup> April 2004, 18 pages, \$105 pdf.

**ISO 3680:2004: Determination of Flash / No Flash - Rapid Equilibrium Closed Cup Method.** *And under the conditions of test, to yield sufficient flammable vapour at this temperature to cause ignition on the application of a test flame in a standard manner.* 1<sup>st</sup> April 2004, 18 pages, \$104.48 pdf.

*Note:* Both ISO 3679 and IISO 3680 specify the method for the determination of the closed cup flash point of paints, varnishes, paint binders, adhesives, solvents, petroleum, and related products having closed cup flash points within the range of - 30°C to 300°C.

## Seminars, Conferences, Courses

### • Interact 2004, Gold Coast, Qld, 4-8 July 2004

An international multi-disciplinary conference incorporating the regular conferences of the RACI Analytical Division (17AC), the RACI Environment Division (8EC), the Australasian Society for Ecotoxicology (9th Annual Conference), and the RACI Electrochemistry Division (12AEC).

Cost \$1200 (Member \$860) with a discount if registered by the 28th April. For details: [www.interact2004.com](http://www.interact2004.com), ph: 61-7-3368-2644, email: [interact2004@ccm.com.au](mailto:interact2004@ccm.com.au)

### • Approval of Agricultural Active Constituents

**APVMA Seminars for industry** are delayed until after 1<sup>st</sup> July 2004. Details: *Dr Paul Sethi, Chemistry Manager, Chemistry and Residues Program, APVMA*, ph: 02-6272-3987, fax: 02-6272-3551, email: [paul.sethi@apvma.gov.au](mailto:paul.sethi@apvma.gov.au)

### • Chemeca 2004 Conference, Sydney, Sept 2004

**26-29<sup>th</sup> on Sustainable Processes.** This Chemical Engineering Conference focusses on harnessing the knowledge, skills and innovation of Chemical Engineers & Industrial Chemists to ensure that the environment inherited by our children's children will be better place for them and for all living things. Over the next twenty years industries' right to operate will increasingly depend upon demonstrated sustainability. *Details:* ph: 61-2-9248-0800, fax: 61-2-9248-0894, email: [chemeca2004@tourhosts.com.au](mailto:chemeca2004@tourhosts.com.au).

From: [www.tourhosts.com.au/chemeca2004/](http://www.tourhosts.com.au/chemeca2004/).

• **Epidemiology in Occ. Health, Melb, Oct 2004**

**Epicoh 2004** - 13-15 October 2004. **Reducing the Global Burden of Occupational Disease and Injury.** The 17<sup>th</sup> International Symposium will be held on the 13-15<sup>th</sup> October 2004 in Melbourne. Each day there will be 4 parallel sessions. On Saturday 16<sup>th</sup> there will be a full day course on "Epidemiological Methods". Cost \$925, Course \$220. *Email: [epicoh2004@monash.edu.au](mailto:epicoh2004@monash.edu.au).*

*Website: [www.med.monash.edu.au/epidemiology/epicoh/index.html](http://www.med.monash.edu.au/epidemiology/epicoh/index.html). Register: ph 61-3-9887-8003;*

*Email: [convention@optushome.com.au](mailto:convention@optushome.com.au)*

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