Hazmat & Environment Notes

Jan-Mar 2019

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•Proposed AgVet Chemical Regs: Consultation

Hazardous Chemicals

OSHA USA: Beryllium Standard Revision

10 Dec 2018: USA Dept of Labor OSHA proposes to Revise the Beryllium Standard for General Industry which are designed to clarify the Standard, and to simplify or improve compliance with the Standard.

The <u>Proposed Rule</u> would amend selected paragraphs of the <u>Standard</u>, including "Definitions," "Methods of Compliance," "Personal Protective Clothing and Equipment," "Hygiene Areas and Practices," "Housekeeping," "Medical Surveillance," "Hazard Communication," & "Recordkeeping." It would remove the existing Appendix A, which lists suggested controls, and replace it with a new Appendix A, Operations for Establishing Beryllium Work Areas. *Comment closed 9 Feb 2019.*

From: www.osha.gov/news/newsreleases/trade/12102018
And: www.federalregister.gov/documents/2018/12/11/2018-26448/revising-the-beryllium-standard-for-general-industry

Canadian Chemicals Management Plan Progress

<u>Issue 11: 14 March 2019</u>: This twice yearly report is produced jointly by Environment and Climate Change Canada and Health Canada.

<u>Chemicals Management Plan Progress Report, Issue 11, Fall 2018</u> (17 page pdf)

From: www.canada.ca/en/health-canada/services/chemical-substances/chemicals-management-plan/progress-report.html

Editor: A useful twice yearly Chemical Management update.

Canadian Chemicals Management Plan Website

This Government of Canada website enables you to see the chemicals being currently assessed Canadian Authorities and look back at previous assessments in 2018.

Recent Chemicals & Issues that caught the editor's attention:

Jan 19: 1/ PFOS, PFOA, LC-PFCAs, HBCD, PBDEs, DP and DBDPE; 2/ Ketones Group and Risk Management Scope for MEK, MIBK and 2,4-PD; 3/ Informed Substitution within Canada's Chemicals Program (closed 18 Mar 2019); 4/ Pigments and Dyes Group.

Feb 19: 1/ Stilbenes Group; 2/ Alkyl Aryl Phosphites Group; 3/ Benzoates Group; 4/ Hexanedioic Acid, Diisodecyl Ester; 5/ Trimellitates Group; 6/ Final Pollution Prevention Planning Notice in respect of TDIs; 7/ Disperse Yellow 3 and 25 other Azo Disperse Dyes in the textile sector.

Mar 19: 1/ 2-Ethylhexyl-2-Ethylhexanoate; 2/ Carboxylic Acid Anhydrides Group; 3/ Carboxylic Acids Group; 4/ Arenes Group; 5/ 11th Issue of Chemicals Management Plan Progress Report; 6/ DTPMP.

DTPMP: (Phosphonic Acid, [[(Phosphonomethyl)Imino]Bis[2,1-Ethanediylnitrilobis(Methylene)]]Tetrakis-)

From: www.canada.ca/en/health-canada/services/chemical-substances/latest-news.html

Advancing Informed Substitution & Alternatives

Options for Advancing Informed Substitution & Alternatives Assessment within Canada's Chemicals Program.

Environment and Climate Change Canada June 2018 Report (was open for comment in early 2019). This webpage Report was developed by the University of Massachusetts Lowell, Lowell Center for Sustainable Production (LCSP) under contract with Environment and Climate Change Canada.

Recent stakeholder consultations about the post-2020 Canadian Chemicals Management Plan (CMP), as well as Parliamentary review of CEPA 1999, have identified informed substitution and alternatives assessment as priority areas for consideration in future chemicals management policy development. Importantly, as the government begins to consider its post-2020 chemicals management strategy, it has the potential to take its efforts to the next level by building on the skills, knowledge, and tools developed in the CMP assessment process to align with international activities and lessons learned around informed substitution and alternatives assessment. Doing so could position Canada as a global leader in developing a holistic chemicals management framework focused on driving safer, more sustainable chemistry.

Under the CMP, Environment and Climate Change Canada (ECCC) and Health Canada (HC) have developed broad expertise in rapid screening approaches, as well as a number of technical methods for streamlined risk assessment of chemicals. These efforts have resulted in significant achievements in terms of assessing approximately 3,470 priority existing chemicals and undertaking risk management actions for about 437 existing chemicals in a 12-year period along with pre-market assessment of nearly 5,700 new chemicals.

The LCSP's recent policy and program research identified **5 Key Themes to Guide Government Actions**, including:

- 1. A combination of voluntary and regulatory approaches are needed to most effectively support transition to safer chemicals
- 2. Regulations and policy actions represent important substitution incentives
- 3. Greater collaboration between government departments, the supply chain, and the scientific community is needed to ensure development of data, tools, and capacity to support informed substitution and alternatives assessment
- 4. Collaboration at a global level can help resolve gaps in data and tools, identify best practices, and strengthen and bring consistency to informed substitution and alternatives assessment activities
- 5. Substitution activities should be more effectively linked to sustainable chemistry research, development, and innovation

Four Areas of Strategic Actions could be considered:

- 1. Build scientific and technical capacity
- 2. Incentivize the adoption of safer chemicals, processes, and technologies
- Facilitate collaboration among federal, provincial, territorial, and international governments
- Support innovation through research and development in green/sustainable chemistry

Contact: Substances Management Information Line (Chemicals Management Plan)

Ph: 819-938-3232, Email: eccc.substances.eccc@canada.ca

From: www.canada.ca/en/health-canada/services/chemicalsubstances/consulting-future-chemicals-managementcanada/options-advancing-informed-substitutionalternatives-assessment-canada-chemicals-program.html

And: www.canada.ca/en/health-canada/programs/consultation-informed-substitution-canadas-chemical-program.html

• ECHA News & Newsletter (Dec 18 - Mar 19)

ECHA News that caught the Editor's Attention:

20 Mar 2019: SEAC adopted its Final Opinion backing the proposal to restrict the placing on the market and use of hazardous substances in tattoo inks and permanent makeup, meaning both the Committees have agreed to support the restriction proposed by ECHA in collaboration with Denmark, Italy, and Norway. Substances within the scope of the restriction include Carcinogenic, Mutagenic and Reprotoxic (CMR) substances, Skin Sensitisers or Irritants, substances Corrosive or Damaging to the eye, Metals as well as other substances regulated in cosmetic products.

Annex to news release (20 March 2019) (6 page pdf)

19 Mar 2019: ECHA has adopted the updated Community Rolling Action Plan (CoRAP) for substance evaluation, with 100 substances listed to be evaluated in 2019-2021 (31 in 2019). Substances are selected for evaluation based on concerns related to their suspected serious hazard properties. The substances may be suspected Sensitisers, Persistent, Bioaccumulative and Toxic (PBT) substances, Carcinogenic, Mutagenic and Reprotoxic (CMR) substances or Endocrine Disruptors. The selection also considers wide dispersive worker or consumer use.

2019-2021 CoRAP list (39p pdf) (Editor: an interesting list)

21 Feb 2019: The ECHA Newsletter is now only online. Some of the topics: The main priorities for 2019 e.g. the work being carried out to improve the compliance of REACH registrations. Articles on proposed restrictions for microplastics and cobalt salts, mapping the use of plastic additives in Europe, and how sustainable substitution solutions have started to appear on the biocides market. Research on Nanosafety (see next Note for details), protecting consumers against Endocrine Disruptors and how to stay safe when renovating your home.

21 Feb 2019: High-Volume Plastic Additives Mapped. Information on over 400 substances used in the EU as additives in plastics is now available on ECHA's website. The listing is based on the technical functions of additives and data provided by industry on substances manufactured or imported at above 100 tonnes per year. It covers substances used as antioxidants, antistatics, flame retardants, nucleating agents, plasticisers, pigments, heat stabilisers, and UV/light stabilisers. Information on the polymer types that the additives are most commonly found in and the expected concentration ranges is provided. https://echa.europa.eu/mapping-exerciseplastic-additives-initiative Mapping info webpages are grouped under: Light Stabilisers; Heat Stabilisers; Other Stabilisers; Antioxidants; Nucleating Agents; Pigment Agents; Antistatic Additives; Flame Retardants; Other Functions; Plasticisers.

21 Jan 2019: ECHA has agreed to provide regular recommendations for Occupational Exposure Limits for hazardous chemicals. The agreement requires ECHA to assess four to five OELs per year from 2020 onwards.

15 Jan 2019: Six new substances added to the Candidate List. They are carcinogenic, toxic to reproduction, PBT, vPvB, PAHs, and a SVHC substance. No active use registrations except Pyrene as a transported intermediate.

18 Dec 2018: Biocidal Products Committee concludes on a Union authorisation for disinfectants and also supported the approval of seven active substances for use in disinfectants, preservatives and insect repellents.

5 Dec 2018: ECHA's Committees adopt 19 harmonised classification and labelling opinions and one restriction. **RAC** opinions on the environmental hazards of Lead, other

industrial chemicals as well as 12 pesticides & biocides. **SEAC** opinion, supporting the proposal to restrict the manufacturing, use, placing on the market & import of C9-C14 perfluorinated carboxylic acids (PFCAs), their salts & precursors.

From: https://echa.europa.eu/news

• ECHA: Safety of Nanomaterials Research

From 21 Feb 2019 ECHA Newsletter:

Eva Valsami-Jones, Professor of Environmental Nanoscience at the University of Birmingham, leads the coordination team of the ECHA NanoSafety Cluster. She tells us about EU-funded research on nanomaterials and the benefits and risks of innovations. Video (2m 26s)

Some extracts:

Nanomaterials have captured our imagination with characteristics that we have never seen before. Yet they have equally captured our concerns by showing properties and toxicity that we have not yet fully understood.

Although there is a lot of research being carried out in Europe to better understand the behaviour of nanomaterials, so far we have not identified any toxicity that would be more severe than that of better known toxicants. Still, we do observe toxicity that deviates from the standard behaviour of equivalent bulk material such as larger particles. This is quite a concern for us, and something we need to understand better.

The <u>European Union Observatory for Nanomaterials</u> (EUON) was launched in 2017 and provides information about existing nanomaterials on the EU market. For this, it also makes use of the data generated by the NanoSafety cluster projects.

For example, the <u>eNanoMapper</u> featured on the EUON provides a computational infrastructure for the management of toxicological data on nanomaterials.

From: https://newsletter.echa.europa.eu/home/-/newsletter/entry/research-on-the-safety-of-nanomaterialsbeyond-horizon-2020

ECHA Registered Substances Database (RSD)

Last updated 23 Mar 2019. The RSD contains 22059 Unique Substances & contains information from 93722 Dossiers.

As Substances are registered under REACH, there is an obligation on registrants to provide information on the substances they manufacture or import. ECHA subsequently has the obligation to make certain of this information publicly available. Here you find a variety of information on Registered Substances: for example their hazardous properties, their classification & labelling and how to use the substances safely.

The data published is compiled from joint or individual submissions for a substance. The data reflects the information contained in ECHA's Databases as of the last updated date, and note that not all data may be available for all substances.

From: https://echa.europa.eu/information-on-chemicals/registered-substances

And: https://echa.europa.eu/information-on-chemicals/registered-substances/registered-substances/registered-substanc

• ECHA Classific'n & Labelling Inventory Database

Notifications submitted/updated by: 25 March 2019 contains 147,632 results.

The C&LID contains Classification and Labelling Information on Notified and Registered Substances received from manufacturers and importers. It also includes the List of Harmonised Classifications and the names of Harmonised Substances translated in all EU languages.

ECHA maintains the C&L Inventory Database (C&LID), but does not review or verify the accuracy of the information. Notifiers are encouraged to check the classifications for their Substances in the Inventory & update them if necessary.

From: https://echa.europa.eu/information-on-chemicals/cl-inventory-database

And: https://echa.europa.eu/regulations/clp/cl-inventory

EPA NZ: Hazardous Substances Update

Recent EPA NZ Hazardous Substances Update newsletters:

<u>Feb 2019 - Update #185</u>: New rules for Hydrofluorocarbons; information on staying safe with Potting Mix; call for information on Synthetic Pyrethroids; Paraquat reassessment submissions open soon; and hazardous substances decisions from Nov 2018, Dec 2018, & Jan 2019.

Editor: Decision to reassess Methylamine caught my attention.

APP203350 by Eastman Chemical Asia Pacific Pte Ltd to determine if grounds exist to reassess Monomethylamine CAS N. 74-89-5 and Methylamine Hydrochloride CAS N. 593-51-1. *Decision:* Grounds exist and notified on 14 Nov 2018

March 2019 – Update #186: Submissions are open for the Paraquat reassessment; new online form for reporting bee incidents; and you can now apply for permits for importing Hydrofluorocarbons (HFCs).

https://www.epa.govt.nz/news-and-alerts/newsletters/hazardous-substances-update/

EPA NZ: Potting Mix poses Risk to Human Health

28 Jan 2019: The EPA NZ alerted consumers to the risks of using Potting Mix after the tragic passing of a Christchurch gardener from Legionnaires' disease (Legionellosis).

Safer and Healthier Gardening (12 page pdf, Feb 2018)

https://www.healthed.govt.nz/resource/safer-and-healthier-gardening

Legionellosis (or Legionnaires' disease) is a form of pneumonia. It's caused by a bacteria called Legionella, an environmental organism that lives in moist conditions. You can catch the disease by inhaling airborne droplets or particles containing the bacteria. There has been no reported person-to-person spread of Legionellosis.

The illness may be mild or severe and can sometimes be fatal. It is more common in older people, particularly if they smoke, have poor immunity or have a chronic illness. To reduce the risk of exposure to legionella:

- minimise the amount of dust when working in the garden
- water your garden and indoor plants using a gentle spray
- read the warning on bags of composted potting mixes
- wear gloves when handling soil, mulches, compost or potting mix

- wear a dust mask when opening bags or using potting mix and compost to avoid inhaling dust
- open bags of soil products or composted potting mixes slowly and away from the face
- dampen potting mixes before use
- make sure the working area (glasshouse, potting shed) is well ventilated.

See your doctor immediately if you develop a flu-like illness that is worsening. Antibiotics are effective against Legionellosis IF given early.

From: www.epa.govt.nz/news-and-alerts/alerts/potting-mix-can-pose-risk-to-human-health/

WorkSafe WA: Lead Work – Take Action Now

20 Mar 2019: On 1 Oct 2019, amendments to the WA Occupational Safety and Health Regulations 1996 (WA OSH Regulations) will come into effect. The amendments lower the blood Lead removal level thresholds for workers and changes the definition of 'Lead-risk job'.

Lead stays in the blood for several months. It is important to take action now to ensure that when the new laws come into effect the blood Lead levels of workers do not exceed the allowable level. When a worker's blood Lead levels exceed this the worker must be removed from lead-risk work.

From: www.commerce.wa.gov.au/announcements/lead-work-take-action-now

Chemical Toilet Hazard on small Ferries: H₂S gas

Feb 2019: A tragic accident being investigated by the Australian Maritime Safety Authority (AMSA) and NSW Police has highlighted the importance of maintaining chemical toilets onboard ship.

A 39-year-old passenger was found unconscious in a toilet cubicle aboard the Sydney harbour ferry Lady Rose and could not be revived by paramedics. While the reasons behind her death are unconfirmed, during the initial investigation HAZMAT crews detected hazardous levels of Hydrogen Sulphide (H_2S) gas in the toilet cubicle.

A NSW Police report stated: "Investigators were advised that several gas detection tests were conducted in a bathroom area of the vessel and were found to be in excess of safe operating levels."

Some small passenger vessels do not have installed treatment systems and therefore store wastewater in holding tanks, but if these are not regularly flushed and aerated then the contents can become anaerobic and generate lethal H2S gas. Hydrogen Sulphide is a gas produced during the decomposition of waste. In modest concentrations of between 700 and 1000ppm it is toxic and can lead to sudden collapse and death.

A suggested simple way to protect passengers from the hazardous gases generated from untreated effluent, is to ensure all bathrooms and toilet cubicles are fitted with sensors.

From: https://shipinsight.com/articles/tragic-accident-highlights-hidden-hazard-of-sewage-treatment?mc_cid=a47dbb0f8e&mc_eid=5234cab2dc

More Info at: www.dailymail.co.uk/news/article-6699979/Family-mother-died-aboard-party-boat-Sydneysharbour-say-inhaled-hydrogen-sulphide.html

(Alerted by DG Newsy Stuff: Dangerous Goods - Hazmat Global Network, https://groups.io/g/hazmat)

Chemical Management

Respirable Crystalline Silica & Respirable Coal Dust

AU Workplace Exposure Standards (WEStd) Consultation

In particular, SWA are seeking technical comments regarding:

- the toxicological information and data that the value is based upon, and
- the measurement and analysis information provided.

To provide your comments, access Safe Work Australia's (SWA) consultation platform Engage

https://engage.swa.gov.au/workplace-exposure-standards-review

<u>https://engage.swa.gov.au/wes-review-release-1-RCS-RCD</u>
on the draft evaluation reports and recommendations for:

Respirable Crystalline Silica (0.02 mg/m3) and Respirable Coal Dust (<5% Quartz) (0.9 & 0.4 mg/m3) before 30 April 2019.

www.safeworkaustralia.gov.au/media-centre/news/workplace-exposure-standards-open-public-comment

SWA Code: Labelling Workplace Hazardous Chemicals

26 Oct 2018: UPDATED Model Code of Practice: Labelling of Workplace Hazardous Chemicals. (pdf, docx, 130 pages)

This Model Code of Practice has been developed (and recently updated) to provide practical guidance to persons conducting a business or undertaking involved in the manufacture, import, supply or use of hazardous chemicals on how to correctly label hazardous chemicals used in the workplace.

This Model Code of Practice has been amended since its publication in September 2015, including a number of amendments agreed to in 2018 as part of a technical and usability review of the model Code. The current version, dated October 2018, incorporates all of those amendments.

From: www.safeworkaustralia.gov.au/doc/model-codepractice-labelling-workplace-hazardous-chemicals

Editor: There isn't a list of amendments, so I am assuming the amendments must be minor in nature, e.g. website links.

Labelling of AU Hazardous Chemicals: End Date

Work Health and Safety Amendment (Labelling of Hazardous Chemicals) Model Regulations 2018

Sets end date for old labels to 2023, and exempts labelling of Veterinary Medicines that are Schedule 4 or Schedule 8 Poisons labelled to the Poisons Standard.

<u>https://www.legislation.gov.au/Details/F2018L01766/d1715a8</u> 7-f06a-413b-8f11-c7dcb71c117c (pdf)

From: https://www.legislation.gov.au/Details/F2018L01766

• EPA NZ: Haz. Subs. Compliance System Eval'n

Dec 2018: The evaluation of the NZ Hazardous Substances Compliance System, the terms of reference, and how to contact the 3 person Technical Working Group (TWG).

The TWG will assess the current Hazardous Substance Compliance System; comment on whether it is fit for purpose; and recommend improvements.

The focus of the assessment is to understand what can be done to assist Agencies where Funding and Resources can be an Issue. This will help ensure NZ can create a cohesive platform for a world class Chemical Management System that keeps New Zealand safe.

It is not intended that the evaluation will make any recommendations about legislative changes to the:

- Hazardous Substances and New Organisms Act (HSNO)
- Health and Safety at Work Act (HSWA)
- Resource Management Act (RMA)

Technical Working Group's <u>terms of reference</u> (pdf) It began work in Oct.2018. Anticipated report at end June 19.

TWG Secretariat email: HSReviewPanel@epa.govt.nz

From: www.epa.govt.nz/industry-areas/hazardoussubstances/evaluation-of-hazardous-substancescompliance-system/about-this-evaluation/

And: www.epa.govt.nz/industry-areas/hazardoussubstances/evaluation-of-hazardous-substancescompliance-system/

Editor: I would like to see at least a process introduced to ensure all "non hazardous" substances are really non hazardous. I suggest that the "non-hazardous" chemical(s) introducers provide their CAS No.(s) to the EPA NZ.

e.g. Recently I prepared an Australian SDS for Zinc Citrate powder. It classifies as Dangerous Goods Environmentally Hazardous by Sea & Air (but not Road & Rail in AU). However I found 2 NZ SDSs from knowledgeable businesses that classified it as "non hazardous" and "not D.Goods" in NZ!

Worksafe NZ: WES and BEI Explained

13 Dec 2018: In 2018 Worksafe NZ consulted on proposed changes to 15 Workplace Exposure Standards (WES) and 17 Biological Exposure Indices (BEI) as part of ongoing WorkSafe NZ consultation on, and review of, chemicals and their effects on workers.

WES are levels of airborne substances it is expected most workers can tolerate repeated exposure to without coming to harm. We say 'most', not 'all' workers as differences between people, such as genetic variation, may mean some are more at risk from exposure. In addition toxicology data on the risk of certain chemicals is often limited, so setting a suitable WES value can be difficult.

Prescribed Exposure Standards are an upper limit above which no worker should be exposed. These are prescribed in legislation or a safe work instrument. There are currently only two NZ Prescribed Exposure Standards - 1080 and Methyl Bromide. These are in WorkSafe NZ's WES book.

The new WES and BEI values were published in the <u>2018 WES/BEI Book (Edition 10)</u> in late November. 11 WES values were reduced this year and 17 BEI were lowered or adopted.

worksafe.govt.nz/dmsdocument/923-workplace-exposurestandards-and-biological-exposure-indices (68 page pdf)

In 2019 Worksafe NZ will be consulting on proposed changes to 36 carcinogens, respiratory sensitisers and mutagens.

2018 WES reviewed: Beryllium, Cobalt, Chromium (VI), Manganese, Nickel, Perchloroethylene, Portland Cement, Synthetic Mineral (vitreous) Fibres, Sulphuric Acid, Total Welding Fume, Flour Dust, Hydrogen Sulphide, Nitrogen Dioxide, Propylene Oxide, Styrene.

2018 BEI reviewed: Arsenic, Benzene, Carbon Disulphide, Carbon Monoxide, Chromium VI, Ethyl Benzene, Fluorides,

Mercury (elemental), MOCA, MDI Isocyanate, Methyl Isobutyl Ketone, PCP, Phenol, Tetrahydrofuran, TDI Isocyanate, Toluene, Trichloroethylene.

From: https://worksafe.govt.nz/about-us/news-and-media/wes-and-bei-explained/

• WA DMIRS: "Thinksafe" Online Publication

The chemical topics in the January 2019 Edition:

- Spotlight on Asbestos in the built environment.
- Know your Hazards: Spotlight on Silica
- Cutting red tape for transporters of Explosives & Fireworks

From: www.dmp.wa.gov.au/News/Safety-matters-go-online-with-25001.aspx

And: https://issuu.com/dmirs_wa/docs/19983_nl_thinksafe_ja_n19_web_

Assessing & Controlling Risk: Guide for Business

1 Mar 2019: EPA Vic: A risk management framework (16 page pdf) that can be applied to help prevent harm to human health and the environment. Its principles can be applied to businesses of any size, and of varying levels of risk.

Note: Larger businesses or those that pose a high level of risk to the environment and public health may need to adopt more complex methods.

Publication 1695.1 August 2018, replaces 1695 May 2018

Note: This Guide **only addresses risks from pollution and waste** and should not be relied upon as a substitute for compliance with your OHS obligations. For information about managing your OHS obligations consult WorkSafe Victoria.

From: www.epa.vic.gov.au/our-work/publications/publication/2019/march/1695-1

UNEP: Global Chemicals Outlook II (2019 Report)

11 March 2019: Global Chemicals Outlook (GCO) II seeks to alert policymakers and other stakeholders to the critical role of the sound management of chemicals and waste in sustainable development. It takes stock of global trends as well as progress made & gaps in achieving the global goal to minimize the adverse impacts from chemicals and waste by 2020.

The GCO II finds that the global goal to minimize adverse impacts of chemicals and waste will not be achieved by 2020. Solutions exist, but more ambitious worldwide action by all stakeholders is urgently required.

The GCO II Synthesis Report (102 page pdf) is being launched on 11 March 2019 at the fourth session of the UN Environment Assembly. A shorter Summary for Policymakers (20 page pdf dated 21 Jan 2019) is available.

www.unenvironment.org/explore-topics/chemicals-waste/whatwe-do/policy-and-governance/global-chemicals-outlook

Cefic: No Deal Brexit is a No-Win outcome

11 March 2019: European businesses are calling for a no deal Brexit to be averted immediately to avoid major disruption of supply chains across all industries and to protect jobs.

The undersigned organizations (15) reiterate that a no-deal Brexit will have disastrous consequences for businesses and citizens on both sides of the Channel.

Delays at customs and disrupted supply of all goods, including foods and medicines, will affect communities and incur significant costs for businesses and governments

alike. In many areas, businesses do not yet know the trading conditions they will be operating in and smaller companies are already experiencing cash flow problems in the face of this uncertainty. Jobs are at risk as businesses might have to close down or downsize, unable to deal with disruptions.

From: https://cefic.org/media-comer/newsroom/ Cefic: The European Chemical Industry Council

• USA Chemical Safety Board Updates Feb-Mar 2019

13 Dec 2019: CSB Releases Factual Investigative Update about the 26 April 2018, Explosion and Fire at the Husky Superior Refinery in the Wisconsin USA

www.csb.gov/csb-releases-factual-investigative-update/ www.csb.gov/assets/1/6/Husky Factual Update - 2.pdf (4p)

12 Mar 2019: The Importance of Industry Safety Guidelines, Codes, and Standards

www.csb.gov/assets/1/17/CSB Safety Spotlight SDOs 1.p df?16458 (6 page pdf)

13Feb 2019: CSB Releases Final Report into 2016 Enterprise Products Pascagoula Gas Plant Explosion

The CSB determined that the probable cause was a phenomenon known as thermal fatigue.

More than 500 gas processing facilities operate across the country and the use of similar Heat Exchangers is common. Extending the life cycle of equipment at these facilities requires more robust inspection protocols. Operators shouldn't take the risk of waiting to find a leak because, as this case demonstrates, that leak could result in a catastrophic failure.

www.csb.gov/assets/1/6/Final_Case_Study_-_Enterprise.pdf (69 page pdf)

www.csb.gov/csb-releases-final-report-into-2016-pascagoula-gas-plant-explosion/

CSB: 3D Model of Heat Exchanger Used at the Enterprise Plant

The CSB released interactive 3D model of the Heat Exchanger used at the Enterprise Plant to enhance understanding of how this type of Heat Exchanger operates and its vulnerability to thermal fatigue.

https://www.csb.gov/heat-exchange-functions/

(Several schematic 3D scalable drawings showing the issues)

From: https://www.csb.gov/news/

USA OSHA Quick Takes e-News: De 18 - Mar 19

19 Dec 2018: 1/ OSHA USA Proposes Revised Beryllium Standard for General Industry; 2/ Hawaii Cites Hotel for Exposing Workers to Asbestos Hazards.

17 Jan 2019: 1/ OSHA USA Provides Outreach on Regional Emphasis Program for fertilizer-grade Ammonium Nitrate and agricultural Anhydrous Ammonia.

30 Jan 2019: Did You Know?: <u>Carbon Monoxide Exposure</u> (1 page pdf). Many people die from CO poisoning, usually while using gasoline powered tools and generators in buildings or semi-enclosed spaces without adequate ventilation.

8 Feb 2019: 1/ OSHA USA Forms Alliance with Agribusiness Organizations to Protect Workers. The Alliance will focus on helping agricultural retail facilities comply with safety and health standards for safe storage and handling of Ammonium Nitrate and Anhydrous Ammonia. 2/ New FAQs Available on Controlling Silica in General Industry. 3/ OSHA USA Signs Charter for Working Group to Improve Chemical

Facility Security and Safety. For information visit OSHA's Chemical Facility and Security webpage. 4/ Bulletin Addresses Safety for Workers Wearing Devices Containing Lithium Batteries. If these devices are damaged or defective, they may catch fire or explode. See the OSHA Bulletin 18 Jan 2019. 5/ Nebraska Beef Processing Plant Cited after Worker Severely Burned by Ammonia. 6/ Dallas Utilities Contractor Cited after Worker Suffers Fatal Hydrogen Sulfide Gas Exposure. 7/ Working Safely with Portable Generators. OSHA's portable generator fact sheet (a webpage) focuses on how to protect workers from hazards associated with the use of this equipment. These hazards include exposure to Carbon Monoxide from a generator's exhaust, shocks and electrocution, and fires from ignited generator fuel.

12 Feb 2019: Did You Know?: OSHA USA has a new video on inspections (10m 41s) under its Ammonium Nitrate emphasis program.

22 Feb 2019: 1/ OSHA USA Urges Employers to Prevent Worker Exposure to Carbon Monoxide. OSHA's <u>Carbon Monoxide Fact Sheet</u> (3 page pdf). 2/ Texas Indoor Gun Range Cited for Exposing Workers to Unsafe Lead Levels. 4 Feb 2019 New Release (webpage). 3/ Washington Cites Construction Contractors for Exposing Workers to Asbestos Hazards.

6 Mar 2019: 1/ Ohio Musical Instrument Manufacturer Cited for Exposing Workers to Copper Dust and Machine Hazards. For information, see the news-release (13 Feb 19 webpage). 2/ Featured Video: Carbon Monoxide Exposure (4m 10s) from Portable Gas-Powered Equipment

20 Mar 2019: 1/ Georgia Battery Manufacturer Cited for Lead and Other Safety Hazards (see 6 Mar 2019 News Release). The investigation was initiated under USA OSHA's Regional Emphasis Program on Lead (6 page pdf). 2/ Wisconsin Manufacturer Cited after Workers Develop Lung Disease (from exposure to airborne metalworking fluids used during machining operations). 3/ USA OSHA's new webpage on Radiation Emergency Preparedness is intended to help protect the health and safety of workers during situations ranging from small, isolated incidents in laboratories to potentially catastrophic radiation releases at nuclear facilities.

From: www.osha.gov/as/opa/quicktakes/

NICNAS (Industrial Chemicals)

NICNAS Chemical Gazettes

<u>Chemical Gazette January 2019</u> (goes to the initial webpage)

<u>Chemical Gazette February 2019</u> (goes to the initial webpage)

<u>Chemical Gazette March 2019</u> (goes to the initial webpage)

From: www.nicnas.gov.au/news-and-events/chemical-gazette

AU Industrial Chemicals Reform Legislation

AU Industrial Chemicals Reform Legislation is now being passed though the Australian Parliament.

A package of six bills to establish a new national regulatory scheme for industrial chemicals, the bill establishes a legislative framework for the Australian Industrial Chemicals Introduction Scheme (AICIS).

The now passed Government amendments

https://parlinfo.aph.gov.au/parlInfo/download/legislation/ems/r5885 ems 7c90c80a-7421-46d0-baed-

8535b26efd44/upload_pdf/698764sem.pdf;fileType=application/92Fpdf (8 page pdf)

require those introducing (through importation or manufacture) very low-risk chemicals, known as "exempted chemicals", to make a once-off declaration to the new Australian Industrial Chemicals Introduction Scheme (AICIS), with criminal or civil penalties for failing to do so.

The Bills previously allowed manufacturers or importers to introduce exempted chemicals without providing any advice to the AICIS, but the Cancer Council and other groups raised serious concerns about new chemicals entering the country without the Government being able to track them.

There are six Bills (the first 3 have passed both Houses of Parliament as at 19 Feb 2019)

Industrial Chemicals Bill 2017;

https://www.aph.gov.au/Parliamentary_Business/Bills_Legislation/Bills_Search_Results/Result?bld=r5885

Industrial Chemicals (Consequential Amendments and Transitional Provisions) Bill 2017;

https://www.aph.gov.au/Parliamentary Business/Bills Legislation/Bills Search Results/Result?bld=r5881

Industrial Chemicals (Notification and Assessment)
Amendment Bill 2017;

https://www.aph.gov.au/Parliamentary_Business/Bills_Legislation/Bills_Search_Results/Result?bld=r5883

Industrial Chemicals Charges (Customs) Bill 2017;

Industrial Chemicals Charges (Excise) Bill 2017;

Industrial Chemicals Charges (General) Bill 2017.

Reforms Passage Update via the NICNAS website

25 Feb 2019: "The Industrial Chemicals Bill 2017 (IC Bill) passed the Senate, with amendment, on 14 February 2019. The House of Representatives approved the amendments on 18 February 2019. The IC Bill, along with the Transitional Provisions & Amendment Bills, which have also been passed by both Houses of Parliament, is currently awaiting Royal Assent by the Governor-General to become Australian law.

The most significant amendment to the IC Bill in the Senate was a change to obligations for introducers using the exempted category under the new scheme, the Australian Industrial Chemical Introduction Scheme (AICIS).

The IC Bill was also amended so that AICIS will commence on 1 July 2020. The ban on the use of new animal test data for ingredients solely used in cosmetics will begin on 1 July 2020."

From: www.nicnas.gov.au/news-and-events/news-and-notices/news-and-notices-content/reforms-update-passage-of-bills-through-both-houses-of-parliament

Reforms Update: NICNAS announcements

15 March 2019: New Australian Industrial Chemicals Law—the Industrial Chemicals Act 2019. This law gives effect to a new Regulator for the importation and manufacture of Industrial Chemicals in Australia from 1 July 2020. As well as the IC Bill, the Transitional Provisions and Amendment Bills are now law with all 3 bills now receiving Royal Assent.

The ban on the use of new animal test data for ingredients solely used in cosmetics will also begin on 1 July 2020.

Continued

The other bills relating to fees and charges for the new scheme are expected to be considered by the Senate during the Budget sittings in April 2019.

NICNAS will provide information shortly about the expected start date for 'early wins' that reduce regulatory burden for some lower risk chemicals such as polymers of low concern.

There are links on this page to:

<u>Case studies - how to categorise chemicals</u> under the new scheme; Draft Industrial Chemical <u>Rules and Categorisation</u> Guidelines;

<u>Changes to Categorisation of Industrial Chemicals since</u>
<u>Consultation Paper 5</u> (published 9 March 2018)
(see the separate Note following)

From: https://www.nicnas.gov.au/reforms

Changes to Categorisation of Industrial Chemicals since Consultation Paper 5

9 March 2019: Since Consultation Paper 5 NICNAS has made changes as a result of stakeholder feedback and the process of drafting the requirements into the General Rules and Categorisation Guidelines.

NICNAS have summarised the main changes in terminology, definitions or requirements and presented these as a side-by-side comparison between Consultation Paper 5 and the draft General Rules or Categorisation Guidelines. NICNAS also mention some aspects of the General Rules that were **not included** in Consultation Paper 5.

From: https://www.nicnas.gov.au/reforms

Editor: The Changes were previously published 14 Aug 2018, are at: www.nicnas.gov.au/reforms/Rules-Guidelines/draft-categorisation-quidelines-main/changes-since-CP5

Assuming you have been part of the previous Consultations, it is worth reading through these Changes to make yourself adequately aware of them for when the processes are final.

For those who have not been part of the Consultation process it will give you a sense of how the processes have firmed up.

Reforms Proposed for Early Commencement (2016)

From NICNAS April 2016 website (based on the original Bills).

- remove the requirement to provide annual reports for permits and self-assessed assessment certificates
- remove the requirement to provide a final statement of the value of relevant industrial chemicals actually introduced in a year
- remove the requirement to provide Safety Data Sheets and labels for certain cosmetics to be introduced at low volumes
- 4. simplify the annual reporting obligations for new chemicals exempt from notification
- 5. exempt PLCs (Polymers of Low Concern) from notification
- 6. change the PLC criteria (to increase the number of polymers that are exempt from notification)
- 7. change the definition of a new synthetic polymer to more closely align with international approaches
- 8. shorten timeframes for assessing new chemicals under the Approved Foreign Scheme categories.

Previously: www.nicnas.gov.au/reforms/consultation-paper-3/reforms-proposed-for-early-commencement (April 2016)

Editor: The 2016 webpage has been removed since Feb 2019.

Draft General Rules & Categorisation Guidelines

https://www.nicnas.gov.au/ data/assets/pdf file/0011/6568 4/Industrial-Chemicals-General-Rules-2018-Exposure-Draft.pdf (80 page pdf Jan 2018)

https://www.nicnas.gov.au/ data/assets/pdf file/0016/7152 1/Categorisation-Guidelines-DRAFT-March-9-2018-forwebsite.pdf (274 page pdf Jan 2018)

Draft Transitional Rules

The Transitional Rules cover how the certificates, permits and processes under the current laws will operate once the new laws are in effect:

https://www.nicnas.gov.au/ data/assets/pdf file/0010/6568 3/Industrial-Chemicals-CA-and-TP-Rules-2018 Exposure-Draft-2.pdf (48 page pdf 2018)

From: www.nicnas.gov.au/reforms/Rules-Guidelines/draft-Transitional-Rules

Reforms Change: Exempted Introductions

25 Feb 2019: "The amended Industrial Chemicals Bill 2017 (IC Bill) requires introducers to tell AICIS about chemicals introduced under the exempted category. This is a new requirement, consisting of a once-off declaration at the end of the registration year in which each chemical is first introduced in this category. The amended IC Bill allows for the details of these declarations to be set out in the Rules. The Rules will describe the information to be included in the declarations, as well as the exempted introductions that will not require this once-off declaration. These details are yet to be developed and we will consult with stakeholders before they become part of the Rules."

From: www.nicnas.gov.au/news-and-events/news-and-notices/news-and-notices-content/reforms-update-change-to-exempted-introductions-category-due-to-industrial-chemicals-bill-amendment

Editor: I am informed that "exempted introductions that will not require this once-off declaration" is intended to only cover trans-shipped chemicals and small scale research and development chemicals in the gram or less amounts. So I assume this will allow up to 999 gram amounts of such introductions managed under strict R&D laboratory protocols

NICNAS - Exempted Chemicals - Concerns

Editor: I am still concerned that the General Rules & Categorisation Guidelines be simplified so a normal chemical specialist can initially sign off on each Exempted Chemical and recheck off each additional year after reviewing the data supporting the continued Exempted Chemical status.

As the Rules & Guidelines are currently informed, to cover the liability issues I believe that only specialist toxicologists will be able to do this work, which does not include myself.

Note: The changes to the AU Industrial Chemicals Introduction Scheme (AICIS) have been delayed a further year to start 1 July 2020

Draft PEC 41: Decabromodiphenyl Ether Consultation

5 March 2019: Draft Priority Existing Chemical (Draft PEC 41) Report for Decabromodiphenyl Ether. Consultation is from 5 March 2019.

(Part of PEC 20 (June 2001) then declared as requiring a specific PEC evaluation in June 2005).

Draft PEC 41 Report: www.nicnas.gov.au/ data/assets/word doc/0007/85912/DecaBDE-Report-for-Public-Comment.docx (104 page docx)

The focus of the NICNAS draft report is assessment of risks to:

- workers handling decaBDE or its products
- the general public coming in contact directly or indirectly with articles containing decaBDE and
- to the environment.

PEC 41 Recommendations:

Having regard to the human health and environmental effects of decaBDE and fate in the environment, and noting that it is listed on Annex A of the Stockholm Convention on Persistent Organic Pollutants to which Australia is a signatory, **NICNAS recommends** that the Australian Government explore options for managing the use of decaBDE and its import into Australia, taking into account the information in this report.

Variation Requests must be submitted by 1 April 2019.

Queries about the Public Comment Processes: Dr Sami Syed Email: imap @nicnas.gov.au; Phone: 02 8577 8845

From: https://www.nicnas.gov.au/news-and-events/chemicalgazette/numbers/2019/chemical-gazette-march-2019/publicrelease-of-draft-priority-existing-chemical-pec-report-fordecabromodiphenyl-ether

NICNAS Secondary Notification Obligations

1 March 2019: Complete this webpage based form:

IF you're importing or manufacturing a chemical in Australia that has Secondary Notification Obligations

AND any of the following applies:

- you can't find the NICNAS assessment chemical report
- you found the Assessment Report but you're unsure what to do next
- you've read the Assessment Report and you're uncertain whether your circumstances require Secondary Notification

Your Secondary Notification Obligations are set out in the NICNAS Assessment Report for the chemical. You can find the report by searching your chemical's CAS number on the NICNAS website and clicking on the result under 'Assessments'. Some assessment reports are not available on our website due to confidentiality reasons.

From: www.nicnas.gov.au/forms/secondary-notification

NICNAS Inventory forms are now Online

The following Inventory forms are now online in NICNAS Business Services:

https://officeofchemicalsafety.createsend1.com/t/r-l-jjtuhkdy-l-n

- request a search for confidentially listed chemicals on the Inventory
- apply for an early listing of a chemical on the Inventory (assessment certificate holders only)
- apply to confidentially list/relist a chemical on the Inventory (assessment certificate holders only)

You can now apply, pay, withdraw and track your applications through the Business Services portal.

From: www.nicnas.gov.au/news-and-events/news-and-notices/news-and-notices-content/inventory-forms-now-online

IMAP Tranche 26 Existing Chemical Assessments

8 March 2019: Tranche 26 of the Inventory Multi-tiered Assessment and Prioritisation (IMAP) framework for existing chemicals are open for public comments until **3 May 2019.**

Tranche 26 Existing Chemicals include:

NO Chemicals with Tier I Health Assessments at:

www.nicnas.gov.au/chemical-information/imapassessments/imap-assessments/human-health-assessments

253 Chemicals with Tier II Health Assessments at:

www.nicnas.gov.au/ data/assets/excel doc/0014/40820/Ti er-II-HH-summary-all-tranches-published-8-Mar-2019.xlsx

- 28 HCIS Classifications are proposed to be amended:

- e.g. There are three Organostannane compounds.
- e.g. 6 Selected 3,3'-Dihydroxybenzidine Based Azo Dyes

- 1 Chemical is proposed for Tier III Health Assessment:

3(2H)-Isothiazolone, 2-Methyl-, Hydrochloride CAS 26172-54-3

- 4 Chemicals are proposed to be SUSMP chemicals:

Ethanone, 1-(3-Ethyl-5,6,7,8-Tetrahydro-5,5,8,8-Tetramethyl-2-Naphthalenyl)- CAS 88-29-9; 2,3-Pyridinediamine, 6-Methoxy-N2-Methyl-, Dihydrochloride CAS 83732-72-3; Picramic Acid CAS 96-91-3; Sodium Picramate CAS 831-52-7

21 chemicals under Tier III Health Assessment

Acetaldehyde CAS 75-07-0: Proposed HCIS Amdt & consider establishing an Indoor Air Guidance Value

Chemicals: Tier II regulatory measures considered sufficient Nitromusks (4 CAS No.s)

Waxy esters of 2-ethylhexanol (16 CAS No.s)

77 Chemicals with Tier 1 Environment Assessments

www.nicnas.gov.au/__data/assets/excel_doc/0016/40822/IMA P_Environment_Tier_I_summary-all-tranches-8-Mar-2019.xlsx

Editor: 27 Tier 1 Chemicals caught my interest: 9 *Fluoropolymers*.

Boric Acid (H310BO3) CAS 13813-79-1 Data available to NICNAS indicate that this Boron 10 chemical is only introduced at small quantities for use by trained personnel for research purposes in laboratories. Editor: This is a Reproductive Hazard (which I assume will apply for other animal species - apart from rats and humans).

16 Borate salts. Editor: These have a Reproductive Hazard.

3(2H)-Isothiazolone, 4,5-Dichloro-2-Methyl- CAS 26542-23-4

Editor: Methylisothiazolone compounds are biocides.

NO Chemicals with a Tier II Environment Assessment

31 Chemicals with a Tier III Environment Assessment

6:2 Fluorotelomer Sulfonamide Surfactants (2 CAS No.s)
Boric Acid & precursors to Boric Acid: update (11113-50-1)
Indirect Precursors to Perfluorocarboxylic Acids: update (16)
Indirect Precursors to Perfluorocarboxylic Acid (PFOA) update (7)

From: www.nicnas.gov.au/chemical-information/imap-assessments/imap-assessments

Scheduled Poisons

• The Poisons Standard (SUSMP No. 23) Feb 2019

Poisons Standard February 2019 (SUSMP No. 23)

692 page Standard commenced 1 February 19. The SUSMP:

- is a record of decisions regarding the classification of medicines and chemicals into Schedules for inclusion in relevant legislation of the States and Territories;
- includes model provisions about containers and labels, and recommendations about other controls on medicines and chemicals.

Editor: The Index, starting at page 384 is 308 pages long!

https://www.legislation.gov.au/Details/F2019L00032/aee373 b3-9459-4b5b-b622-ad7e21480846 (pdf)

Changes are detailed in the <u>Explanatory Statement</u> (3p pdf) supporting Poisons Standard February 2019. www.legislation.gov.au/Details/F2019L00032/Download

The Poisons Standard February 2019 incorporates a number of changes compared to the Poisons Standard October 2018. These amendments principally involve changes to existing entries, and the inclusion of a number of specified substances in the Poisons Standard for the first time.

The Poisons Standard February 2019 also introduces Appendix M to the Poisons Standard for the first time. This Appendix is intended to facilitate the down-scheduling of substances from Schedule 4 to Schedule 3 where, for example, there is a community need for access to a medicine that has previously only been accessible with a prescription, but where it is considered that additional controls and oversight by a dispensing pharmacist are needed, in the interests of protecting public health.

No substances have been included in Appendix M in the Poisons Standard February 2019.

From: www.tga.gov.au/publication/poisons-standard-susmp

Scheduling Interim Decision on Naphthalene

Will the proposed Naphthalene Scheduling affect your products?

Editor: The Chemicals Scheduling Committee and Delegate do not seem to understand pesticide, home workshop and business / industrial use of Naphthalene containing solvents.

I have been unofficially informed that 2 additional chemical specialists with this sort of usage knowledge have been approved to be added to this Committee.

The original Sept 2018 Submissions on the proposed Naphthalene amendments were:

Consultation submission: ACCORD (2 page pdf)

Consultation submission: Chemistry Australia (2 page pdf)

Consultation submission: ChemSkill (2 page pdf)

Consultation submission: NSW Poisons Information Centre (1 page pdf)

From: www.tga.gov.au/scheduling-submission/public-submission/public-submissions-public-submissions-public-submission/public-submissions-public-submissions-public-submissions-public-submissions-public-submissions-public-submissions-public-submissions-public-submissions-scheduling-matters-referred-acms-25-accs-23-and-joint-acms-accs-20-meetings-held-november-2018

Other Public Submissions on Scheduling Matters

8 March 2019: Public submissions on scheduling matters referred to the ACMS #25, ACCS #23 and Joint ACMS-ACCS #20 meetings held in November 2018.

https://www.tga.gov.au/scheduling-submission/public-submissions-scheduling-matters-referred-acms-25-accs-23-and-joint-acms-accs-20-meetings-held-november-2018

Naphthalene (see above) Salts of Boric Acid Atranol and Chloroatranol Solvent Yellow 33

2-Chloro-p-Phenylenediamine

25 January 2019: Public submissions on regulatory options for appropriate access and safety controls for Alkyl Nitrites

https://www.tga.gov.au/scheduling-submission/public-submissions-regulatory-options-appropriate-access-and-safety-controls-alkyl-nitrites

There are 10 submissions from organisations, and 25 submissions from private individuals.

From: www.tga.gov.au/public-submissions-scheduling-matters

Proposed Amendment to the Poison's Standard-A 13 December 2018: Two Chemical Entries

Editor: I have just included proposed amendments for (non medical / non veterinary) chemicals.

2.1 N-Methyl-2-Pyrrolidone CAS No. 872-50-4

Proposed Schedule 6 - Amended Entry

N-METHYL-2-PYRROLIDONE except:

- a. when included in Schedule 5; or
- in cosmetic preparations containing less than <2%of the chemical; or
- c. in preparations not for cosmetic use containing ≤25% of designated solvents.

Key Use: Cosmetic and domestic.

Reasons for Proposal (via NICNAS):

- Reported uses in cosmetic products including mascara, skin moisturiser, hair colour stain removal solution, nail products.
- Identified as a Developmental Toxin and is classified for Reproductive Toxicity - category 1B with hazard statement H360D (May damage the unborn child).
- expected to be readily absorbed through the skin.
- quantitative risk assessment data indicate that cosmetic uses at concentrations >2% may pose an unreasonable risk to the public.
- prohibited in cosmetic products in the European Union under Article 15(2) of the Cosmetics Regulation 1223/2009.
- listed REACH Annex XVII which restricts the use restrict the use of NMP in consumer applications to <0.3 % in the European Union.
- Listed in REACH Annex XVII which restricts the use restrict the use of NMP in consumer applications to <0.3% in the EU.
- EU Scientific Committee on Consumer Products (SCCP) opinion is the presence of NMP with a max'm use amount of 5% in cosmetic products is not safe for the consumer.

2.2 Polymer in Durazane 1500 CAS No. 475645-84-2

Cyclosilazanes, di-Me, Me Hydrogen, Polymers with di-Me, Me Hydrogen Silazanes, Reaction Products with 3-(Triethoxysilyl)-1-Propanamine

Proposed Schedule 6 - New Entry

POLYMER IN DURAZANE 1500 for use in coating wipes.

Key Use: Domestic - coating wipes containing the polymer up to 50% will be available to the general public to use on various substrates. Wipes will be supplied in sealed pouches

with up to 8 pouches in each packet with a pair of nitrile gloves. Each pouch contains 3-6 g of the polymer (10 mL).

Reasons for Proposal (via NICNAS):

- Appropriate labelling is required for domestic use to avoid corrosion / irritation risks to the public (including children).
- Durazane 1500 containing the polymer >60% is corrosive to skin (GHS Cat 1B).
- Polymer in Durazane 1500 (>60% polymer) has a moderate to High Acute Oral Toxicity LD50 value of between 200-2000 mg/kg bw in rats and warrants GHS classification 'Toxic if swallowed' (Acute Oral Toxicity Category 3).

From: www.tga.gov.au/consultation-invitation/consultation-proposed-amendments-poisons-standard-accs-acms-and-joint-accsacms-meetings-march-2019

Proposed Amendment to the Poison's Standard-B January 2019: Amend MCPB from Sched 5 to Sched 6.

Chemical: 4-(4-Chloro-O-Tolyloxy) Butyric Acid CAS 94-81-5

Use: Herbicide use in Agriculture

Reasons for Proposal: Potential for salts of MCPB in a herbicide product to cause irreversible eye (corneal) damage. MCPB acid, and one form of MCPB salt have been shown to be moderately acutely toxic via the oral route.

From: www.tga.gov.au/consultation-invitation/consultation-proposed-amendments-poisons-standard-accs-meeting-march-2019

Food Chemical Issues

A1159: Triacylglycerol Lipase Trichoderma Reesai

5 Feb 2019: This Application is to permit the enzyme Lipase, Triacylglycerol from Trichoderma Reesei as a processing aid for the production of bakery products and cereal-based beverages.

Executive Summary (1 page pdf)

The enzyme is intended for use in the baking and brewing processes. In baking, Lipase 3 performs its technological function during the dough or batter handling to improve the dough stability and dough handling properties. In brewing processes, Lipase 3 performs its technological function in the mashing and fermentation step for removal of the fatty lipids which otherwise affect the mash separation and the yeast fermentation.

From: www.foodstandards.gov.au/code/applications/Pages/ A1159%e2%80%93TriacylglycerollipasefromTrichodermare esaiasprocessingaid%28enzyme%29.aspx

A1160: Aspergillopepsin I - Processing Aid (Enzyme)

27 Feb 2019: This Application is to seek approval to permit the enzyme Aspergillopepsin I from Trichoderma Reesei as a processing aid for the production of potable Alcohol products and Protein processing.

Call for Submissions (17 page pdf, docx)

Supporting Doc 1 - Risk Assessment Report (17p pdf, docx)

From: www.foodstandards.gov.au/code/applications/Pages/A1160%e2%80%93AspergillopepsinlfromTrichodermareeseiasprocessingaid%28enzyme%29.aspx

A1161: Potassium Polyasparatate as a Food Additive

27 Feb 2019: This Application is to permit the use of Potassium Polyaspartate as a food additive in wine at a maximum permitted limit of 100mg/L.

Potassium Polyaspartate is proposed for use as a stabiliser against Tartrate crystal precipitation in wine (red, rosé and white wine) at the typical use level of 100 to 200 mg/L and at a maximum use level of 300 mg/L, depending on the level of instability of the wine to be treated.

Approval Report (17 page pdf, docx)

Application (redacted) (Feb 2018) (118 page pdf)

From: www.foodstandards.gov.au/code/applications/Pages/A1161.aspx

A1167: Lactase from Bacillus Subtilis Enzyme

22 Nov 2018 (Approved 21 Mar 2019): The purpose of this Application is to permit use of Lactase Enzyme from Bacillus Subtilis as a Processing Aid for use in dairy processing.

Executive Summary (2 page pdf)

CB108 Lactase enzyme preparation is produced by submerged fermentation of Bacillus Subtilis carrying the lactase gene from Bifidobacterium Bifidum encoding the wild-type truncated Lactase Enzyme.

CB108 Lactase enzyme is intended for use in dairy processing for production of lactose reduced dairy products including but not limited to milk, yogurt, cheese, and the production of Galacto Oligo Saccharides (GOS).

From: www.foodstandards.gov.au/code/applications/Pages/A1167.aspx

A1168: Glucoamylase from GM Aspergillus Niger

6 Dec 2018: The purpose of the Application is to permit the use of Glucoamylase enzyme produced from a genetically modified strain of Aspergillus Niger as a Processing Aid.

Call for Submissions - 6 Dec 2018 (15 page pdf)

The Enzyme's purpose is to convert Starch into Glucose to manufacture syrups, beverages, cereal based products, fruit products and vegetable products. It would be used in the baking, brewing and distilling industries, as well as in the manufacture of fruit and vegetable juices, and sugar syrup.

From: www.foodstandards.gov.au/code/applications/Pages/A1
168%20%e2%80%93%20Glucoamylase-from-GM-Aspergillus-niger-as-a-Processing-Aid-%28Enzyme%29-.aspx

A1174: Xylanase from Trichoderma Reesei

20 Dec 2018: This Application is to permit the use of Xylanase from Trichoderma Reesei as a Processing Aid.

Executive Summary (1 page pdf)

The enzyme is intended for use in baking for the production of bread, buns, cakes, sweet goods and tortillas and other bakery products. In baking, Xylanase performs its technological function during the dough or batter handling to improve the dough stability and dough handling properties.

From: www.foodstandards.gov.au/code/applications/Pages/A1 174%E2%80%93Xylanase-from-Trichoderma-reesei-as-a-PA-(Enzyme).aspx

A1175: Rapeseed Protein as a Novel Food

21 Mar 2019: This application is to seek approval to permit the use of Rapeseed Protein as a Novel Food in several food categories, requiring a safety assessment and dietary exposure assessment. Similar to the use of e.g. animal, soy or pea proteins.

Rapeseed Protein is one of the promising Protein sources which was also recognized by the Australian Grain Research and Development Corporation who funded a project at the Charles Sturt University, Wagga Wagga NSW, on improving food functionality of Canola Proteins.

CanolaPRO Rapeseed Protein has a protein content of 90% with negligible amounts of Carbohydrates or Fat. This Rapeseed Protein production is from the Brassica varieties (Brassica Napus, Brassica Rapa and Brassica Juncea) that are low in anti-nutrients including Erucic Acid and Glucosinolates.

Since 8 March 2017 the use of DSM's CanolaPRO is also approved in the EU as being substantial equivalent to Rapeseed Protein Isolate as a Novel food EU/424/2014 (EC, 2017).

CanolaPRO has broad functionality and can be used in a wide range of food applications, as a protein source, thickener, water binder, emulsifier, gelling agent, foaming agent, or texturizer. It will be used in a variety of food products for the general population.

Due to potential unpalatability (bitterness) and/or technological limitations associated with its water-binding capacity, use levels are not expected to exceed 30% in any one food.

Executive Summary (3 page pdf)

From: www.foodstandards.gov.au/code/applications/Pages/A1175.aspx

Editor: Regulation of Novel Foods & a <u>Guidance Tool</u> (30p pdf) www.foodstandards.gov.au/industry/novel/Pages/default.aspx

Also Select <u>Schedule 25</u> Permitted Novel Foods http://www.foodstandards.gov.au/code/Pages/default.aspx

FSANZ Novel Food - Record of Views Formed in Response to Inquiries

Jan 2019: The Record of Views (30 pages <u>pdf</u> or <u>docx</u>) lists foods and food ingredients with views regarding their status as non-traditional/novel foods.

From: www.foodstandards.gov.au/industry/novel/novelrecs/Pages/default.aspx

Problem Zip Files on the Food Stds webpages

Editor: I have emailed a request to FSANZ, that the practice of FSANZ using Zip files be ceased, as they are the only chemicals management Govt. agency in Australia who presents such a security risk by using Zip files.

Australian Food Composition Database

This AFCD database, (previously called NUTTAB) has had a makeover including an improved web interface and enhanced search. Some of the changes are:

The Public Food Key unique code replaces the previously used Food ID.

A core set of nutrients for all foods, which means that every food in the database will have a value for at least these 54 nutrients.

Release 1 of the Australian Food Composition Database contains nutrient data for 1534 foods available in Australia and up to 256 nutrients per food. It is FSANZ's most recent reference database with data preparation completed in 2017.

From: www.foodstandards.gov.au/science/monitoringnutrients/afcd/Pages/default.aspx

Alerted by Food Standards News January 2019: https://mailchi.mp/foodstandards/food-standards-news-jan19

Agricultural Chemicals

Scheduled Excipients in Ag chemical formulations

24 Jan 2019: Non-active constituents or "excipients" generally are not required to be included on the Agricultural chemical product label, unless they are Scheduled Poisons according to the current Poisons Standard.

The label of an agricultural chemical product must include the name and proportion of any constituent contained in the formulation that is a Scheduled Poison, plus the appropriate Signal Heading (e.g. CAUTION or POISON).

It is a holder's responsibility to ensure their product labels comply with the relevant legislation including the Agvet Code, Agricultural Labelling Code, the Poisons Standard and the FAISD Handbook.

If you are the holder of a product that contains a Scheduled excipient that is not on the approved product label, you are required to <u>submit a variation application</u> to the APVMA to update your label.

Send any questions on this to enquiries @apvma.gov.au.

From: https://apvma.gov.au/node/43066

Editor: This would have been a good opportunity to also remind all holder's of products of their responsibility to also include the GHS Hazard Statements and any additional Precautionary Statements on each Ag product label that also classifies as a Hazardous Chemical.

APVMA Relocation to Armidale & Staffing

19 Feb 2019: Extract from APVMA CEO Dr Chris Parker's Senate Estimates Opening Address.

"There has been a focus from some quarters on what the APVMA has lost in terms of staff and experience and this is undeniable. However, as I have said at previous estimates, the move has provided us with opportunities for renewal of the business. We have also gained some highly experienced and energetic individuals.

At January 31st, we had 72 staff in Armidale, and a further 18 staff will commence by the end of March. By the end of March, there will be 39 Regulatory Scientists in Armidale.

The Australian public and industry expect us to make science-based decisions for the good of the community and agricultural productivity. With a mix of around 40 experienced scientists and decision-makers in the Canberra satellite office and our qualified scientists in Armidale, I have every confidence that we will continue to get the job done."

From: https://apvma.gov.au/node/44126

APVMA Boat Hulls Anti-Fouling Paint Guidance

15 March 2019: APVMA anti-fouling paint guidance for use on boat hulls, Consultation Draft. Submissions are invited on

the proposed guidance for Registration of Specific Anti-Fouling Products for Use on Vessels (26 page pdf, docx)

The purpose of this APVMA Guidance is to establish criteria for registration of specific anti-fouling products for use on vessels, streamlining the application process. The antifouling products covered in this Guidance are those listed in this Guidance which release substances, chemicals or biocides. This guidance does not refer to non-biociderelease anti-fouling coatings (foul-release coatings).

Actives in the Guidance are:

Category 1: Cuprous Oxide (alone) CAS 1317-39-1 Category 2: Cuprous Oxide AND CAS 1317-39-1 Diuron OR CAS 330-54-1 Copper Pyrithione OR CAS 14915-37-8 Zinc Pyrithione OR CAS 13463-41-7 Dichlofluanid CAS 1085-98-9 Category 3: Cuprous Oxide AND CAS 1317-39-1 Zinc Oxide CAS1314-13-2

Category 4: Cuprous Thiocyanate AND CAS 1111-67-7
Diuron OR CAS 330-54-1

Zineb OR CAS 12122-67-7
Copper Pyrithione OR CAS 14915-37-8
Zinc Pyrithione OR CAS 13463-41-7

Send written submissions to: <u>Enquiries @apvma.gov.au</u> Consultation closes 12 April 2019.

From: https://apvma.gov.au/node/45336

EPA NZ proposes Tightened Paraquat Use Rules

28 Feb 2019: Public submissions are open on a reassessment proposal by the EPA NZ for the herbicide Paraguat and its associated formulations.

The herbicide Paraquat is included in the EPA NZ's Priority Chemical List that was unveiled in October 2018 as part of the Authority's revamped reassessments programme. The EPA NZ regards Paraquat is a particularly harsh and hazardous chemical, and its sale & use is tightly controlled in NZ.

Based on the EPA NZ review, we propose further tightening the controls for two Paraquat-containing substances currently used in agriculture, which we believe can be used safely as long as risk mitigation measures are strictly followed.

The EPA NZ propose revoking approvals for sale and use in NZ of two substances which have mutagenic, carcinogenic or reproductive toxicant classifications and pose unnecessary risk, regardless of controls.

The EPA NZ also propose revoking the approvals for two substances which we can find no evidence are being used in this country.

The tighter controls being proposed involve restricting use to agriculture only, and imposing downwind buffer zones, and restrictions on application rates, frequencies, and intervals. Manufacturers who continue to sell Paraquat would need to provide a Product Stewardship Programme for all users.

More information & to make a Submission.

View the <u>documents for the Application for grounds for</u>
<u>Reassessment</u>

View the documents for the Declined Application

Comment closes: 30 April 2019

From: www.epa.govt.nz/news-and-alerts/latest-news/epa-proposes-tightened-rules-on-paraguat-use/

And: www.epa.govt.nz/public-consultations/open-consultations/reassessment-of-paraquat/

EPA NZ Website: Suspected Poisoning of Bees

4 March 2019: New EPA NZ online reporting form means bee keepers can now give details about any suspected or known poisoning incidents that may have affected their bee hives and other pollinator insects.

The OECD Pollinator Incidents Information System. The system allows OECD member countries, (New Zealand is one), to collect and share information quickly and consistently about pollinator incidents that may be potentially linked to pesticides.

Link: Pollinator Incident Report Webform or 2p docx template

Fact Sheet: <u>Tell EPA NZ about Suspected Beehive or Pollinator Poisoning Incidents</u> (2 page pdf)

Link: EPA NZ work to protect Bees & other Pollinators in NZ.

From: www.epa.govt.nz/news-and-alerts/latest-news/going-digital-for-bees/

Proposed AgVet Chemical Regs: Consultation

20 December 2018: The Department of Agriculture and Water Resources consulted on Proposed Changes to regulations for agvet chemicals regulated by the APVMA.

The proposed changes would amend the:

Ag & Vet Chemicals (Administration) Regulations 1995

Ag & Vet Chemicals Code Regulations 1995

Ag & Vet Chemical Products (Collection of Levy) Regs 1995.

For information on the Proposed Measures go to: www.agriculture.gov.au/ag-farm-food/ag-vetchemicals/better-regulation-of-ag-vetchemicals/streamlining/regulations-consultation.

The consultation closed 20 February 2019. There are submissions available from:

Animal Medicines Australia (11 page pdf)

Australian Competition & Consumer Commission (4 page pdf)

The ACCC has concerns over deregulation of "low risk" ag & vet chemicals such as: Carbon Dioxide or Nitrogen used as a fumigant; Citronella Oil use for a purpose other than as an insect repellent for use on Human Beings (such as in a candle); and Sheep Branding substances.

CropLife Australia (9 page pdf)

National Farmers' Federation (12 page pdf)

Veterinary Manufacturers & Distributors Assoc'n Ltd (2p pdf)

From: https://apvma.gov.au/node/41651

ACCC Levy: Agvet Chemicals & Container Recycling

19 Dec 2018: The ACCC has authorised AgStewardship to continue collecting a levy on the sale of agricultural and veterinary chemicals, to fund programs for the safe disposal and recycling of the containers and unused chemicals.

The levy, imposed on participating manufacturers, was first authorised in 1998 and has now been authorised to continue for a further five years.

The ACCC has also approved the first increase of the levy, from 4 cents per L or kg to 6 cents per L or kg, to keep pace with increased expenses and to fund improvements to the programs.

In the past 20 years, the program has diverted 32 million containers from landfill, and resulted in over 661,000 litres of agvet chemicals being collected for safe disposal & recycling.

Currently 116 manufacturers of Agricultural and Veterinary chemicals participate in the scheme. AgStewardship estimates this covers in excess of 90% of the manufacturers of AgVet chemicals in Australia.

The <u>Final Determination</u> (18 page pdf) & 32 other documents are available at the ACCC <u>AgStewardship Aust Ltd</u> webpage.

From: www.accc.gov.au/media-release/levy-for-chemicals-and-container-recycling-scheme-to-continue

APVMA Ag Active: Bacillus Amyloliquefaciens

15 January 2019: An application for the approval of a new active constituent, Bacillus Amyloliquefaciens strain MBI 600 that colonises the roots and developing shoot systems of plants, suppressing by competition disease organisms such as Botrytis, Fusarium, Rhizoctonia, and Alternaria as well as those organisms causing powdery mildew and anthracnose.

Common Name: Bacillus amyloliquefaciens MBI 600

Classification: *Kingdom*: Bacteria; *Phylum*: Firmicutes; *Class*: Bacilli; *Order*: Bacillales; *Family*: Bacillaceae; *Genus*: Bacillus; *Species*: Bacillus Amyloliquefaciens.

Bacillus Amyloliquifaciens strain MBI 600 is an aerobic, endospore-forming Bacillus, originating from an indigenous wild type isolated from leaves of broad bean plants (Vicia Faba). Its occurrence is abundant in any environmental media, predominantly in soil. The organism is an ellipsoidal rod shaped bacterium. 0.7–0.8 µm by 2–3 µm in length. All sporeformers, including members of the Genus Bacillus, undergo a cycle consisting of several discernible phases: Germination, Outgrowth, Multiplication, and Sporulation.

The APVMA has evaluated the chemistry aspects of Bacillus amyloliquefaciens MBI 600 active constituent (biological properties, identification, manufacturing process, quality control procedures, batch analysis results and analytical methods) and found them to be acceptable.

The APVMA has completed a toxicological evaluation of Bacillus amyloliquefaciens MBI 600.

Bacillus amyloliquefaciens are common environmental organisms likely to be present on fruit and vegetables. The organisms are not infective or pathogenic and were not toxic at limit doses in acute toxicity tests, and consequently the establishment of an Acceptable Daily Intake (ADI) or an Acute Reference Dose (ARfD) is not required.

Other components of toxicological significance are not expected to occur in Bacillus Amyloliquefaciens MBI 600 technical active constituent.

The Scheduling Delegate considered that it will not require control under the Poisons Standard, and it has been listed in Appendix B, Part 3.

Submissions: Case Management & Administration Unit, APVMA. Ph: 02 6210 4701, Email: Enquiries @apvma.gov.au

From: Ag&Vet Gazette, 15 June 2019 p31-32 https://apvma.gov.au/node/42526

APVMA Ag Active Constituent: Potassium Silicate

15 January 2019: An application for the approval of a new active constituent, Potassium Silicate. Potassium silicate will be used for the control and suppression of various fungal infections in viticultural and horticultural crops.

Common Name: Potassium Silicate; CAS Name: Silicic Acid, Potassium Salt; CAS No: 1312-76-1; Minimum Purity: Variable, depending on the ratio of potassium oxide to silica, and on the water content; Formula: K₂O.xSiO₂.yH₂O, where x is variable, commonly 1.6 for Potassium Silicate used in agricultural products, and y is typically between 1 and 2; MW: Variable; Chemical Family: Alkaline salt.

The APVMA has evaluated the chemistry aspects of potassium silicate active constituent and found them to be acceptable. The APVMA has completed a toxicological evaluation of potassium silicate as part of their assessment of the accompanying product.

A Joint FAO/WHO Expert Committee on Food Additives (JECFA) report that concluded that orally administered silica and silicates, if absorbed, are excreted by the kidneys without evidence of toxic accumulation in the body

Potassium Silicate is captured in the listing for alkaline salts in the Poison Standard. Product containing alkaline salts, including silicates, are variously unscheduled or included in Schedules 5, 6 or 10, depending on the use of the product and its pH.

Based on the use pattern of the Fungicide product as an agricultural chemical product, noting that it is a solid formulation, and considering the pH of a 10 g/L (1% w/v) solution is well below 11.5, the Fungicide product would be unscheduled.

On the basis of the data provided, and the toxicological assessment, it is proposed that the following APVMA Active Constituent Standard be established for Potassium Silicate as: Potassium Silicate content; Potassium Oxide (K_2O) content; Silicon Dioxide (SiO_2) content.

Other compounds of toxicological significance are not expected to occur in potassium silicate technical active constituent.

The APVMA is satisfied that the proposed importation and use of potassium silicate would not be an undue toxicological hazard to the safety of people exposed to it during its handling and use

Submissions: Director Chemistry and Manufacture, Scientific Assessments and Chemical Review Program, APVMA. Phone: 02 6210 4701, Email: Enquiries @apvma.gov.au

From: Ag&Vet Gazette, 15 June 2019 p33-35 https://apvma.gov.au/node/42526

Dangerous Goods

WA Dangerous Goods (S&H) Regs Draft Guide

March 2019: The WA Dept of Mines, Industry Regulation and Safety (DMIRS) is seeking public comment on a Draft Guide developed for the Storage and Handling of non-explosive Dangerous Goods in Western Australia.

It provides practical guidance on how to comply with the Regulations for persons who manufacture, import, supply, store or handle Dangerous Goods and all persons at Dangerous Goods sites.

Dangerous Goods Safety (Storage and Handling of Non-Explosive) Regulations 2007 – DRAFT Mar 19 Guide (80p pdf)

Public comment period closes 5.00pm, Friday 10 May 2019. Send Comments to: <u>safetycomms@dmirs.wa.gov.au</u> Please use the cover sheet and feedback template.

From: www.dmp.wa.gov.au/Consultation-16497.aspx

Editor: The 2007 Regs Draft Guide March 2019 still allows the NOHSC 2003 MSDS Code as well as the current SDS Code.

Major Hazard Facilities in the Review of Model Laws

25 Feb 2019: The review of the model WHS laws is complete and the report is available on the Safe Work Australia website. The Review Report makes 34 recommendations designed to enhance the WHS framework.

The <u>Review Report</u> (196 page <u>pdf</u> or <u>docx</u>) is with WHS Ministers for consideration and their response to the recommendations is expected later in the 2019 year.

Major Hazard Facilities (7.6 pages 152-153):

Prior to the development of the WHS Regulations, there were significant differences in jurisdictional regulation of MHF. Amendments to MHF Regul'ns to support unique issues and policy decisions in jurisdictions has resulted in inconsistencies, generally in relation to scope, of MHF Regulations.

Stakeholders around the country raised concerns about the regulation of MHF. These mainly centred on the regulatory complexity for MHF, inconsistent application of the model WHS Regulations across jurisdictions & exclusion of Class 1 Explosives from the model WHS Regulations.

Common issues raised in business forums during the consultation process related to the many layers of regulation which are considered to create duplication, inconsistency, confusion and frustration. This was particularly the case where businesses have facilities in multiple jurisdictions.

It was highlighted that Regulators have different expectations of what should be contained in a safety case and often perceive it to be a product developed for the regulator rather than for the business operating the MHF and its workers and the safety of the workplace.

Various technical issues were raised by regulators and the industry in relation to the WHS Regulations dealing with MHF.

From: www.safeworkaustralia.gov.au/media-centre/media-release/independent-review-finds-model-whs-laws-operating-intended

China Chemical Blast: 78 Dead & >500 in Hospital

25 March 2019: Excerpts from Asia Pacific - Daily Sabah

The death toll from a chemical plant explosion in China (on the 21 March 2019) rose to 78 on Monday, as Beijing ordered a nationwide inspection of chemical firms four days after one of the country's worst industrial accidents.

More than 500 people are still in hospital, said city officials in Yancheng on their official Twitter-like Weibo account. Among them, 13 are critically injured and 66 are seriously injured, the statement said.

The city government said some 89 houses were damaged beyond repair and families were resettled after those structures had been demolished.

From: www.dailysabah.com/asia/2019/03/25/death-toll-rises-to-78-in-china-chemical-blast-as-inspections-ordered

Also see: https://santiagotimes.cl/2019/03/24/64-killed-600-injured-in-china-chemical-plant-blast/

Also see: www.nytimes.com/2019/03/22/world/asia/china-chemical-plant-explosion.html

WA Dangerous Goods New Working Group

14 March 2019: The new WA Dangerous Goods Rail Transport Safety Working Group will provide an overview of dangerous goods rail transport activity in WA, act as an intermediary between operators and industry regulators and provide input to assessing, accepting and reporting rail transport risk.

Department of Mines, Industry Regulation and Safety (DMIRS) officers conducted audits of all bulk dangerous goods rail transfer locations across WA in 2016-17, which included Cyanide and Ammonia filling of rail wagons, Caustic Soda transport for the Alumina industry and bulk solid Sulphur Prill railed to mine processing sites.

Knowledge gained from the audits was passed on to industry at the inaugural Dangerous Goods Rail Safety Forum, which DMIRS hosted in October 2017.

This new Working Group (in 2019) is a joint initiative between the DMIRS Dangerous Goods and Critical Risks Directorate and WorkSafe Division and the Office of the National Rail Safety Regulator (ONRSR). Industry stakeholders include chemical manufacturers, freight forwarders and rail operators.

The Working Group's Delegates represent:

- DMIRS: Dangerous Goods & Critical Risks, WorkSafe Division (two delegates)
- ONRSR: Principal Rail Safety Officer, Director Perth Oper'ns
- Industry Operators: Aurizon, Pacific National, SCT Logistics
- Major Freight Forwarder reps Toll, Linfox & Sadleir's
- Manufacturer reps Alcoa, CSBP & Coogee Chemicals
- Emergency Services: Dept of Fire & Emergency Services

From: www.dmp.wa.gov.au/News/New-transport-safety-group-on-25090.aspx

WA Incidents / Releases

Ammonia Release during Ship Unloading (SIR0119) (2p pdf) 19 Mar 2019: On 21 July 2018, a major release of Ammonia Gas occurred at a Western Australian port.

Reducing Exposure to Respirable Crystalline Silica (Quartz) (Mine Safety Bulletin MSB No. 163: 18 Ma 2019) (3 page pdf)

From: www.dmp.wa.gov.au/Dangerous-Goods/What-is-happening-16169.aspx

Storage and Handling of Liquefied Chlorine Gas

<u>DR AS 2927:2019:</u> The Storage and Handling of Liquefied Chlorine Gas (Draft AU Standard)

Published 13 Feb 2019, 80 pages, pdf (Personal-No Copy/No Paste & Print Once): Free; Hardcopy: \$48.97.

Comment closes 17 April 2019

From: https://infostore.saiglobal.com/store/Details.aspx?ProductID=1990330
Alerted by: Peter Hunt

Editor: Worth reading over to check how the Standard has changed: e.g. 1/ Incorporation of a management of change process for Chlorine Facilities. 2/ Are the creation of requirements for storage only areas and transit areas, versus Chlorine installation requirements adequate? 3/ Calculated risk-based separation distances will be used: Are these changes to separation distances appropriate?

• D. Goods (Road & Rail): Differences 7.5 to 7.6

Australian Code for the Transport of Dangerous Goods by Road and Rail - Differences between editions 7.5 and 7.6

https://www.ntc.gov.au/Media/Reports/(049F35A2-1EF1-318B-2115-2D0C8CDBC2CF).pdf (14 page pdf Jan 2019)

From: https://www.ntc.gov.au/heavy-vehicles/safety/australian-dangerous-goods-code/

IATA 2019 Lithium Battery Guidance Document

Transport of Lithium Metal and Lithium Ion Batteries Revised for the 2019 Regulations

Download the 27 page pdf document from: www.iata.org/whatwedo/cargo/dgr/Documents/lithiumbattery-shipping-quidelines.pdf. Alerted by the British Ass'n of D.Goods Professionals (https://www.badgp.org/)

• EPA NSW: Rollover Stability now All DG Tank Trailers

12 Feb 2019: After previously only being compulsory in new Dangerous Goods tank trailers, the EPA NSW now requires all tank trailers carrying Dangerous Goods to be fitted with a roll stability system.

This requirement applied from 1 January 2019 in NSW.

Roll-over control is an electronic system that automatically reduces vehicle speed when sensors detect wheel speed is producing a high risk of a vehicle rolling over.

The safety initiative follows recommendations by the NSW Coroner after a fatal tanker accident in 2009 at East Lynne NSW on the south coast. It also follows a serious accident in 2013 at Mona Vale on Sydney's northern beaches. In both crashes the vehicles rolled & leaked fuel, and six people died.

From: www.epa.nsw.gov.au/news/media-releases/2019/epamedia190212-rollover-stability-extended

CSB: Husky Superior Refinery - Explosion & Fire

12 Dec 2018: CSB Releases Factual Investigative Update about the 26 April 2018, Explosion and Fire at the Husky Superior Refinery (in Wisconsin USA).

The explosion resulted from the inadvertent mixing of Hydrocarbons with air inside the unit that found an ignition source.

Update: <u>www.csb.gov/csb-releases-factual-investigative-update/?lbound=11%2F25%2F2018&ubound=01%2F22%2F2019</u> (4 page pdf)

From: www.csb.gov/csb-releases-factual-investigative-update/

"Flammable" Cladding Fire in Melbourne, Vic

4 Feb 2019: The Age: A matter of life and death': Hundreds of buildings at high risk from dangerous cladding

After fire raced up cladding at the Neo200 building on Spencer St Melbourne Victoria on Monday morning, it can be revealed more than 350 buildings are still at high risk from the flammable material. The Neo200 fire is believed to have started on the 22nd floor just after 5am and reached the 27th floor before it was extinguished.

https://www.theage.com.au/national/victoria/a-matter-of-life-and-death-hundreds-of-buildings-at-high-risk-from-dangerous-cladding-20190204-p50vlw.html

NSW: Fire Safety and External Wall Cladding

Feb 2019: Conformity withdrawn for nine cladding products. Find out if your building has aluminium cladding

From:www.fairtrading.nsw.gov.au/housing-and-property/fire-safety-and-external-wall-cladding

EPA NSW: Mainfreight fined \$4000 DG Transport

15 Mar 2019: Trucking company Mainfreight Distribution Pty Ltd has been fined \$4000 for allegedly failing to carry the required safety equipment while transporting Dangerous Goods (DG) in Mayfield West, NSW last year.

It was alleged the truck was not equipped with the required safety equipment including fire extinguisher, chemically resistant gloves, eye wash kit and correct torch.

From: www.epa.nsw.gov.au/news/media-releases/2019/epamedia190315-mainfreight-fined-\$4000-for-alleged-dangerous-goods-transport

Environmental Notes on Chemicals

• EPA Vic: Fact Sheet - Fire Retardants & Health

20 Dec 2018: Fire retardants are chemicals that slow the spread or intensity of a fire. They help firefighters on the ground and are sometimes dropped from aircraft.

Short-term fire retardants are detergent chemicals mixed into foam. Long-term fire retardants are chemicals that are mixed with water to form a slurry.

Fire retardants have been used in Victoria for the last thirty years. This Fact Sheet provides information about the effects of fire retardants, and how to protect your health around fire retardants.

Long-term fire retardants are essentially fertilisers (Ammonium and Diammonium Sulphate and Ammonium Phosphate) with thickeners (Guar Gum) and corrosion inhibitors (for aircraft safety). Sometimes a red coloured pigment, made from Iron Oxide, is added so that those spraying can see where they have released the fire retardant. Examples of long-term fire retardants include Phos-Chek D75-F and Phos-Chek D75-R.

Short-term fire retardant foams are made from a combination of wetting agents and foaming chemicals, mixed with water. This allows the water to penetrate surfaces more easily. Their usefulness is limited against high-intensity fires, where long-term retardants have proven more successful. Examples of short-term fire retardants include Ansul Silv-Ex, Angus Forexpan S and Phos-Chek WD-881.

Publication 1721 Dec 2018 (2 page pdf)

From: www.epa.vic.gov.au/our-work/publications/publication/2018/december/1721

EPA NSW: Potential PFAS Contamination

7 Mar 2019: An EPA NSW investigation into potential PFAS contamination resulting from historical site activities at the Swanson Industries Georgetown premises in Newcastle, is underway.

Preliminary investigations undertaken in late 2018 and early 2019 indicate that PFAS has migrated from the site in groundwater and may be flowing south-east, underground.

EPA NSW officers and Swanson Industries are visiting some nearby residents, to determine if groundwater or bore water is

used at those properties. The presence of PFAS in the environment does not always indicate a human health risk.

The site was formerly operated by Goninan Platers as a metal electroplating facility, which used chemicals containing PFAS as a mist suppressant, until about 2006.

From: <u>www.epa.nsw.gov.au/news/media-releases/2019/epamedia190307</u>

EPA NSW: Statement on RAAF Base Richmond

6 Mar 2019: The Commonwealth Department of Defence is responsible for RAAF Base Richmond & in the case of contamination at RAAF Base Richmond, Defence is the polluter.

The NSW Environment Protection Authority does not have the jurisdictional powers to direct the Commonwealth, or to regulate activities on Commonwealth land.

Although the EPA NSW cannot regulate Defence sites, it has made clear its expectations that Defence will carry out investigations in a timely manner that is consistent with the EPA's usual requirements and processes.

In NSW, the 'polluter pays principle' applies to contaminated land, this means the EPA NSW requires the polluter to undertake assessment, pay for and manage any clean-up.

The PFAS Inter Governmental Agreement between the Commonwealth and the states acknowledges that the polluting party holds responsibility for PFAS contamination.

From: www.epa.nsw.gov.au/news/media-releases/2019/epamedia190306-statement-raaf-base-richmond

PFAS – NT Tindal's Long Cleanup has Begun

27 Feb 2019: The cleanup of PFAS contaminated groundwater at the NT Tindal RAAF Base has begun.

One of two expensive treatment plants began work on a job which the Dept of Defence admitted "may take many years".

PFAS has been leaking from the base for 31 years, through the groundwater and underneath Katherine NT town, and empties into the Katherine River. The PFAS chemicals were contained in firefighting foams which were used at the base from 1988 to 2004.

There has been no information provided on the soil cleanup which defence officials have said was much more difficult than cleaning PFAS from water.

Water is extracted from groundwater at the PFAS hotspots on the base - the former firefighter training areas. PFAS is extracted using the same synthetic resin being used on Katherine's smaller water treatment plant.

The cleaned water is being reinjected back into the aquifer in an ongoing cycle. Combined, the two base plants are intended to clean PFAS from 10 megalitres per day or 3650 megalitres per year.

Katherine NT is still waiting for more information about its own town water treatment plant while it remains on water restrictions because of PFAS.

From: www.katherinetimes.com.au/story/5927620/operation-pfas-tindals-long-cleanup-has-begun/

(Alerted by DG Newsy Stuff: Dangerous Goods - Hazmat Global Network, https://groups.io/g/hazmat)

PFAS in Firefighter's Blood: Clinical Pilot Study

25 Feb 2019: MFB & UFU partnering on world-first PFAS study to determine: Can regular blood or plasma donations reduce the level of PFAS chemicals in firefighter's blood?

MFB and the UFU have announced a clinical pilot study into Per and PolyFluoroAlkyl Substances, known as PFAS.

The MFB has commissioned Macquarie University to conduct the research, which will be undertaken over a 12 month period, with 350 firefighters and staff participating.

PFAS are a diverse group of manufactured chemicals resistant to heat, water and oil. Previously used in a range of common household products, including non-stick cookware, fabric & food packaging & in fire fighting foams since the 1950s.

PFAS is still in use in some firefighting foams, meaning that firefighters are exposed to higher levels of PFAS than the general public.

There is a body of research on the adverse impact of PFAS on humans and the environment. Acknowledging this, MFB is taking proactive action to reduce PFAS exposures for firefighters and the community.

MFB was the first Fire and Rescue Service in the world to establish safe PFAS limits for firefighters and successful measureable decontamination programs for appliances and fire fighting equipment.

MFB also uses a Fluorine-Free firefighting foam which does not contain PFAS.

United Firefighters Union of Australia National Secretary Peter Marshall welcomed the ground-breaking research.

"Firefighter health and safety is paramount and the health effects of exposures to toxins and carcinogens is one of the most significant risks firefighters face in protecting the community," Mr Marshall said.

"The results of this research will be a significant part in the understanding of the impact of PFAS exposures, but more importantly, may provide a feasible and practical option for reducing PFAS levels."

"This is the world's first systematic intervention study to assess the efficacy of using phlebotomy (blood and plasma donation) to lower PFAS levels," Macquarie University Professor Mark Taylor said.

From: www.mfb.vic.gov.au/News/Media-releases/MFB-and-UFU-to-partner-on-world-first-PFAS-study.html

You Tube Video: www.youtube.com/watch?v=J828lZM-p5E

EPA Vic: PFAS Game Consumption Advice

15 March 2019: On the eve of the Victorian duck hunting season, EPA Vic is reminding hunters about consumption advice for waterfowl taken from some Gippsland and Bellarine Peninsula wetlands.

"Following a statewide testing program of waterfowl, EPA Vic issued consumption advice for waterfowl taken from Heart and Dowd Morass, East Sale and Macleod Morass, Bairnsdale, as well as Hospital Swamp on the Bellarine Peninsula due to PFAS levels above food trigger values," said EPA Chief Environmental Scientist, Dr Andrea Hinwood.

Consumption advice for recreationally harvested waterfowl www.epa.vic.gov.au/our-

work/publications/publication/2019/march/1732 (2 page pdf)

Consumption advice for recreationally caught fish www.epa.vic.gov.au/our-

work/publications/publication/2019/march/1735 (2 page pdf)

Ambient concentrations of PFAS in the Latrobe Valley www.epa.vic.gov.au/our-

work/publications/publication/2019/march/1736 (2 page pdf)

From: www.epa.vic.gov.au/about-us/news-centre/news-and-updates/news/2019/march/15/epa-pfas-consumption-advice

PFAS in Vic Waterfowl-Tech Report Public'n 1734 (Mar 19) www.epa.vic.gov.au/~/media/Publications/1734.pdf (25p pdf)

Fish Consumption Advice for Morwell's Kernot Lake

15 Feb 2019: Results of recent testing of fish (Redfin, Eel and Carp) from Morwell's Kernot Lake by EPA Vic has confirmed high levels of PFOS (Perfluorooctane Sulfonate), one of the PFAS (Per- and Poly-Fluorinated Alkyl Substances) family.

EPA Vic has confirmed its previous advice to the public not to eat fish caught there.

From: www.epa.vic.gov.au/about-us/news-centre/news-and-updates/news/2019/february/15/fish-consumption-advice-for-morwells-kernot-lake

NZ: Consumer Guide to Domestic Chemical Disposal

1 Feb 2019: A new Guide to help protect New Zealanders from hazardous domestic chemicals has been released by Consumer New Zealand, with the support of the EPA NZ.

Unwanted or leftover chemicals in sheds and garages across NZ left to accumulate can pose a risk to children, pets and the environment if they're not disposed of safely.

The Guide is based on a survey of Consumer NZ members and City and District Councils. It includes information on chemical storage, banned pesticides, and a district guide to disposal facilities around New Zealand.

Website: www.consumer.org.nz/articles/hazardous-waste-aquide-to-disposal

Link: What You Can And Can't Recycle (17 July 2018)

Link: Plastic Packaging (6 July 2018)

Link: <u>Disposable Batteries</u> Link: <u>Rechargeable Batteries</u>

This web report is free, thanks to funding from the EPA NZ.

From: www.epa.govt.nz/news-and-alerts/latest-news/epa-welcomes-consumer-guide-to-domestic-chemical-disposal/

EPA NZ: HFC Greenhouse Gases Targeted

18 Feb 2019: After 31 Dec 2019, a permit will be required for new and recycled bulk imports or exports of 18 different HydroFluoroCarbon (HFC) Gases, which are used in both refrigeration and air-conditioning units.

The new rules set limits on how much new bulk HFC can be imported, and encourage a move to alternative gases or HFCs with less potential to warm the atmosphere.

These NZ Regulations are in line with the Kigali Amendment to the Montreal Protocol, an international agreement adopted by New Zealand, to phase out certain gases which damage the Earth's Ozone layer, & affect our climate.

Details at: www.epa.govt.nz/industry-areas/hazardous-substances/hfcs/

Why the rules for HFCs changed: The Montreal Protocol is thought to be one of the most successful and effective

international environmental treaties – the declining levels of Ozone-depleting substances in the atmosphere means the Ozone layer is recovering, and is expected to fully recover later this century.

To reduce our reliance on Ozone-depleting gases, the manmade gases collectively known as HydroFluoroCarbons (HFCs) were developed. Although HFCs have a smaller impact on the ozone layer, they are potent greenhouse gases which warm the atmosphere and contribute to climate change.

In 2016, the Montreal Protocol was amended (the Kigali Amendment) to ensure that industrialised and developing member countries reduce their HFC production and consumption over time.

NSW EPA: Chemical and Hazardous Waste

17 Dec 2019: Spreading the word on chemical and hazardous waste.

Spray drift education is helping EPA NSW staff increase awareness about responsible pesticide use, and promote positive behaviour change amongst farmers. In recent months, the EPA NSW also delivered public safety awareness initiatives on Asbestos.

From: www.epa.nsw.gov.au/newsletters/epa-connect-newsletter/summer-december-2018/9-spreading-the-word-on-chemical-and-hazardous-waste

WA Govt: Strict New Controls for Hydraulic Fracturing

28 Nov 2018: Hydraulic fracturing fracking will NOT be permitted in 98% of Western Australia.

The Govt will only lift the fracking moratorium on existing onshore petroleum titles, concluding that the risk to people and the environment is low.

Fracking will continue to be banned in Perth, Peel and the South-West. National parks, the iconic Dampier Peninsula in the Kimberley and public drinking water source areas will also be declared off limits

Major changes to the existing regulatory regime include:

- no fracking to be allowed within two kilometres of gazetted Public Drinking Water Source Areas;
- all fracking projects, including exploration and production wells, to require EPA WA assessment;
- the development of an enforceable Code of Practice to ensure high standards of health, safety and environmental protection; and
- no fracking allowed within 2 km of towns, settlements or residents.

From: www.dmp.wa.gov.au/News/Government-introducesstrict-24760.aspx

WA: Tailings Storage Facilities Regulation

21 Feb 2019: The tragic loss of life and significant environmental impacts associated with the failure of a tailings storage facility (TSF) at Vale's Córrego do Feijão iron ore mine in Brazil has highlighted the devastation that can occur when critical mine infrastructure fails.

There are more than 800 TSFs in Western Australia, with approximately two thirds categorised as shut - including historic TSFs.

The WA Dept of Mines, Industry Regulation and Safety (DMIRS) requires mining companies to undertake rigorous design processes that match the designated risk/consequence profile for each TSF regardless of construction method. These design processes are set out in DMIRS' <u>Code of Practice and Guidelines</u> (webpage).

The vast majority of the TSFs built in WA by upstream construction methods are paddock storage situated on relatively gentle topography, with generally drier climatic conditions and less propensity to seismic events.

From what is currently understood, these general characteristics differ significantly from those at the Vale Córrego do Feijão TSF and more significantly, the Brazilian cross-valley TSF was significantly higher than current facilities in Western Australia.

From: www.dmp.wa.gov.au/News/Tailings-Storage-Facilities-in-25040.aspx

• EPA Vic: Combustible Recyclable & Waste Materials

30 Oct 2018: The Victorian Government is committed to reducing the risk of fires at waste and resource recovery facilities. The Government therefore developed the Waste Management Policy (Combustible Recyclable and Waste Materials) (the Policy) (4 page pdf) which came into effect on 28 Aug 2018, replacing the interim Waste Management Policy (Resource Recovery Facilities).

Compliance with the policy requires Combustible Recyclable and Waste Materials (CRWM) at Waste and Resource Recovery Facilities (WRRF) to be managed and stored in a manner that minimises risk of harm to human health and the environment from fire.

To support compliance with the Policy, an updated Management and Storage of Combustible Recyclable and Waste Materials – Guideline (Publication 1667.2 (63 page pdf)) (the Guideline) was developed by EPA Vic, Country Fire Authority (CFA) and Metropolitan Fire Brigade (MFB) in consultation with a wide range of government and waste industry representatives.

From: www.epa.vic.gov.au/business-and-industry/guidelines/waste-guidance/combustible-recyclable-and-waste-materials

• EPA Vic: Fact Sheet - Ash from CCA Treated Timber

20 Dec 2018: Copper Chrome Arsenate (CCA) is a wood preservative that is fixed into timber and used to protect wood from rotting, fungi and insects, and resist leaching. This fact sheet provides information about collection & disposal of CCA-treated timber ash after a fire, and protecting your health when collecting ash from CCA-treated timber.

If you know that you had structures made from CCA-treated timber, when cleaning up the ash, remember:

- it is not possible to tell if ash contains Arsenic just by looking at it, so you should treat the ash as containing Copper, Chromium and Arsenic
- the remaining ash and char can contain up to 10% (by weight) Copper, Chromium and Arsenic
- this ash may pose a health hazard if it is swallowed by young children or grazing animals.

Publication 1720 Dec 2018 (2 page pdf)

From: www.epa.vic.gov.au/our-work/publications/publication/2018/december/1720

• EPA Vic: Fact Sheet - Industrial Fires

21 Dec 2018: During an industrial fire, EPA Vic's role is to provide support to Emergency Response Agencies. This Fact Sheet contains information about industrial fires and how to protect your health in the event of a fire.

Why are industrial fires different to bushfires? Industrial sites may store a range of chemicals used in the manufacturing process, as well as produce a range of products. Therefore, if an industrial site has a fire, there can be a large range of pollutants released from the site that may end up in the local environment.

e.g. Firewater from the West Footscray factory fire in Aug 2018 washed a range of chemicals, including industrial solvents, detergents and fire and soot by-products into Stony Creek.

Publication 1723 Dec 2018 (2 page pdf)

From: www.epa.vic.gov.au/our-work/publications/publication/2018/december/1723

Managing Contamination at Shooting Ranges

10 Jan 2019: This EPA Vic Guide provides Victorian Outdoor Shooting Ranges with information to help them prevent, manage and contain contamination from their activities.

A range of potential contaminants are common at shooting ranges but lead usually has the greatest potential to harm human health and the environment. For this reason, this Guide will primarily focus on Lead, but other contaminants are also often controlled with the same methods.

This Guide covers

- Current outdoor shooting ranges firing either shot or bullets (for example shotgun, rifle, and pistol ranges).
- Waste that is unique to shooting ranges, such as from ammunition and clay targets.
- Contaminants resulting from shooting activities, primarily lead but also others such as polycyclic aromatic hydrocarbons (PAH), copper, zinc, antimony, arsenic, nickel, tin, strontium, magnesium, barium, and mercury.
- Risks to human health and the environment associated with outdoor shooting activities.

Publication 1710 January 2019 (80 page pdf)

From: www.epa.vic.gov.au/our-work/publications/publication/2019/january/1710

EPA Vic: Chemical Waste filled Warehouses Found

in Epping & Campbellfield (Melbourne Northern Suburbs)

28 Dec 2018: EPA Vic lifts the lid on hazardous material

www.epa.vic.gov.au/about-us/news-centre/news-andupdates/news/2018/december/28/epa-statement-on-eppingincident

29 Dec 2018: EPA Vic lifts the lid on hazardous material (Update 4 pm Saturday)

Around the clock security remains on the site of yesterday's discovery of illegally stored chemical waste in Devon Ct, Epping, and at three sites in Campbellfield.

https://www.epa.vic.gov.au/about-us/news-centre/news-andupdates/news/2018/december/29/epa-lifts-the-lid-onhazardous-material

31 Dec 2018: EPA Vic maintains watch at Illegal Chemical Storage sites (Update Mon 31 Dec 2018)

https://www.epa.vic.gov.au/about-us/news-centre/news-andupdates/news/2018/december/31/chem-dump-updatemonday

1 Jan 2019: Illegal Chemical Storage in Epping and Campbellfield - EPA Vic (Update Tues 1 Jan 2019)

https://www.epa.vic.gov.au/about-us/news-centre/news-and-updates/news/2019/january/01/illegal-chem-1-jan-update

2 Jan 2019: Illegal Chemical Storage (Update Wed 2 January 2019)

Environment Protection Authority Victoria (EPA) officers have begun speaking with businesses that neighbour the chemical storage sites discovered in Epping and Campbellfield on Friday (28 Dec 2018).

https://www.epa.vic.gov.au/about-us/news-centre/news-and-updates/news/2019/january/02/wednesday-update

3 Jan 2019: Illegal Chemical Storage (EPA Vic Update Thurs 3 Jan 2019)

https://www.epa.vic.gov.au/about-us/news-centre/news-and-updates/news/2019/january/03/update-thursday

4 Jan 2019: Epping and Campbellfield Illegal Chemical Storage (EPA Vic Update Fri 4 Jan 2019)

https://www.epa.vic.gov.au/about-us/news-centre/news-and-updates/news/2019/january/04/friday-update

9 Jan 2019: Epping and Campbellfield Illegal Chemical Storage (EPA Vic)

Following confirmation that flammable liquids are present in waste material being stored at a number of sites in Campbellfield and Epping, WorkSafe Vic, EPA Vic and other agencies will take direct action to remove stored chemicals.

https://www.epa.vic.gov.au/about-us/news-centre/news-and-updates/news/2019/january/09/chem-store-update-9-jan

6 Feb 2019: Removal of Dangerous chemicals from Epping sites. A WorkSafe Vic led taskforce, including EPA Vic & Fire Services has begun the complex task of removing chemicals stockpiled at eight sites in Epping and Campbellfield.

https://www.epa.vic.gov.au/about-us/news-centre/news-and-updates/news/2019/february/06/chem-dump-removals-start

Worksafe Vic: Clean-up of Waste Chemical Stockpiles

8 Jan 2019: WorkSafe Vic, EPA Vic and other Vic Govt agencies will take action to remove stored chemicals discovered at a number of sites in Epping and Campbellfield.

https://www.worksafe.vic.gov.au/news/2019-01/agencies-take-control-chemical-removal

16 Jan 2019: Update on plans to remove chemical stockpiles at Epping and Campbellfield

https://www.worksafe.vic.gov.au/news/2019-01/updateplans-remove-chemical-stockpiles-epping-and-campbellfield

6 Feb 2019: The chemicals are contained in bulk containers and drums at eight sites.

Representatives from the WorkSafe-led taskforce and contractors are now on site and worker amenities and chemical testing facilities have been erected.

Once the removal process is underway at the first Epping site, it is expected works will be able proceed at other sites, including those at Campbellfield, simultaneously.

https://www.worksafe.vic.gov.au/news/2019-02/epping-and-campbellfield-dangerous-goods-sites

https://www.worksafe.vic.gov.au/news/2019-02/work-remove-chemical-stockpiles-begins

Worksafe Vic: New Chemical Waste Sites

9 March 2019: Three new chemical sites in Craigieburn (a northern suburb of Melbourne), which may also contain Dangerous Goods, are under investigation after new information was received by WorkSafe.

The sites appear to house Bulk Containers similar to those being stored at the eight sites found in late Dec 2018.

Chemical testing will be required to establish the presence of Dangerous Goods, but 24-hour security has been put in place at each site as a precautionary measure. Air monitoring will also be established at the sites.

From: www.worksafe.vic.gov.au/news/2019-03/new-chemical-sites-under-investigation

16 March 2019: Victorian Government Agencies tasked with removing chemical stockpiles from sites in Melbourne's northern suburbs are investigating another new site at Campbellfield (a northern suburb of Melbourne).

The warehouse appears to house Bulk Containers similar to those being stored at sites discovered in Epping and Campbellfield in Dec 2018.

Investigations into how the sites in Epping, Campbellfield and Craigieburn came to house the chemicals are continuing.

WorkSafe Vic and the EPA Vic will continue to inspect industrial sites across Melbourne's northern suburbs to ensure Dangerous Goods are being stored properly.

Anyone with information or concerns about chemical storage can contact WorkSafe Victoria on 1800 136 089.

From: www.worksafe.vic.gov.au/news/2019-03/new-chemical-site-under-investigation

EPA Vic: Epping Compost Fire – Company Fined

31 Jan 2019: Recycling company Suez Recycling & Recovery Pty Ltd has been fined more than \$8000 after a compost fire at its Epping premises that burned for 6 hours.

The situation was made potentially worse by the fact that the compost pile was larger than is allowed under the company's licence. EPA Vic has required the company to reduce the size of the stockpile to a level that is within its limit.

From: www.epa.vic.gov.au/about-us/news-centre/news-and-updates/news/2019/january/31/epa-fines-company-over-compost-fire-at-epping

Editor's Note: A compost fire means that the material became Spontaneously Combustible Division 4.2 Dangerous Goods.

We all need to know when an Unsaturated Oil (like Linseed Oil) spill is a cleaned up with a high surface area absorbent that allows air flow through it, **then** the pile will compost, heat up & may become a Spontaneously Combustible Division 4.2 Dangerous Goods and burn down your building.

Don't leave untreated cleanups where this may occur.

EPA Vic: Notice to stop receiving recyclable waste

14 Feb 2019: EPA Vic issued SKM Service P/L notices for its Coolaroo and Laverton sites to stop receiving recyclable waste materials

EPA Vic CEO, Dr Wilkinson said that in the event of a fire at either site, large amounts of plastic materials could likely generate significant community impacts from smoke.

These waste stockpiles could pose a significant risk and challenge for firefighting agencies if ignited. Fire water run off

could also enter waterways and have long-lasting impacts on the environment due to the toxic contaminants.

EPA Vic officers recently inspected both sites and observed large stockpiles of combustible recyclable waste materials from kerb-side collections stored without appropriate separation distances between stockpiles, buildings or the premises boundary.

EPA Vic determined that SKM has not taken reasonable steps to manage and store combustible recyclable waste materials at these facilities in a manner that minimises the risks of harm to human health and the environment from fire.

The EPA Vic Waste Management Policy has been in place for almost 18 months, SKM, and the recycling industry as a whole, has had ample time to meet the requirements of the policy to ensure the safety of local communities.

From: www.epa.vic.gov.au/about-us/news-centre/news-and-updates/news/2019/february/14/epa-issues-skm-notices-for-coolaroo-and-laverton-sites-to-stop-receiving-waste

EPA Vic: SKM Services regains recyclable waste

12 Mar 2019: SKM Services P/L requested the inspection following improvements at their Laverton North site's outdoor storage which has seen a reduction in stockpiled waste and increased separation distances as required by the Policy.

EPA Vic: SKM has demonstrated that it has met the conditions outlined in our notices and is again compliant.

The closure (on the 14 Feb 2019) of the SKM sites was an (EPA Vic) decision taken to protect the community from the risk of a major fire.

From: www.epa.vic.gov.au/about-us/news-centre/news-and-updates/news/2019/march/12/skm-laverton-north-regains-compliance

EPA Vic: Coal to Hydrogen trial in Latrobe Valley

14 Feb 2019: EPA Vic has approved an application from J-Power Latrobe Valley Pty Ltd (J-Power) for a Research, Development and Demonstration (RD&D) that will investigate the potential for converting coal to hydrogen.

An RD&D allows the company to conduct a short-term research or demonstration project with limited potential environmental impact. Any subsequent commercial operation would require additional EPA assessment and approval through a Works Approval. EPA's Works Approval process includes public consultation.

The trial will run for a limited duration of 12 months starting in mid-2020 within a purpose-built plant in the Latrobe Valley converting brown coal to hydrogen, testing the viability of a combination of several existing technologies.

The Applicant has also established a dedicated website https://hydrogenenergysupplychain.com where members of the public can provide comments or request information.

From: www.epa.vic.gov.au/about-us/news-centre/news-and-updates/news/2019/february/14/epa-victoria-approves-coal-to-hydrogen-trial-in-latrobe-valley

Editor's Note: The final project will involve large scale Carbon Capture Storage at significant depths underground.

Lignin: Part of a Renewable 3D Printing Composite

18 Dec 2019: OAK RIDGE National Laboratory (ORNL), Tenn. USA. Scientists at the USA Dept of Energy's Oak Ridge

National Laboratory have created a recipe for a renewable composite 3D printing feedstock that could spur a profitable new use for an intractable biorefinery byproduct: Lignin.

The discovery, detailed in Science Advances (Research Article reference below), expands ORNL's achievements in lowering the cost of bioproducts by creating novel uses for Lignin—the material left over from the processing of biomass. Lignin gives plants rigidity & also makes biomass resistant to being broken down into useful products.

https://www.oml.gov/news/new-composite-advances-lignin-renewable-3d-printing-material

Research Article (14 Dec 2018, 16 page pdf): A path for Lignin valorization via additive manufacturing of high-performance sustainable composites with enhanced 3D printability

From: http://advances.sciencemag.org/content/4/12/eaat4967

Chemical Recycling makes Waste Plastic a Resource

1 March 2019: With an eye toward a circular economy, technology developers are advancing a host of new approaches to chemical recycling of post-use commodity plastics.

Increasingly, the sheer volume of plastics produced (estimated at well over 300 million metric tons annually) presents environmental risks if the material is not captured, and represents a waste of resources if the material is disposed of in landfills. Currently, only a small fraction of commodity plastics are recycled globally (some estimates peg the number at 14%), while the majority end up in landfills, incinerators or in the environment, particularly the ocean.

The majority of plastic-recycling processes today are mechanical, where waste thermoplastic material from enduse products are melted and used as a component of another manufactured product. While improvements continue to be made in this area (for example, in spectral identification and sorting of plastic items), it is clear that mechanical recycling processes alone are not sufficient to handle the volume of plastic recycling that is required to shift society toward a circular economy with regard to plastic.

The limitations of existing recycling processes and the push toward circular economy ideals has driven development of chemical recycling processes — those in which polymers are taken back to their monomers. This class of processes need to be developed and deployed at scale to complement existing mechanical recycling efforts. NOVA's Thayer comments: "One hundred percent of plastics should be reused, recycled or recovered and regenerated. We believe that chemical monomer recovery is the best long-term solution, where end-of-life plastics become feedstock that is chemically indistinguishable from fossil-fuel-sourced monomer."

Several advancements in chemical recycling processes, including several technologies that have recently been, or are soon to be, scaled up are presented in the article.

PET Upcycling; Making Mixed Streams Work; Products from Pyrolysis Oil; Supply Chain Changes; Recycling Hurdles; Projects for Flexible Plastic Packaging

From: www.chemengonline.com/chemical-recycling-makes-waste-plastic-resource

Standards & Codes

• Stds Australia: Change to Distribution Rights

7 Feb 2019: Standards Australia wins right to move beyond exclusive distribution arrangements with SAI Global

In late Dec 2018, an independent arbitration determined that any extended distribution agreement with SAI Global will be non-exclusive. This means that Stds Australia can now take steps to move beyond the exclusive distribution arrangements that have been in place with SAI Global since 2003.

A process is continuing in relation to how the arbitrator's decision will be implemented. Stds Australia is committed to getting to the end of this process as quickly as it can, sometime later this year.

In the meantime, Australian Standards® will continue to be distributed through SAI Global.

Stds Australia is exploring additional distribution channels as the first stage of its transition.

The second stage of transition will start with an open process of consultation with stakeholders to understand how the current and future distribution models can deliver easier access for those who use Stds Australia's content.

Contact: Adam Stingemore

General Manager, Strategy and Public Affairs

Ph: +612 9237 6086 Em: Adam.Stingemore@standards.org.au

From: www.standards.org.au/news/standards-australia-wins-right-to-move-beyond-exclusive-distribution-arrangements-with-sai-global

SIA welcomes Announcement on Australian Stds

7 Feb 2019: In a Press Release today (see above), Standards Australia have announced the decision of the arbitrator in the contract extension dispute between SAI Global (the distributor) and Stds Australia.

Stds Australia has said that moving forward, 'any extended distribution agreement with SAI Global will be non-exclusive'. They have announced that they 'can now take steps to move beyond the exclusive distribution arrangements that have been in place with SAI Global since 2003.'

Over the past year, the Safety Institute of Australia, on behalf of the health and safety profession, has actively lobbied for an end to the 15-year monopoly distribution arrangements. SIA Chief Executive, David Clarke, congratulated Standards Australia in taking up the challenge of removing what has long been seen by the Institute as an unfair arrangement to Australian business.

This recent decision will reduce costs which is a positive step, but there is still a case to be made for the Commonwealth to look at subsidising access for some areas of Australian business, especially small business.

Extracted comments from SIA Chief Executive, David Clarke.

From: www.sia.org.au/news-and-publications/news/media-release-sia-welcomes-watershed-announcement-australian-standards

Editor's Comment: Our free technical specialist work to create AS1940 Storage & Handling of Flammable & Combustible Liquids should not be costing each purchaser around \$400!!

Standards – https://infostore.saiglobal.com/

https://infostore.saiglobal.com/store/Default.aspx?SearchType=power

AS 2809.6:2019: Road Tank Vehicles for Dangerous Goods - Tankers for Cryogenic Liquids. Pub: 4 Mar 2019, 20 pages, pdf (Personal Use): \$115.38; Hardcopy: \$128.20.

AS ISO 27914:2019: Carbon Dioxide Capture, Transportation and Geological Storage - Geological Storage. Pub: 5 Mar 2019, 59 pages, pdf (Personal Use): \$223.32; Hardcopy: \$248.13.

AS ISO 27919.1:2019: Carbon Dioxide Capture - Performance Evaluation Methods for Post-Combustion CO2 Capture Integrated with a Power Plant. Pub: 28 Feb 2019, 63 pages, pdf (Personal Use): \$254.15; Hardcopy: \$282.39.

ISO/DIS 14063: Environmental Management -Environmental Communication - Guidelines and Examples. Pub: 21 Dec 2018, 32 pages, pdf (Personal Use): \$86.99; Hardcopy: \$96.66.

<u>ISO/TR 12885:2018</u>: Nanotechnologies - Health and Safety Practices in Occupational Settings. Pub: 18 Dec 2018, 125 pages, pdf (Personal Use): \$296.97; Hardcopy: \$329.97.

<u>ISO 27916:2019</u>: Carbon Dioxide Capture, Transportation and Geological Storage - Carbon Dioxide Storage using Enhanced Oil Recovery (CO2-EOR). Pub: 30 Jan 2019, 55 pages, pdf (Personal Use): \$266.98; Hardcopy: \$296.64.

ASTM F2205-19: Standard Guide for Ecological Considerations for the Use of Chemical Dispersants in Oil Spill Response: Tropical Environments. Pub: 1 Feb 2019, 7 pages, pdf (Personal Use): \$78.98; Hardcopy: \$78.98.

Draft Stds – https://infostore.saiglobal.com/

https://infostore.saiglobal.com/store/Default.aspx?SearchType=power

DR AS/NZS 2243.3:2019: Safety in Laboratories - Microbiological Safety and Containment. Published 29 Mar 2019, 195 pages, pdfs (Networkable / Personal Use): Free; Hardcopy: \$89.95. Comment closes 31 May 2019

Amendment to AS 1940 for Category 6 Tanks

DR AS 1940:2017 Amdt 1:2019: The Storage and Handling of Flammable and Combustible Liquids. (Pub: 15 Mar 2019) AMDT No.1 to Clause 5.3.3(f) Revised Text is proposed as: "clause 5.3.3(f) 1st sentence to be. In addition to the LAH, Category 6 tanks filled from ship to shore, from a refinery, or similar high volume transfers, shall incorporate a physical and electrically independent high-high level alarm (LAHH)."

Comment Closes: 17 May 2019 Alerted by Peter Hunt

Storage and Handling of Liquefied Chlorine Gas

DR AS 2927:2019: The Storage and Handling of Liquefied Chlorine Gas (Draft AU Standard). Published 13 Feb 2019, 80 pages, pdf (Personal-No Copy/No Paste & Print Once): Free; Hardcopy: \$48.97. Comment closes 17 April 2019

From: https://infostore.saiglobal.com/store/Details.aspx?ProductID=1990330
Alerted by: Peter Hunt

Other Draft Standards

ISO/DIS 14016: Environmental Management - Guidelines on Assurance of Environmental Reports. Pub: 15 Mar 2019, 25 pages, pdf (Personal Use): \$86.99; Hardcopy: \$96.66.

<u>ISO/DIS 29903-1</u>: Guidance for the comparison of toxic gas data from different tests - Part 1: General. Pub: 1 Feb 2019, 25 pages, pdf (Personal Use): \$86.99; Hardcopy: \$96.66.

https://www.hub.standards.org.au/hub/public/listOpenCommentingPublication.action

Note: Comment must be via the Hub. Any emails or forms sent to Standards Australia by fax or mail will not be considered by the Committee when it reviews the Public Comment received.

NFPA News (Codes Newsletter)

Newly Published NFPA Codes

All NFPA documents are at: <a href="https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes

NFPA Research & Analysis: January 2019

New Flammable Refrigerants, New Firefighter Tactics

<u>Identifying the Parameters Affecting Flame Propagation involving Combustible Dusts</u>

NFPA Research & Analysis: February 2019

New Report: Home Structure Fires

From: www.nfpa.org/News-and-

Research/Resources/Research-newsletter

NFPA News: now only appears accessible by being emailed. http://ebm.cheetahmail.com/r/regf2?a=0&aid=272412627&n=210

Standards Seeking Public Input

For a complete listing of NFPA standards accepting Public Input, please go to www.nfpa.org/publicinput

Standards Seeking Public Comment

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Both of the above take you to the various Committees:

As part of its commitment to enhancing public safety, NFPA makes its codes & standards available for **free online**.

Seminars, Conferences, Courses

• DGAG Meeting, MFB Burnley, 3 April 2019, Melb

Dangerous Goods Advisory Group meeting, Wed 3rd April 2019, 5.30pm for 6pm - 8.15pm meeting at the MFB Burnley Complex. No Cost to attendees. There will be tea / coffee and biscuits and for those interested will go for a meal after.

Info: www.haztech.com.au/click-this-tab-for-a-list-of-all-meetings-conferences-seminars-workshops/

For those who would like to be added to my Dangerous Advisory Group / Chemical Hazard Communication Network email meeting issues list, please email me at: Jeff.Simpson@haztech.com.au.

Chemical Engineering Educ'n for Industry 10 April Industry Meets Academia 10 April 2019 6-9pm CHEMICAL ENGINEERING Education for Industry

Be More Ready for Industry – a joint initiative between RACI-Vic and Society of Chemical Industry (SCI) where Science meets Business. Join us to discuss the Chemical Engineering Education issues with 3 notable speakers.

6-00 pm Professor David Shallcross, Director – Engineering Learning Unit, Melbourne School of Engineering, Uni of Melb.

6-30 pm Ms Leonie Walsh – Director & Founder, Productive Management Sol'ns Pty Ltd, formerly Lead Scientist, State Vic

7-00 pm Professor Cordelia Selomulya – Professor and ARC Future Fellow, Dept of Chemical Engineering, Monash Uni.

Cost \$25 (non-members) or \$15 (members); All students \$15.

At BASF Aust, L12 / 28 Freshwater Place, Southbank VIC

From: https://www.raci.org.au/events/event/industry-meets-academia-be-more-ready-for-industry-education

To Register: https://www.ivvy.com.au/event/VCB830/

Jeff Simpson: I regard this Uni degree area to be the basis for adding hazardous chemicals management skills to.

HAZOP Leadership & Mgmt, 7 May 2019, Brisbane

Brisbane, 7 May – 9 May 2019: Explores best practice in HAZOP Leadership and Management. Learn about the application of the technique & how to plan and manage study programs more effectively. Learn how to lead study teams.

Cost: Non-Members \$4040, IChemE Members \$3515.

Email: austcourses@icheme.org, ph: 03-9642-4494

From: www.icheme.org/career/training/courses/hazop-leadership-and-management/7-9-may-2019-australia/

RISK Eng & Project Controls Conference 5/2019

15-17 May 2019 at the Sydney International Convention Centre (ICC), NSW, Australia. Organised by: Risk Engineering Society (RES) & Australian Cost Engineering Society (ACES) of Engineers Australia.

There is a critical need to improve and further support the required decisions by using innovative but practical risk engineering and project controls solutions.

Cost Non-Member: \$1200. Member: \$1000. Flyer (2page pdf): http://risk-pcc19.com.au/wp-content/uploads/2019/02/2951-RISK-PCC-Flyer_07-APPROVED.pdf

From: https://risk-pcc19.com.au/

• Fundamentals of Process Safety, Perth & Brisbane Perth, 8-12 April 2019 & Brisbane, 24-28 June 2019:

For staff keen to develop or improve their knowledge of process safety, hazards, risk and their management.

Cost: Non-Members \$4090, IChemE Members \$3565.

Email: austcourses@icheme.org, ph: 03-9642-4494

From: www.icheme.org/career/training/courses/fundamentals-of-process-safety/8-12-april-2019-australia/ (Perth)

From: www.icheme.org/career/training/courses/fundamentals-of-process-safety/24-28-june-2019-australia/ (Brisbane)

IChemE Training – New On-Line Courses

Editor: Most of these on-line courses have been run once as live sessions and are now available to purchase as on-demand recordings for the costs shown below.

An Introduction to HAZOP 2 CPD Hrs £149 + VAT

An Introduction to LOPA 3 CPD Hrs £199 + VAT

Confined Space Entry 3 CPD Hrs £199 + VAT

Dust Explosions 4 CPD Hrs £235 + VAT

Dust Explosion Risk Reduction 4 CPD Hrs £235 + VAT

Plus several other relevant on-line courses.:

From: www.icheme.org/career/training/online-courses/

Lab Safety Training Courses

Email: <u>info@labsafety.com.au</u> Mobile: 0417-843-798

From: www.labsafety.com.au/training-courses

Haztech Environmental: Chemical Hazard Classifications done & reviewed. SDSs prepared & reviewed. Labels prepared & reviewed. Chemical Management & Safety Regulatory Compliance: checked for NICNAS, APVMA, FSANZ, TGA; prepared & reviewed for Dangerous Goods & Combustible Liquids, GHS Hazardous Chemicals / Workplace Hazardous Substances, Environmentally Hazardous Substances, Scheduled Poisons, and other Chemical and Physical Hazards.

I can come and work in your office, which provides better access to data with improved security, plus good technical contact with relevant personnel. This allows the work to be done more quickly and comprehensively. *I also work from my home office*, in Ashburton, Victoria, where I maintain an extensive reference library, developed over 28 years whilst preparing these Notes.

Contact: Jeff Simpson, Hazardous Materials & Regulatory Affairs Consultant, Haztech Environmental, 18 Laurel St, Ashburton 3147, Australia, 61-(0)3-9885-1269, 61-(0)403-072-092, Jeff.Simpson@haztech.com.au, Website: www.haztech.com.au.

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