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Notes to Especially Consider are:

Proposed Amendments to the Approved Criteria for Classifying Hazardous Substances

The scope has been extended to domestic use, physicochemical and ecotoxicological effects, and Chapter 8 introduces labelling phrases beyond Risk & Safety Phrases. See p2 for details.

NZ – Draft Safety Data Sheet Preparation Code

There are some significant issues. This is your opportunity to comment on a GHS format based SDS. See p2 for details.

"Used Chemical" Management – A Quantum Leap Forward is Now Needed

Action is Needed Within the Next Year : to enthuse the community about the sort of quantum leap facilities that are required for management of "used chemicals" (so we get the equivalent effect for Melbourne as occurred with the Werribee Sewerage Farm 110 years ago). See p6 for details.

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.

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Hazardous Substances

• Proposed Amendments to the Approved Criteria for Classifying Hazardous Substances

NOHSC has released the draft Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2002)] for public comment until mid November. The Approved Criteria is at [Attachment 1](#), or www.nohsc.gov.au.

A Preliminary Regulation Impact Statement (PRIS) is provided at [Attachment 2](#), which outlines the impact of the proposed changes in terms of a qualitative discussion and assessment of the costs and benefits. The basic structure of the PRIS has been prepared with the assistance of the Office of Regulation Review (ORR).

Comment is invited on the proposed amendments to the Approved Criteria and the accompanying PRIS.

From: www.nohsc.gov.au/NewsAndWhatsNew/MediaReleases/mr23082002.htm

Editor's Comments on the Draft Criteria:

The Draft Criteria is now clearly intended to "ensure that people are properly informed of the dangers of chemicals, both at work and in the home". Ecotoxicological effects may also be used to "optionally" classify as hazardous.

I agree with this change of scope (as the Scheduled Poisons classification and labelling for industrial chemicals is very poor, because it only covers those chemicals the SUSDP committee happens to have evaluated). Also, we are still waiting for the EPAs of Australia to recognise MSDS as the obvious document to contain information on ecotoxicological effects. **BUT, this is an extension on the original scope** of the Hazardous Substances Regulations and may cause bureaucratic / territory / implementation disputes between the various Authorities.

Chapter 8 advises extra requirements for labelling. Some appears for domestic use and some for any use. These phrases are additional to the standard Risk & Safety Phrases. e.g. The sensitising effect phrase for 0.1-1.0%. Also Lead; Cyanoacrylates; Isocyanates; Epoxy constituents; Active Chlorine; Cadmium; "Can become flammable in use"; Chromium VI >0.0002% in Cements.

Optionally Hazardous: By including physicochemical (P) and ecotoxicological (E) criteria as optional to be classified against, as currently written, it means that a substance IS HAZARDOUS if the substance is on the List BUT only against these risk phrases subset or if you apply these P&E criteria to it and it has these risks. e.g. 28th ATP List: Amyl Propionate CAS 624-54-4 R10; Acetoxymethyl benzyloxybutyl Acetate CAS 131266-10-9 R52/53.

I am happy to go with this, but it is different to the current "health effects list and criteria" currently used to define a hazardous substance. This is likely to lead to confusion when this Criteria document is used. I'm assuming these changes are a stepping stone to the GHS approach to life due in a couple of years.

It is URGENT that everyone read this Draft ASAP.

• NZ – Draft Safety Data Sheet Preparation Code

The draft can be downloaded from www.nzcic.org.nz. It is 95 pages long. Some aspects that caught my attention are:

1/ It has a much clearer basis for the need to Review & Re-Issue a SDS, para 2.1.18: a/ change in formulation which - effects the hazardous or dangerous properties; alters the form or appearance; alters the mode of application; b/ new health and/or safety information; c/ reflect new regulations or standards.

2/ Preparation of a SDS, para 2.2.7: Suppliers are responsible for the preparation and provision of SDS. This is in DIFFERENT TO Australia where it is the Manufacturer / Importer only, who are responsible for preparation of SDS.

(Editor's Comment: I'm advised that it is not intended that each supplier in a chain of suppliers prepare an MSDS – suggestions for rewording this para are needed).

3/ Retailer Provision, para 2.2.9: - is "... required ... where asked to by a person in charge of a place of work." An improvement over the Australia Haz Subs Codes & Regs.

4/ Should Safety Phrases be in the Hazards Identification Section, para 3.2? I would prefer to see just the standard and non-standard risk phrases here and pick up the safety phrases in Section 16 under Label Details. Do we really need a country specific statement of Hazardous Nature here? I think this should be in Section 15.

5/ Annex IV compares EU-Aust Risk Phrases to the HSNO Classifications. Most have equivalent classifications. *Some points are:* a/ There is no HSNO Category for R37 Irritating to Respiratory System (does this mean there is no GHS Category for this to?). b/ The HSNO Category 6.1E that is from LD₅₀ (Oral & Dermal) 2000-5000 mg/kg is left out. c/ Physicochemical Risk Phrases & equivalent HSNO Classifications are left out. Both b/ & c/ should be here.

6/ It also includes a Product Safety Card - a condensed version, but sufficient information, of a SDS. See 2.3.1 and ANNEX VIII

Editor's Comment: This is an excellent concept to ensure information is succinctly available where a hazardous substance is used. I am very interested to have this sort of concept used around the world so that information is easy to read, re-checked regularly, and easily acted upon by workers. Workers do NOT normally regularly even scan several 6-12 page MSDSs for products they work with.

In Australia we still have seven **Safe Storage & Handling Information Cards** available from Standards Australia. See www.standards.com.au and search on "safe storage handling information card". NICNAS, www.nicnas.gov.au in the last year have also introduced a similar one page information sheet concept: Their are **Safety Info Sheets**, for 23 chemicals that have had Priority Existing Chemical reports done on them. Thus the concept of condensed but sufficient safety information on chemicals, that is readily accessible to workers, is clearly recognised by NICNAS.

COMMENT NEEDED: *This is your opportunity to comment on a GHS format based SDS. Comment should be sent to New Zealand Chemical Industry Council by the 29th November 02. Submissions can be made as follows:*

Email: nzcic@attglobal.net; Post: NZCIC, PO Box 5069, Wellington, New Zealand, Attention: Bill Birch, Technical Manager (Project Leader)

Editor's Note: I am advised that the Australian Draft MSDS Preparation Code, which has been long in coming, is now being urgently finalised so that both Australian & NZ documents may be released at a similar time by mid 2003 and if possible by the end of April 2003.

• **National Exposure Standard Proposed Amendment For Chrysotile Asbestos to: 0.1 fibres / mL for 8 hours.**

From no later than 31 December 2003 all uses of chrysotile asbestos, including the replacement of chrysotile products when replacement is necessary, are prohibited except for (a) bona fide research or analysis; (b) for removal and disposal; (c) where encountered during non-asbestos mining; or (d) chrysotile products *in situ*, at the time prohibition takes effect, but not to their replacements.

NOHSC has released a revised National Exposure Standard for chrysotile asbestos of 0.1 f/mL for 8 hours for public comment. The focus of this consultation period is to seek comment on the scientific basis for a revised standard and the accuracy of current measurement methodologies.

A Public Discussion paper and a Preliminary Regulation Impact Statement (PRIS) are available by downloading from the NOHSC Website at: www.nohsc.gov.au/PublicComment/, or freecall 1800 666 843, or email: joanne.cuthbert@nohsc.gov.au. Comment closes 13 December 2002.

From the Chemical Gazette 1 Oct 2002, www.nicnas.gov.au/publications/#gazette

NICNAS (Industrial Chemicals)

• **Views on Ratification of Two Multilateral Treaties Relating to Certain Hazardous Chemicals**

1/ **Rotterdam Convention on the Prior Informed Consent Procedure** for Certain Hazardous Chemicals and Pesticides in International Trade; and

2/ **Stockholm Convention on Persistent Organic Pollutants.**

Both these conventions aim to protect human health and the environment from potential harm, and cover certain pesticides and industrial chemicals. Australia signed the Rotterdam Convention in 1999 and the Stockholm Convention in May 2001.

The Rotterdam Convention facilitates information exchange about the characteristics of hazardous industrial chemicals and pesticides. It does not involve international bans.

The Stockholm Convention includes obligations to reduce and eliminate production, use, trade, stockpiles, wastes and emissions of toxic chemicals known as **persistent organic pollutants**. The Stockholm Convention contains obligations on nine pesticides initially - aldrin, chlordane, DDT, dieldrin, endrin, heptachlor, hexachlorobenzene, mirex, and toxaphene.

Further information about the Rotterdam and Stockholm Conventions can be obtained from http://www.dfat.gov.au/environment/haz_chem.html

Queries can be directed to NICNAS POPS ph: 02-8577-8880, email: sneha.satya@nicnas.gov.au; PIC ph: 02-8577-8881, rosemary.sager@nicnas.gov.au; AFFA, phone 02 6272 5391 or andre.mayne@affa.gov.au.

Submissions are sent to: Assistant Secretary Environment Branch Department of Foreign Affairs and Trade BARTON ACT 0221.

From the Chemical Gazette August 2002, also from the Ag&Vet Chemical Gazette August 2002

• **Perfluoroalkyl Sulfonate (PFAS) Chemicals**

NICNAS is seeking information on 13 chemicals, including polymers, which are derived from perfluorooctanesulfonic acid and its homologues; collectively referred to as perfluoroalkyl sulfonates (PFAS) which have been imported as chemicals or products since January 2001.

- Quantities imported and/or manufactured;
- Products imported containing the chemical and quantities of chemical in the products; and
- Uses of the chemical or the products containing the chemical.

Any other persons with information on these chemicals including: users, past importers or manufacturers, are also encouraged to provide information on the uses of these chemicals.

12 have CAS No.s:

2250-98-8; 30381-98-7; 57589-85-2; 61660-12-6; 61660-12-6; 68608-14-0; 70776-36-2; 127133-66-8; 148240-78-2; 148684-79-1; 178535-22-3; 306974-63-0.

Plus: Polymethylenepolyphenylene isocyanate and bis(4-NCO-phenyl)methane reaction products with 2-ethyl-1-hexanol, 2-butanone, oxime, N-ethyl-N-(2-hydroxyethyl)-1-C4-C8 perfluoroalkanesulfonamide.

NICNAS ALSO seeks information on ANY other perfluoroalkyl sulfonate chemical and product imported into or manufactured in Australia.

PFAS's may be contained in such products as fire-fighting foams, commercial and consumer floor polishes, window cleaners, alkaline cleaners, electroplating and etching bath surfactants/mist suppressants, mining and oil surfactant products and in hydraulic and dielectric fluids.

For PFOS containing products NICNAS only seeks information from end-users on the uses and quantity held.

The PFAS group of industrial chemicals may be hazardous to human health and the environment. Data collected will contribute to the OECD risk management strategy regarding PFAS chemicals.

Response Forms are in the 3 Sept 2002 Chemical Gazette. Send the information to: Jane Weder, Existing Chemicals, NICNAS, G P O Box 58, Sydney NSW 2001.

For further information contact Dr Sneha Satya on 02-8577-8880 or email sneha.satya@nicnas.gov.au

From the Chemical Gazette 3 Sept 2002, www.nicnas.gov.au/publications/#gazette

Agricultural & Veterinary Chemicals

• **Varying an NRA an Approved Label**

A new document "NRA Requirements for Applications to Vary an Approved Label" is now available in [html version](#) or [PDF version](#). When the variation is of an administrative nature and no technical assessment is required.

Note: Requirements for applications to vary an approved label when technical assessment is required will be set out in a separate document.

The label that appears on the product container must be identical to the NRA approved label. Therefore all variations to labels require NRA approval before a product is supplied for use. This requirements document describes the two different types of applications that can be made to vary the label, and the requirements and process for each. There is now a one-page application form for these applications.

The Notification scheme is now redundant, and notification of changes to labels will no longer be accepted.

Copies: www.nra.gov.au/gazette/gazette0208p50.shtml or
NRA Vet. Medicines Division Officer ph: 02-6272-3744.

• NRA Guidelines For Vet Chemical Products

After consultation with the veterinary chemical industry, the NRA is adopting **Reproduction Testing** and **Genotoxicity Testing** guidelines developed by the VICH process. VICH is the International Cooperation on Harmonisation of Technical Requirements for Registration of Veterinary Medicinal Products.

**NRA Veterinary Evaluation Guideline No. V66
Studies to Evaluate the Safety of Residues of Veterinary Drugs in Human Food: Reproduction Testing (also VICH GL 22)**

**NRA Veterinary Evaluation Guideline No. V67
Studies to Evaluate the Safety of Residues of Veterinary Drugs in Human Food: Genotoxicity Testing (also VICH GL 23)**

All NRA Guidelines are on the NRA website or from the NRA Veterinary Medicines Division by fax: 02-6272-5249 or ph: 02-6272-3374.

The VICH guidelines can also be accessed from <http://vich.eudra.org/hm/guidelines.htm>

From Ag&Vet Chem Gazette, Aug 2002, www.nra.gov.au

• NRA Registration of Post Harvest Treatments

The NRA regulates the chemicals sold or supplied for the purpose of controlling a pest or disease on the harvested produce whereas ANZFA regulates the sale of treated food. This document provides guidance as to what products do or do not require registration with the NRA, by identifying whether a product is considered an agricultural chemical product. This document discusses the post harvest treatment of produce to control fungal and microbial pathogens.

If products containing chemicals that are for use only as sanitisers in food processing situations (this includes products applied to disinfect water used in food processing, surfaces of equipment used in food processing, and the surface of the food which is processed) AND only claim to control human pathogens, (as distinct from food spoilage pathogens), then the products **do not require registration with the NRA.**

For the full Guide see the August 2002 Ag&Vet Chemical Gazette or www.nra.gov.au/gazette/gazette0208p63.shtml

From Ag&Vet Chem Gazette, Aug 2002, www.nra.gov.au

• Reconsideration of Sodium Fluoroacetate (1080)

Sodium Fluoroacetate (1080) is a fluorinated carboxylic acid ester with high to very high toxicity to birds and mammals. It is widely used in Australia as a poison for the control of vertebrate pests.

The NRA is **no longer satisfied** that the continued use of products containing sodium fluoroacetate (1080) would not be likely to have an unintended effect that is harmful to animals, plants or things or to the environment.

The scope of this 1080 review covers:

1/ Environmental aspects including:

- Persistence of 1080 in baits and poisoned animals
- Effects on non-target animals
- Poisoning incidents associated with 1080
- Effectiveness of 1080 as a vertebrate pest control agent

2/ Animal welfare concerns,

3/ Assessment of product labels and associated extension material.

The review scope document for sodium fluoroacetate (1080) is on the NRA Website: <http://www.nra.gov.au>.

For information contact Chemical Review 02 6272-3213 or email: chemrev@nra.gov.au.

From Ag&Vet Chem Gazette, Aug 2002, www.nra.gov.au

• New Active Constituents Proposed by the NRA

That caught my attention:

Domperidone - CAS 57808-66-9, C22-H24-Cl-N5-O2, which is a dopamine antagonist with numerous actions, including the advancement of fertile oestrus in seasonally anoestrous mares.

Domperidone has been included in Schedule 4 (Prescription Animal Remedy) of the SUSDP.

Mesosulfuron-Methyl – CAS 208465-21-8, C17-H21-N5-O9-S2 which is a new sulfonylurea herbicide for early-post emergence control of wild oats and phalaris, and suppression of brome grass and annual ryegrass in wheat by inhibition of acetolactate synthase (ALS)

Mesosulfuron-Methyl has been exempted from scheduling in the SUSDP.

Acetamiprid - CAS 135410-20-7, C10-H11-Cl-N4 is a systemic insecticide with translaminar activity and with contact and stomach action. It inhibits nicotinic acetylcholine receptors in insects and blocks nervous conduction by depolarisation.

Acetamiprid has been included in Schedule 6 (Poison) of the SUSDP.

Ractopamine hydrochloride - CAS Number: 90274-24-1, C18-H23-N-O3.H-Cl, is a β -agonist that increases the protein deposition rate in pigs and will be used as a feed additive to promote growth and carcass leanness in finishing swine. The mechanisms of reaction are not completely known, but they appear to act through cyclic AMP mediated metabolism resulting in the break down of fat tissue and accretion of protein muscle tissue. Thus, ractopamine hydrochloride is best described as a repartitioning agent.

Ractopamine has been included in Schedule 4 of the SUSDP with a cut-off to Schedule 5 for animal feed mixes containing 10% or less Ractopamine.

Epoconazole - CAS 135319-73-2 (formerly 106325-08-0), C17-H13-Cl-F-N3-O, is a broad-spectrum triazole fungicide with preventative and curative action. Its activity is by inhibition of C-14-demethylase in sterol biosynthesis,

leading to accumulation of 14-a- methylsterols, and thus inhibiting the growth of fungi.

Epoxiconazole has been included in Schedule 5 of the SUSDP.

Tepraloxymid – CAS 149979-41-9, C17-H24-Cl-N-O4 is a cyclohexanedione oxime class herbicide that acts as a fatty acid synthesis inhibitor via inhibition of acetyl CoA carboxylase. It has application for broad-spectrum postemergent grass weed control.

Tepraloxymid has been included in Schedule 5 of the SUSDP.

For all the above active constituents (AC) the NRA is satisfied that the proposed importation and use of each AC would not be an undue toxicological hazard to the safety of people exposed to it during its handling and use.

For details of the above Active Constituents contact Dr Paul Sethi, Chemicals & Residues Evaluation Section, NRA, ph: 02-6272-3987; fax: 02-6272-3551.

From NRA Ag&Vet Chemical Gazettes, Sept/Oct 2002, website: www.nra.gov.au/gazette/subpage_gazette.shtml

• Suspension of Products with Ethylene Oxide

41087 FUMIGAS 900; 41088 FUMIGAS 100; and 50192 FUMIGAS 90.

The NRA is no longer satisfied that use of any of the products in accordance with the instructions contained on the approved labels would not be an undue hazard to the safety of people exposed to the product during its handling or whilst using anything containing its residues.

This suspension remains in effect from 16 August 2002 until 27 June 2003.

For queries contact: Mr Colin Byrnes, NRA Pesticides Division 02-6272-4850.

From NRA Ag&Vet Chemical Gazette, Sept 2002, website: www.nra.gov.au/gazette/subpage_gazette.shtml

• Diazinon Review Draft Report: Further Comment

Diazinon is an organophosphate insecticide used for pest control purposes in agriculture, veterinary and domestic situations. Diazinon containing products were reconsidered because of concerns over toxicity, agricultural worker health and potential environmental and trade effects.

In the absence of adequate data the NRA cannot be satisfied that:

- use of diazinon products on food producing crops is unlikely to be harmful to human beings.
- use of diazinon products on animal housing is unlikely to be harmful to workers.
- diazinon products that are dog/cat shampoos are unlikely to be harmful to the environment.

On this basis, the NRA now proposes to affirm some products and cancel others.

The Draft Review is available on the NRA's website www.nra.gov.au/chemrev/diazinon.shtml. Comment to Email address: chemrev@nra.gov.au

From NRA Ag&Vet Chemical Gazette, Sept 2002, website: www.nra.gov.au/gazette/subpage_gazette.shtml

The Australian Wool Innovations has agreed to fund an occupational health and safety study into the use of the

chemical on wool producers and other users of diazinon based products on sheep, at a cost of over \$300,000.

Further information from Joan Ashton ph 02-6272-3331 or email: jashton@nra.gov.au

From NRA News August 2002: www.nra.gov.au/publications/nranews_aug2002.pdf

• NRA Ag&Vet PUBCRIS Database Upgraded

The upgraded PUBCRIS database enables the user to:-

1/ perform any combination of searches they wish including active ingredient, host and pest searches which were previously warned against in PUBCRIS

2/ multi active ingredient searches are a new function. The user can choose to perform a search for a product containing 2 active chemical ingredients or search for all products containing Active A or Active B.

3/ a full list of pack sizes for each product is now displayed

4/ information is displayed in a more user friendly /easy to read format with product information tabs at the top of the data for the user to click on.

5/ a link from the Approved Label screen takes the user to an image of the label stored on the QDPI web site.

6/ a product number search is now available through the main search screen.

7/ a feedback facility is now available at the bottom of the main search screen to provide your suggestions for future enhancements and comments.

See: www.nra.gov.au/pubcris/subpage_pubcris.shtml

From NRA News August 2002: www.nra.gov.au/publications/nranews_aug2002.pdf

Scheduled Poisons

• SUSDP 17 Amendment No.2, 1st January 2003

One entry that caught my attention:

•Schedule 6 – Amendment

COPPER COMPOUNDS has 2 extra exceptions

- (c) pigments where the solubility of the copper compound(s) in water is 1 gram per litre or less;
- (d) in feed additives containing 1 per cent or less of copper;

From:

<http://www.health.gov.au/tga/docs/pdf/legis/g0206pos.pdf>

Dangerous Goods

• Revised Timeline for Transfer of Dangerous Goods to the NZ HSNO Act

was announced by the Ministry for the Environment and the Environmental Risk Management Authority on Monday 21st October 2002.

The transfer of dangerous goods to the HSNO regime involves a process of properly identifying substances classified as dangerous goods and assigning controls to

effectively manage the hazardous properties of these substances.'

This was due to be completed by 1 April 2003 BUT the date has been extended to 1 April 2004, which will enable a full round of dangerous goods licensing to occur. Dangerous Goods licenses have a fixed term of one year and are the principal existing means of managing risks.

The delay has been caused because it has taken longer than expected to put in place the regulations for transfer to occur.

The old rules will continue to apply for a further year with the territorial authorities continuing to provide licensing and enforcement services. Meanwhile the documents outlining the proposed classifications and controls for these substances are out, or about to be out, for consultation:

- Class 2 Gases (Including LPG) & Petrol and Petroleum products [Comment closed in Oct 2002].

- Class 3 (Flammable Liquids), Class 4 (Flammable Solids) & Class 5 (Oxidisers) **[Comment closes 15th Nov 2002]**

- Scheduled Toxic Substances [Documents being compiled and will be available for consultation shortly – expected in Nov or Dec 2002]

www.ermanz.govt.nz/Consultation/index.cfm#dggases

The HSNO Act requires each substance approved under the Act to be listed on a register with a sufficient description to "uniquely identify" the substance. Under the HSNO Act, all the hazardous properties of a substance are considered and controls are attached in accordance with the hazard classifications those properties indicate.

Controls are, for the most part, performance based. They specify the outcomes that are desired, but do not prescribe how to achieve these outcomes. This gives flexibility to the user to use a range of existing and new methods without being constrained by regulation. The HSNO Act allows for Codes of Practice to be approved to achieve this compliance. e.g. Codes of Practice on Signage, Labelling, Safety Data Sheets.

Editor's Comment: The Class 3 / 4 / 5 Document advises the Control Codes to use for 117 pages of Hazardous Substances (generally with a specific CAS No). The Control Codes are explained and compared to the previous controls under the old regulations. **This is a very important document to review** as it advises the performance based controls you are required to use for each of the Substances.

• What's New in the IMDG Code Amdt 31-02

which was published by IMO in Oct 2002. A range of changes are discussed in an article on the Hazworld website dated 27th August 2002: www.hazworld.com/index.asp?np=news_full#14_0702

The IMDG Code will be published for voluntary adoption by member governments on 1 January 2003 and, for the first time, will become mandatory on 1 January 2004. Carriers should be ready to accept DG consigned by their customers under Amendment 31-02 from 1 January 2003. Operators will face a scenario of dealing with two sets of regulations in the odd years in global operations covering many countries, customers, agents and partners.

From the Hazworld Website: www.hazworld.com

Environmental Notes on Chemicals

• "Used Chemical" Management – A Quantum Leap Forward is Now Needed

By Jeff Simpson, Haz. Materials Consultant & Editor

I have chosen "Used Chemical" as I regard it is clearer definition for the community and does not automatically imply we have a "prescribed waste" that can only be treated and then put in a hole in the ground.

110 years Ago the Melbourne Community Made a Quantum Leap Forward over Waste Management: when Melbourne had to change how it handled sewerage, otherwise Melbourne could not have continued to operate. So Melbourne came up with a world leading solution at the time - "Werribee Sewerage Farm" which has continued to be upgraded since.

The Current "Used Chemical" Waste Method:

of an immobilised chemical waste meeting the EPA leachate test and put in a lined hole in the ground is no longer acceptable to the Victorian public. No further holes in the ground for the current approach will be approved. The Melbourne hole in the ground is the smallest hole of any State capital city around Australia.

Consequences of No Change

The community must understand that with no more holes in the ground for immobilised chemical waste then industry will no longer be able to economically operate in Victoria, as immobilised "used chemicals" will need to be transported out of Victoria. This will mean all businesses that have any sort of "used chemicals" to be "disposed" of, will have this problem. This has a very broad impact across a huge range of businesses and community activities with a likely loss of industry and jobs to other States.

What We Now Need for "Used Chemical" Management:

to work for the next 110 years is the following, ASAP:

1/ **Rigorously apply "Cleaner Production" practices** across all industries so that the quantity of "used chemicals" is minimised, and what is produced can become someone else's raw material without needing to become a "Prescribed Waste".

2/ **Require all "used chemicals" to be fully specified and also require an accurate MSDS to be prepared** so that these evaluation costs are against the "used chemical" producer. This will then allow an accurate assessment of how these "used chemicals" may be best managed and safely handled.

3/ **Ensure all "used chemicals" that can become raw materials be supported by regulation** so that they are not unfairly undercut by new raw material chemicals.

4/ **Put in place the world's leading edge technologies for a Used Chemical Management Facility** or Facilities that will convert "used chemicals" into a usable raw material chemical.

5/ **For "used chemicals" NOT able to be converted** into a usable raw material there are two options that they will need to be evaluated against:

5.1/ Is there a technology that currently exists or is being developed somewhere in the world that is likely to become available within 5 years? If so, the "used chemical" could be

stored for up to 10 years whilst the technology is finalised and built. Support to finalise and build the technology should also be offered.

5.2/ If NOT 5.1/ then the “used chemical” must be fully treated to make it safe to handle and safe for the environment, even if records are lost. The level of treatment should immobilise or make safe the used chemical to a much higher standard than the EPA currently uses so as to assure the community of the safety of a waste from this approach

Timeframe to Change: is a very short time frame

of 3 and maybe 5 years until a new approach MUST be in place. This limit is placed on us by the Lyndhurst hole in the ground filling up.

Standard of “Used Chemical” Facilities:

The facilities identified in 4/ and 5/ will need to be designed to the highest standard to handle Dangerous Goods and Hazardous Substances and comply with EPA emission limits. I suggest that the community expects to see at least 51% stake by government to ensure that these facilities are directly accountable to the community.

These “used chemical” facilities should be located in an area where the raw materials produced are used by adjacent chemical facilities. Treatment facilities will use chemical technologies that will require a specialised workforce and so must be located near the Melbourne workforce.

The “stored used chemicals waiting for a treatment facility” needs to be carefully located as it may become quite large, but it should be as close to Melbourne as possible so that transport costs are minimised and a specialised workforce is available to manage it.

A final resting place facility for fully treated safe waste product will need to be located so that if it is disturbed that the potential impacts are minimal (as accidental contact is likely over the next 1000 years or so, as records are not likely to be rigorously maintained). We should leave as much flexibility for locating fully treated safe waste product as possible. This waste product should be less hazardous than general community waste and should not need to be tightly controlled, let alone “entombed”

Action is Needed Within the Next Year:

to enthuse the community about the sort of quantum leap facilities that are required for management of “used chemicals” (so we get the equivalent effect for Melbourne as occurred with the Werribee Sewerage Farm 110 years ago)

We will need to overcome the negative information that has been generated in the past in the media.

We will need to demonstrate by changes in other Regulations that such “used chemical” facilities will only be operate at the highest standards.

Please activate Government, Authorities, Industry, Professional Association, Environment and Community Groups. I would appreciate a copy of any such emails so that I can create an email network to link concerned persons. Send a copy to Jeff.Simpson@haztech.com.au.

• Updating Greenhouse Per Capita Emissions for Industrialised Countries

By Hal Turton & Clive Hamilton, The Aust. Institute, Aug 02.

“Australia has the highest level of per capita greenhouse gas emissions in the industrialised world, with emissions of 27.9 tonnes of CO₂-e per person in 1999. This is over twice the industrialised country average of 12.8 tonnes CO₂-e, 25 per cent higher than the next highest per capita emitter, Canada, and 35 per cent higher than the world’s largest polluter, the USA. In comparison, per capita emissions in major industrialised European countries, such as France (8.2 tonnes per capita), Germany (11.6), Italy (9.1) and the UK (10.8) are substantially lower.”

From <http://www.tai.org.au> then click on “What’s New”

• New Vic EPA Publications (May – July 2002)

- The following publications caught my attention:
- No. 739 Guidelines for the Preparation of Environment Improvement Plans, 14p.
 - No. 854 Prevention and Management of Contamination of Land in Victoria, 71p.
 - No. 859 Prevention and Management of Contamination of Land, 3p.
 - No. 860 Environmental Auditing of Contaminated Land, 3p.

From: www.epa.vic.gov.au/News/ (Winter 2002)

Standards

• Introduction to Risk Management CD

(Incorporating AS/NZS 4360:1999 Risk management). The CD provides a fully interactive generic guide for establishing and implementing the risk management process which involves establishing context, identification, analysis, evaluation, treatment, monitoring and review and consultation and communication. A number of worked examples on key facets of the risk management process are included. Sept 2002, \$108.68, from www.standards.com.au

• Draft DR 02380 CP: Competencies for working with electrical equipment for hazardous areas (EEHA) - Part 1: Competency Standards & Draft DR 02381 CP: Part 2: Guide for training & assessment

1/:For explosion protected electrical equipment, 90 pages.
2/ Applicable to the Competencies in Part 1. 40 pages.

• Draft DR 02404: Metal finishing - Preparation and pretreatment of surfaces - Part 1:

Removal of oil, grease and related contamination proposes procedures for cleaning metal surfaces of loosely adhering matter, oil, grease, waste, dirt and perspiration, by treatment with solvents and alkaline solutions. 12 pages.

• Draft DR 02449: Metal finishing - Preparation and pretreatment of surfaces - Part 5: Pickling

Procedures for preparing metal surfaces by immersion, or by other means, employing chemical solutions to remove oxidation products (scale), corrosion products and related foreign materials. 24 pages.

The above Drafts are Free to download as a pdf file from www.standards.com.au

• **Draft DR 02425: Metal finishing - Preparation and pretreatment of surfaces - Part 6:**

Chemical conversion treatment of metals proposes requirements and procedures for the chemical conversion treatment of metals prior to the application of a suitable organic protective coating and includes phosphate conversion of ferrous and non-ferrous metals and chromate conversion of aluminium and aluminium alloys. 31 pages.

• **Draft DR 02422: Safety in laboratories - Part 9: Recirculating fume cabinets**

Proposes requirements and recommendations for the design, manufacture, selection and use of recirculating fume cabinets (sometimes referred to as 'ductless fume cupboards') for use in laboratories. Includes test methods to determine their performance. 34 pages.

The above Drafts are Free to download as a pdf file from www.standards.com.au

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