

Hazmat & Environment Notes - May 2001

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Prepared by Jeff Simpson

Hazardous Materials Consultant

Editor & Publisher

I work as a Hazardous Materials Consultant and have edited and published this newsletter since 1985.

Each year our community expects more controls to be in place to ensure our safety and our children's future. There is a significant move to have a common world system of controls. As a result there is a moving target of regulatory requirements to be met.

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. Contact details are provided so that you may then obtain the detailed information. I also encourage you to make input into the system of regulations and standards.

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Hazardous Substances

. **New Zealand Hazardous Substances & New Organisms (HSNO) Act commences for Hazardous Substances, 2nd July 2001:** The NZ approach is more similar to the product based approach of the Australian National Registration Scheme for Ag & Vet Chemical Products, than it is the CAS Number based approach of the Australian NICNAS system for Industrial Chemicals. The 30th June is your last opportunity to add products under the old Toxic Substances Act. The NZ Chemical Industry Association's comment is at: www.nzcic.org.nz, select *What's Hot*, then down to *HSNO Starts Up July 2..*

The HSNO Act replaces: Explosives Act 1957; Dangerous Goods Act 1974; Toxic Substances Act 1979; Pesticides Act 1979 (minor exceptions); Animals and Plants Acts (1967 & 1970) where relevant to new species introduction. However there will be a transitional period of several years, where the existing controls will continue.

The HSNO website is for basic general information: www.hsno.govt.nz, which then links to the various parts of the ERMA website for detailed information: www.ermanz.govt.nz.

To obtain the Information Sheets, Quick Guides, Guides, Forms use the ERMA website: www.ermanz.govt.nz and select the Publications area then go to the various areas:

Policy - Protocols: e.g. S2 #4 Information Requirements for Hazardous Substances Applications

Information Sheets: e.g. Determining the Status of a Hazardous Substance; What Will It Cost?; Development of HSNO Codes.

Quick Guides: e.g. The Transfer of Substances; Test Certifiers; Applying for a Hazardous Substance Approval; Enforcement and Compliance.

Guides: e.g. Substance Evaluation Sheet; Interim Guide to the Specifications for Hazardous Substance Thresholds under the HSNO Act (under review).

NOTE: The User Guide to Making a Hazardous Substance Application was **not** available as at 7th June 2001.

. **NZ ERMA Composite List of Single Component Substances to be Considered for Transfer:** is available in the ERMA website: www.ermanz.govt.nz then "Hazardous Substances" then to the bottom under Approval/Licence under Old Legislation click on "Transfer of Substances" and select the "Composite List". This is the first step to building the new list of hazardous substances.

. **Draft Codes of Practice on Labelling & MSDS - BUT Australian EPAs have No Environmental Information Requirements for These Documents:** "*Labelling of Workplace Substances (Hazardous Substances and Dangerous Goods)*" and "*Preparation of Material Safety Data Sheets*". These Codes are important documents for

regulatory authorities, manufacturers, suppliers, and users, as labels and MSDS information enables companies to decide which product has the least impact and costs. However, I have become aware that the various Australian Environment Authorities, though controlling end-of-pipe emissions and wastes with increasingly tighter requirements, have no environmental information requirements to be met in these documents. This puts the onus and costs on the companies using the chemicals to do the finding out.

It is time the Australian EPAs to get involved at the START of the environmental effects process, in the decision to use the product with the minimum environmental impact. The EPAs must define the minimum level of information which should be available in the supplier's MSDS and Label and need to ask for a delay in the MSDS and Label Codes review of comment process so their requirements can be included.

The draft codes are no longer available but from the NOHSC website: www.nohsc.gov.au. Copies of comment from the Aust. Institute of Occupational Hygienists can be downloaded from their website: www.aioh.org.au, select "About AIOH" then select "Position Papers" in the righthand column.

. **Proposed Prohibition on the Use of Chrysotile Asbestos in Australia:** A discussion paper is available on the NOHSC website: www.nohsc.gov.au and select "News and What's New". There are several support papers: Technical Assessment of Alternative Materials; Health Assessment of Alternative Materials; Initial Impact Assessment of the Proposed Phase Out. There is also a "Statement of Intent" to support a phaseout by the end of 2003 which has been signed by the State Governments of Victoria, New South Wales; Queensland, Western Australia and Tasmania.

. **UK HSE Toxic Substances Bulletin (TSB) - Now on the Internet:** This very useful newsletter may now be downloaded free from the UK HSE website: www.hse.gov.uk/toxicsubstances/index.htm. The TSB covers the UK Hazardous Substances Regulations, developments in European Directives, and research and developments in hazardous substances in general.

. **UK Hazardous Substances List Update:** The approx. 500 changes between the 25th EU ATP and the 28th EU ATP are presently downloadable for public comment from the UK HSE website: www.hse.gov.uk/hthdir/noframes/chip/chip3ove.htm. There are two documents "Additions" and "Changes". The EU 25th Edition Hazardous Substance List can be searched at "www.the-ncec.com/cselite/index.html".

Note: If a chemical is on these lists it means that it should be classified by all companies in Australia (as the Criteria for Classifying Hazardous Substances has been applied to get it onto the UK/EU Lists).

. **Triclosan (Antibacterial Agent) Found in Breast Milk:** has been reported by the Swedish Environmental Protection Agency in their Swedenvironment September 2000 newsletter. "Triclosan was found in three out of five breast milk samples. One sample contained as much as 300 micrograms triclosan per kilo lipid weight. Triclosan is known to be toxic to fish and algae. It can also foster resistant bacteria and may be connected with the increase of allergies" Margaretha Adolfsson-Erici from Stockholm University reported at a the Dioxin 2000 Conference in California. "Triclosan has been found in plastic chopping boards, toothpaste, bicycle shorts, shoe insoles, household sponges and toilet cleaners" and in baby sheets.

The use of triclosan in toothpastes to help prevent gum disease was seen as justified by Olof Holmer, ecotoxicologist at KTF, the Swedish Chemical, Cosmetic, Toiletry and Household Product Suppliers' Association, but not the "use in dish cloths, toys, cutting boards, etc."

To obtain a copy go to their website: www.swedenvironment.environ.se and select "previous issues".

Note: NICNAS had Triclosan [5-Chloro-2-(2,4-Dichlorophenoxy) Phenol, CAS:3380-34-5] as a Possible Priority Existing Chemical as at March 2000.

. **NSW Occupational Health & Safety Regulation 2001:** has been delayed from starting until at least July 2001. You can still download the draft documents "Draft Occupational Health & Safety Regulation 2001" and "A Guide to the Draft Occupational Health & Safety Regulation 2001". Chapter 6 covers the hazardous substances regulations, which have been aligned with the National Model Regulations. Download the pdf documents from: www.workcover.nsw.gov.au, select "For Public Comment", select "Draft OH&S Regulation", select "Download the Draft Regulation" and this brings up the documents available. *For details contact the OHS Regulation Co-ordinator NSW Workcover ph: 02-9370-5000, freecall: 1800-451-462, fax: 02-9370-5817*

NICNAS (Industrial Chemicals)

Website: www.nicnas.gov.au

. **Australian High Volume Industrial Chemicals List - Stage 1, Manufacture:** Companies manufacturing industrial chemicals \downarrow 100 tonnes in 1999 were required to submit information. 212 chemicals were reported as being manufactured at \downarrow 100 tonnes per year. The list of 146 chemicals manufactured at \downarrow 1000 tonnes per year is listed in the May 2001 Chemical Gazette.

NOTE: Stage 2, Imported Industrial Chemicals: is still to be undertaken. **Editor's Comment:** The reporting year is likely to be more recent as it becomes more difficult to get information from the 1999 year. The original threshold was to be \downarrow 20 tonnes per year of the aggregated amount of an ingredient across a company's imported product range. This may be increased slightly (say \downarrow 30 tonnes per year) to help minimise the cost of reporting for small companies with small

quantities unlikely to add up to \downarrow 1000 tonnes per year across all importers. I guess you will be asked to report on the 2001 year in early 2002.

For details contact NICNAS Ms Deborah Willcocks ph: 02-9577-9377, fax: 02-9577-9465, email: <willcocks@nohsc.gov.au>

From the NICNAS Chemical Gazette, May 2001, now obtained from www.nicnas.gov.au/publications/#gazette

. **Priority Existing Chemical Reports Published:** for

- Tetrachloroethylene (No. 15);
- Short Chain Chlorinated Paraffins (No. 16);
- Tris (Chloroalkyl) Phosphates (No. 17);
- Ammonium, Potassium and Sodium Persulfates (No. 18);
- Hydrofluoric Acid (No. 19);
- Polybrominated Flame Retardants (No. 20).

Chemical Identity summary reports are in the June 2001 Chemical Gazette. Assessment reports are available from the NICNAS website: www.nicnas.gov.au. Hard copies can also be sent ph: 1800-638-528.

. **Draft Priority Existing Chemical Report on Benzene:** is now available. Benzene exposure is most likely to occur in the steel industry (coal coking byproduct), petroleum refining, associated laboratories and from petrol vehicle emissions. Benzene (a known carcinogen) gives cause for concern about leukemia in workers with repeated exposure. The report presents a summary and evaluation of information relevant to the assessment of risks to health and the environment from current manufacture and use of benzene. The measure currently used to manage the risks are reviewed. Various recommendations are made including additional Risk Phrases R36/37/38 (Irritant Effects) and R40 (Mutagen Cat.3 Effect). The 275 page "Full Version Draft" and a 16 page "Key Information (Synopsis)" can both be downloaded from the NICNAS website: www.nicnas.gov.au under "news". Hard copies can also be sent ph: 02-9577-9270 or freecall: 1800-638-528.

. **New Chemical versus Product Recommendations:** The notice in the June 2001 Chemical Gazette clarifies the scope of the assessment and the recommendations, in particular, in matters concerning the assessment of the notified chemical and the need to also include advice on the products containing the chemical.

. **Relationship between NICNAS the National Drugs and Poisons Schedule (NDPS) Process:** is described in the June 2001 Chemical Gazette. NICNAS works with other Commonwealth agencies in performing its new chemical entity assessments. The usual process is that during the NICNAS assessment period, the Therapeutic Goods Administration (TGA) will identify any potential scheduling issues as a public health measure and refer these to the NDPS Committee. This is advised to NICNAS, which informs the company concerned as scheduling is legally a separate process from NICNAS activities. *For further information contact NICNAS ph: 02-9577-9578, freecall: 1800-638-528;*

contact NDPSC Secretary ph: 02-6270-4379, fax: 02-6270-04353.

From the NICNAS Chemical Gazette, June 2001, now obtained from www.nicnas.gov.au/publications/#gazette

Agricultural & Veterinary Chemicals

NRA Study on Quality Assurance Practices for Technical Grade Active Constituents and Agricultural Chemical Product Manufacturers: Currently only information on TGACs at the time of initial approval is required, with no ongoing monitoring of the quality of TGACs or formulated products. Following visits by NRA officers to manufacturers and importers, a Draft Model for a Quality Assurance Scheme for TGACs will be prepared and presented to the NRA board by July 2001. This draft will then be circulated for comment. Contact NRA Gr John Owusu ph: 02-6272-3754, email: <jowusu@nra.gov.au>.

From the Ag&Vet Chemicals Gazette, April 2001

NRA Guidelines for Veterinary Chemical Products:

The NRA is adopting a further guidelines under the Veterinary International Cooperation on Harmonisation of Technical Requirements for Registration of Veterinary Medicinal Products (also known as **VICH**). They are:

Stability Testing for Medicated Premixes C6 (VICH GL 8); Impurities in New Veterinary Drug Substances V55 (VICH GL 10); Impurities in New Veterinary Chemical Products V56 (VICH GL 11).

Efficacy of Anthelmintics - General Req'ts (V51); - bovine specific (V52); - ovine specific (V53); - caprine specific (V54).

C6 is a supplement to C3 and C4 and requires long term stability testing to be conducted at 30°C±2°C & 60%RH±5%.

V55 and V56 are new and should be used in conjunction with *Guidelines for Registering Veterinary Chemicals*.

The Guidelines will be on the NRA website by July 2001: www.nra.gov.au. Hard copies of C6 ph: 02-6272-312, V51, 52, 53, 54, 55 & V56 ph: 02-6272-3744. The VICH Guidelines can also be obtained from <http://vich.eudra.org/> click on "Direct Access to Guidelines".

From the Ag&Vet Chemicals Gazette, May/June 2001

NRA Residue Guidelines:

No. 27 - Ectoparasiticide Residues in Sheep Tissues; contact the NRA Jason Lutze ph: 02-3272-3789, fax: 02-6272-3551, email: jlutze@nra.gov.au.

No. 28 - Residues in Honey (Ag & Vet Chemicals); contact the NRA Phil Reeves ph: 02-6272-3800, fax: 02-6272-3551.

No. 29 - Residues in Abalone (Vet Chemicals); contact the NRA Martin Merrett ph: 02-6272-3189, fax: 02-6272-3551. See the Ag&Vet Chemicals Gazette June 2001 for each Guideline and the relevant residue guidelines.

Prohibition of Chemical Weapons Convention

Notification of Organic Chemical Production - Extra Provisions are Now in Place: The operator of a facility must make notification under the Chemical Weapons (Prohibition) Act if the amount of unscheduled discrete organic chemicals containing one or more of the elements: **phosphorus, sulphur or fluorine**, produced at the facility was more than 200 tonnes in the previous year, or if an individual plant at the facility produced during the year more than 30 tonnes of an unscheduled discrete organic chemical. These requirements do not apply, however, for facilities that exclusively produced hydrocarbons or explosives (no non-explosive intermediates), or production of long chain polymers (such as plastics), during the year.

From their Prevention of Chemical Weapons Convention Office website: www.dfat.gov.au/cwco/pages/summary.html

Dangerous Goods

IMDG Code 2000 Edition (IMO-200E): was published in late 2000. The International Maritime Dangerous Goods Code is now published as two A4 bound volumes, totalling about 1500 pages. There is a transition period during 2001 before the new Code will be fully operational in 2002. New editions of the IMDG Code will be fully published every 2 years and amendments will not be published separately. Cost \$340 approx. + S/H.

There is also a **Supplement IMDG Code (IMO-210E)** with new revised MFAG/Ems/Reporting Procedures/Packing Guidelines/Pesticides/INF Code. Cost \$117 approx. + S/H.

Both available from Hunter Publications, Melbourne, ph: 03-9417-5361, fax: 03-9419-7154, website: www.hunter-pubs.com.au.

Hazmat101 - Hazmat Incidents Listserv: will of particular interest to hazmat regulators/emergency services/trainers who want to be aware of hazmat incidents. (particularly in the USA). In your email program enter into To: <hazmat101-subscribe@yahoogroups.com>.

Aluminium Phosphide Pesticides - Beware of Faulty Packaging: Upon arrival in port, two shipments of aluminium phosphide pesticides were found to be emitting large quantities of phosphine (a toxic gas) due to faulty packaging allowing moist air to react with it. One shipment from India was allowed to be transported for immediate use. The other, from China, had an excessive reaction rate and had to be carefully disposed of by opening the containers in a remote area and allowing the product to react with moisture in the air. This took two weeks, and was monitored by the Fire Brigade and EPA, costing about \$250,000, which the

authorities are now seeking to recover from the importer of the product.

From *WA Explosay May 2001*, downloadable from website: www2.dme.wa.gov.au/safetyenv/index.html

Environment Notes on Chemicals

. **Victorian Industrial Waste Management Policy (Prescribed Waste)**: formulated by the Vic EPA forms the legal framework for the new waste management strategy.

A new waste management hierarchy is established: avoidance; reuse; recycling; recover of energy; repository storage; treatment; and containment. Hazardous waste currently going to landfill will be banned. A Hazardous Waste Consultative Committee and Taskforce to identify potential site have been set up. For details contact Sally Gibson ph 03-9651-5999.

The policy can be downloaded from: www.gazette.vic.gov.au/gazette/ and select 2000 then 5 Dec 2000.

From *Environment Business*, Jan 2001, Hallmark Editions website: www.halledit.com.au

. **Danish EPA List of Undesirable Substances 2000**: The goal of the Danish EPA is to reduce the impact of substances which load the environment, so that the quality of the environment is not diminished for mankind or nature in general. A summary of reasons a chemical is on the list is included in the 52 page document. An important selection criterion has been the distribution/ consumption pattern of a given substance in Denmark. The list of 57 chemicals or groups can be downloaded from www.mst.dk/homepage/ and select "chemicals".

. **The EU Commission Sets Out the Path towards Sustainable Use of Chemicals, 13 Feb 2001**: The main objective of the new Chemical Strategy is to ensure a high level of protection for human health and the environment, while ensuring the efficient functioning of the internal market and stimulating innovation and competitiveness in the chemical industry.

Key Elements of the New Strategy

- A single regulatory framework for "existing" and "new" substances to provide knowledge about hazards and uses.
- Reversal of responsibility from authorities to industry for testing and risk assessment of chemicals.
- Promotion of innovation and competitiveness without compromising the high level of protection
- Introduction of a tailor-made authorisation system where stringent control is ensured for the most dangerous substances
- Increased transparency and information about chemicals.

The new system for assessing both existing and new chemicals will contain three elements; **Registration** of basic information on substances exceeding a production volume of 1 tonne/year; **Evaluation** of the registered information for substances exceeding 100 tonnes/year; and **Authorisation**

of substances which are - carcinogenic, mutagenic, or toxic to reproduction, and persistent organic pollutants.

Suggested registration deadlines are:

>1000 tonnes/year by end 2005; >100 tonnes/year by end 2008; >1 tonne/year by end 2012.

For more information go to the website: <http://europa.eu.int/comm/environment/chemicals/whitepaper.htm>, and for a summary select "press release".

Australian Standards

. **AS 2809.4:2001 Road Tank Vehicles for Dangerous Goods - Tankers for Toxic & Corrosive Cargoes**: To be used with AS 2809.1, five alternative types of cargo tanks are described, the ADG Code specifies the type to be used. 18 pages \$46.20.

. **AS/NZS 2927:2001 The Storage & Handling of Liquefied Chlorine Gas**: covers cylinders, drums and bulk as well as requirements for ancillary equipment. 65 pages \$93.50.

Available from Standards Australia, ph: 1300-654-646, fax: 1300-654-949, email: sales@standards.com.au. Drafts are downloadable from www.standards.com.au and select "Download a Draft". Most drafts are free when downloaded.

Publications

UK HSE Publications

Available from HSE Books, PO Box 1999, Sudbury, Suffolk, CO10 6FS, ph: 01787-881165 or fax: 01787-313995.

Also from John Smith & Son Bookshops, Scotland ph: 44-141-221-7472, fax: 44-141-248-4412, website: www.johnsmith.co.uk. Note: The UK HSE Books have an international surcharge, whilst John Smith doesn't.

Also available in Australia through DA Information ph: 03-9210-7777, fax: 03-92107788, email: service@dadirect.com.au, website: www.dadirect.com.au.

The recent lists of UK HSC/HSE publications can be found at the UK HSE website: www.hse.gov.uk/flist/flist.htm.

- **UK Occupational Exposure Limits: EH40/2001**, ISBN 071761977X, Cost £5.00. Contains a new table of the European Commission's first list of Indicative Occupational Exposure Limit Values (OELVs). It has a shortened format with supporting guidance to be found in the previous edition EH40/2000.

- **Controls of Chemicals in Printing: COSHH Essentials for Printers**, ISBN 0717618358 Cost £15.00. Based on the

publication COSHH Essentials, it is designed to help printers select suitable control measures for chemicals used in various printing processes.

- **Assessing and Managing the Risk at Work from Skin Exposure to Chemical Agents**, HSG205 ISBN 0717618285 Cost €8.00. It covers an explanation of how temporary or permanent health effects can be caused by skin exposure to chemical agents.

- **Cost and Effectiveness of Chemical Protective Gloves for the Workplace**: Guidance for Employers and Health & Safety Specialists, HSG 206 ISBN 0717618285 Cost €8.50

- **Choice of Skin Care Products for the Workplace**: Guidance for Employers and Health & Safety Specialists, HSG 207 ISBN 0717618250 Cost €3.00

- **Water Reactive Chemicals - REACTPOOL**: A New Model for Accidental Releases of Water Reactive Chemicals, by Kapias and Griffiths. ISBN 07176619958, Cost €10.00. REACTPOOL is a new pool model that can be used for both instantaneous and continuous liquid releases.

. **ACGIH 2001 TLVs and BEIs**: ISBN 1-882417-40-2. Threshold Limit Values for Chemical Substances and Physical Agents; Biological Exposure Indices. 2001 adoptions are: Butylated Hydroxytoluene (BHT); Blyoxal; Molybdenum and Compounds; Propylene Oxide; Synthetic Vitreous Fibres - Refractory Ceramic Fibres. Cost US\$27 + shipping & handling, contact ACGIH website: www.acgih.org/store, ph: USA-513-742-2020. Can also be purchased through the AIOH in Australia, ph:

. **ACGIH 2001 Guide to Occupational Exposure Values** ISBN 1-882417-41-0. Designed to support and explain the TLVs and BEIs publication. Cost US\$50 + shipping & handling. Contact - See above.

. **Indoor Air Quality Handbook**: Spengler, Samet, McCarthy, published by McGraw-Hill 2001, ISBN 0-07-445549-4. A very comprehensive practitioner's reference. It is designed to: Assess Indoor Air Quality Complaints; Understand Critical Issues; Design Healthy, Comfortable, and Functional Buildings. Stephen Brown from the CSIRO Indoor Air Pollution Section has contributed to this book. Approx 1480 pages, costs approx \$280. Available from McGraw-Hill Australia, Sydney, ph: 02-9415-9899, email: <cservice_sydney@mcgraw-hill.com>. For comprehensive details go to "www.mcgraw-hill.com" then put "indoor air quality" in the search box, then "Get More Info" will give the contents of the 71 chapters, can also be ordered for US\$115 plus shipping & handling..

. **Handbook of Environmental Data on Organic Chemicals**, K. Verschuere, 4th Edition, Two Vol. Set: John Wiley & Sons. A comprehensive coverage of approx. 3000 environmentally hazardous organic compounds,

highlighting the control measures designed to reduce the destructive impact of chemicals on the ecosystem. Covers 280 new compounds and 600 updated entries. Available as an approx. 2800 page hardbound book ISBN 0-471-374490-3 for approx. \$790, also as a CD-ROM ISBN 0-461-37488-1 for approx. \$790. Both together ISBN 0-471-41188-4 is \$1050 approx. From DA Information ph: 03-9210-7777, fax: 03-92107788, email: service@dadirect.com.au, website: www.dadirect.com.au.

. **Patty's Toxicology 5th Edition, 2000**: ISBN 0-471-31943-0, published by Wiley. In 8 Volumes plus a Cumulative Index. This presents a wide range of toxicological data for industrial compounds in logical groupings. It covers toxicological assessment, metallic substances, organic substances to synthetic polymers. Approx. 9000 pages, cost US\$2400 (Aust\$5100 approx.). From DA Information ph: 03-9210-7777, fax: 03-92107788, email: service@dadirect.com.au, website: www.dadirect.com.au.

. **Kirk-Othmer Concise Encyclopedia of Chemical Technology, 4th Edition, 2001**: ISBN 0-471-41961-3, Published by Wiley. This distills the articles in the 17 Volume 4th Edition into one concise volume. It includes over 1000 concise articles on all aspects of chemical technology; authoritative coverage of new topics such as biosensors, nanotechnology and smart materials. Designed for use as a ready-reference guide. Cost \$580 approx. From DA Information ph: 03-9210-7777, fax: 03-92107788, email: service@dadirect.com.au, website: www.dadirect.com.au.

. **Perry's Chemical Engineers' Platinum Edition, 2000**: McGraw-Hill Publishing, ISBN 0-07-135540-5. This handbook includes topics such as biochemical engineering, waste management, plant safety and analysis of plant performance, expert systems, and material and energy balances. Contains comprehensive data for design on chemical processes. 3000 pages approx, cost \$450 approx. From DA Inform'n email: service@dadirect.com.au, website: www.dadirect.com.au, ph: 03-9210-7777, fax: 03-92107788.

. **The Handbook of Chemistry & Physics 82nd Edition, 2001**: CRC Press. This compilation provides a thorough range of critically evaluated data. Recent revisions have supported advances in semiconductors and high temperature superconductors; addressed environmental concerns by providing data on pollutants, contaminants, global warming, ground water contamination. Cost Hardcover ISBN 0-8493-0482-2 \$290 approx, CD-ROM ISBN 0-8493-0879-8 \$400 approx. From DA Information ph: 03-9210-7777, email: service@dadirect.com.au, website: www.dadirect.com.au, fax: 03-92107788.

. **Links for Chemists**: www.liv.ac.uk/chemistry/links/links.html: An index of over 8000 chemistry resources on the web hosted by the University of Liverpool UK chemistry department. From *Chemistry & Industry Feb 2001*.

Seminars, Conferences, Courses

. **Victorian Health & Safety Week 2001, 17-22 June:** See their website: www.workcover.vic.gov.au or obtain a brochure from Vic Workcover ph: 03-9641-1555.

Various presentations cover chemical issues: METRO **Dangerous Goods/Hazardous Substances - Differences, Chisholm Institute of TAFE. Dandenong**, 18th June 01, 12.15pm for 1-4.30pm; ALSO **Cranbourne**, 21 June 01, 8.15am for 9-12.30pm, ph: 03-9565-9444.

Safety Seminar in Chemical Safety, Vic Workcover. Darebin Arts Centre, **Preston**, 19th June 01, 12.30-4.30pm, ALSO Victoria University, **Sunshine**, 21 June 01, 12.30-4.30pm, ph: 9628-8115.

Guidance on Asbestos in the Workplace, Holmesglen Institute of TAFE. Chadstone campus, 20th June 01, 8am for 9am start (I assume a half day), ph: 9565-9444.

Major Hazard Facilities - Managing Change, Vic Workcover. Darebin Arts Centre, Preston, 9.30am - 3.30pm, ph: 9641-1462.

COUNTRY

Confined Space Seminar, CFA Fiskville, Ballan. 19th June 01, Neil Shell 0418-542-770.

Managing Safety in the Spray Painting Industry, Warrnambool. 21st June 01, 3.00-5.00pm, ph: Donna Lacy 03-5562-5600.

Dangerous Goods and Hazardous Substances Workshop, HAZCON P/L, Bairnsdale, 19th June 01, 8.30am - 1.00pm; ALSO **Trafalgar**, 21st June 01, 8.30am - 1.00pm, Damien Murphy ph: 03-5633-2011

. **Practical OH&S Workshops:** organised by the Collaborative Centre in OH&S, Adelaide University. **Indoor Air Quality** 20th June; **Industrial Ventilation** 21st June; **Confined Space Safety** 27th June; **Emergency Chemical Spill Procedures** 3rd July; **Air Sampling** 4th July; **Asbestos Counting** 5&6th July; **Implementing Australian Standard 1715 Respiratory Protection** 11th July; **Hazardous Substances** 20&21st Sept.

\$209 per day including GST, for details ph: 08-8303-3571, email: <dino.pisaniello@adelaide.edu.au>.

. **Product Due Diligence, Melbourne, 21st June 2001:** Part of series of FREE breakfast seminars organised by Clayton Utz law firm. To be a practical session at making effective use of "front end" due diligence style programs to identify potential product risks. *Contact Anna Fox for details ph: 03-9286-6757, fax: 03-9629-8488, email: afox@claytonutz.com.* Further seminars will include: Dust Diseases - Asbestos; Product Tampering - A Hypothetical.

. **Trade Waste Management Conference, Melbourne, 22nd June 2001:** Presented by the Australian Environment Business Network, Altona, 8.45am for 9.00am - 5.00pm. Covers the new requirements for Trade Waste customers

and what further changes are expected. Speakers from the EPA, Melb Water, TWAAC and the Water Companies. *Cost \$375, for details contact AEBN ph: 03-9397-2511, fax: 03-9397-2411, email: aebn@bigpond.com.*

. **Environmental Short Courses, Cairns, 9-13th July:** Course 5 - Principles of Air Quality Management, 5 days, \$2500; Course 6 - Waste Minimisation, Cleaner Production and Eco-Efficiency, 3 days, \$1800; Course 7 - Practical Environmental Auditing, 2 days, \$1300; Course 8 - Implementing and Environmental Management System, 3 days, \$1800; Course 9 - Statutory and Environmental Planning, 3 days, \$1800; Course 10 - Environmental Law for Manager, Scientist and Engineer, 3 days, \$1800; Course 11 - Principles of Life Cycle Analysis, 2 days, \$1300. *Accommodation is extra, organised by the University of Queensland, International Winter Environmental School Pty Ltd, ph: 07-3365-4370, fax: 07-3365-6083, email: <j.nankiville@uq.edu.au>, website: www.iwes.com.au.*

. **Neighbourhood Environment Improvement Plans (NEIPs) Briefing, Melbourne, 12th July 2001:** Presented by the Australian Environment Business Network, St.Kilda, 8.30am - 12.30pm. NEIPs may need to be developed where there is an identified environmental issue which need to be developed on a local or regional basis. Speakers - Jennifer Wolcott, Director Vic EPA; Dr Richard Strauch, Boral. *Cost \$135, for details contact AEBN ph: 03-9397-2511, fax: 03-9397-2411, email: aebn@bigpond.com.*

. **Environmental Management - Best Practices Measures, Sydney, 21-22 August 2001:** Speakers from Environment Australia and for 15 case studies. On the 20th Aug there is a one day workshop, the 23rd Aug there are 4 half day workshops. *Cost \$2420, half day workshops add \$650 approx.. one day workshops add \$1000 approx.. Details IQPC ph: 02-9223-2600, fax: 9223-2622, email: registration@iqpc.com.au, website: www.iqpc.com.au, click on "Management Strategy".*

. **Green Chemistry - Research & Development Collaborations, Melbourne, 24th Sept 2001:** Half day symposium organised to promote collaborative partnerships. Speakers from university, CSIRO and industry. *For details contact Gerard Roe, email: <Gerard.Roe@riotinto.com>.*

. **Conference of Residue Chemists, Canberra, 31st Oct -2nd Nov 2001:** "The Environment, Food and You" - will discuss monitoring and managing residues of agricultural, and veterinary chemicals, organic and inorganic contaminants, in people, in food and in the environment. *Cost \$350, contact John Connolly, National Residue Survey, ph: 02-6272-4682, fax: 02-6272-4023, email: johnconnolly@affa.gov.au.*

AIOH Conference: The Evolving Face of Occupational Hygiene, Wollongong, NSW, 1-5 Dec 2001. The Robens' style legislation introduced nearly 30 years ago has moved to the risk assessment approach rather than the prescriptive approach. Industry has learned to manage without full-time OH&S advisers.

3 day conference only cost: \$1060; 3 day conference including 3 nights accommodation: \$1300.
For details contact the AIOH Conference Secretary
ph: 02-4285-7929, fax: 02-4285-0500,
email: aiohconference@ozemail.com.au.

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