Hazmat & Environment Notes April-June 2021

Hazmat & Environment Notes are prepared & edited by: Jeff Simpson **ISSN: 1441-5534**

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Hazardous Chemicals

• ECHA: 290 Chemical Candidates for Regulatory Action

21 April 2020: ECHA's third report on its **Integrated Regulatory Strategy** gives the latest on ECHA's work to identify and manage chemicals that may pose risks to people and the environment, as well as recommendations to Authorities and industry on managing the risks.

ECHA continued addressing groups of structurally similar substances instead of assessing each chemical individually. This group approach boosted the total number of chemicals assessed in 2020 to around 1900 (twice as many as in 2019).

290 chemicals were identified as candidates for further EU Regulatory Risk Management. Most of these will, however, require more data to be generated and confirmation of hazard before any actions can start. There are over 100 substances identified, which based on currently available information, would warrant harmonised classification, but which have so far not been picked up by Authorities.

ECHA has created a mapping tool of all Registered Substances called the Chemical Universe in which each Substance is assigned to a pool that indicates the Regulatory Actions already initiated or under consideration for that substance. It identifies those substances for which the need for suitable Regulatory Actions still needs to be determined.

Integrated Regulatory Strategy Annual Report 2020 [55p pdf]

Integrated Regulatory Strategy Annual Report 2019 [59p pdf]

Addressing Substances of Concern (webpage)

Universe of Registered Substances (webpage)
>100t 1758 (RMgmt 712+267); 1-100t 6529 (RMgmt 469+136)

Grouping Structurally Related Substances are primarily formed based on:

- Structural Similarity, using the substance identity information in registration dossiers and C&L notifications; and
- read-across and categories, using information received in registration dossiers from industry and external sources.

Structurally Similar Substances are identified from all the Registered Substances. Certain Substances are pre-selected to act as 'Seeds'. ECHA's IT tools are then used to identify other substances that are Structurally Similar to the 'Seeds'.

https://echa.europa.eu/working-with-groups

From: https://echa.europa.eu/-/nearly-300-chemicals-identified-as-candidates-for-regulatory-action

• ECHA: 7 Substances incl. Cyclosiloxanes D4, D5 & D6

14 April 2021: ECHA recommended for the European Commission to add seven substances, including:

The Cyclosiloxanes D4, D5 and D6, to the Authorisation List. Once on the list, companies will need to apply for Authorisation to continue using them. The D4, D5, and D6 Cyclosiloxanes are considered harmful to the environment and human health. Some uses of these Cyclosiloxanes are already restricted or in the process of being restricted in consumer products and in most professional uses under REACH.

Terphenyl, Hydrogenated is considered to be harmful for the environment. Dicyclohexyl Phthalate (DCHP), Disodium Octaborate and Trimellitic Anhydride (TMA) are considered harmful to human health.

Tenth Recommendation [14 April 2021, 7 page pdf]

Substances included in the 10th Recommendation with examples of their uses in the scope of Authorisation (Annex) [14 April 2021, 1 page pdf]

Background: REACH Authorisations aim to ensure the good functioning of the EU market while assuring that the risks from using Substances of Very High Concern are properly controlled and that SVHCs are progressively replaced by less dangerous substances or technologies, where technically and economically feasible alternatives are available.

From:
https://echa.europa.eu/-/echa-proposes-seven-substances-for-authorisation-to-protect-people-and-the-environment

• Canadian Chemicals Management Plan Website

Screening Assessments & Evaluations (some entries)

From 17 March 2021:

An order amending the Domestic Substances List to apply the Significant New Activity (SNAc) provisions of the Canadian Environmental Protection Act, 1999 to 19 substances with Pesticidal Use was published. [2021-03-17]

Information regarding the rolling workplan for risk management performance measurement has been published.[2021-03-26]

This includes Evaluations in Progress: Bis(2-ethylhexyl) phthalate (DEHP); Inorganic arsenic compounds; Benzene; Dichloromethane; Dioxins & Furans; Polychlorinated Biphenyls

Upcoming Evaluations: Inorganic Arsenic Compounds; Inorganic Cadmium Compounds; Ethylene Oxide; Nonylphenol & its Ethoxylates: Polycyclic Aromatic Hydrocarbons; Octamethylcyclotetrasiloxane (D4); Dioxins & Furans; PerfluoroOctane Sulfonate, its salts & its precursors.

April 2021:

The *Final Screening Assessment for DTPMP* was published. [2021-04-03]

The *Final Screening Assessment for Acetonitrile* was published. [2021-04-03]

The Canadian Federal environmental quality Guideline for Copper was published. [2021-04-09]

The Government of Canada strengthens its *Canadian Environment Protection Act* to better protect Canadians and their environment. [2021-04-13]

A summary of feedback from the consultation: Informed substitution within Canada's chemicals program was published. [2021-04-16]

The *Final Screening Assessment for Talc* ($Mg_3H_2(SiO_3)_4$) was published. The *Risk Management Approach for Talc* ($Mg_3H_2(SiO_3)_4$) was also published for a public comment period ending June 23, 2021. [2021-04-22]

A notice of intent to address the broad class of PFAS was published. [2021-04-24]

Per- and PolyFluoroAlkyl Substances (PFAS) are a group of over 4700 human-made substances that are used as surfactants, lubricants, repellents (for dirt, water, and grease). They can be found in certain firefighting foams, textiles (including carpets, furniture, and clothing), cosmetics, and in food packaging materials.

May 2021:

The meeting record for the February 2020 Chemicals Management Plan Science Committee meeting was published. A committee report on considerations for identifying

Potential Risks from exposure to Chemicals in the Workplace was also published. [2021-05-05]

The *Draft Screening Assessment for the Monocyclic and Bicyclic Sesquiterpenes Group* and the *Risk Management Scope for Certain Terpenes and Terpenoids within the Monocyclic & Bicyclic Sesquiterpenes Group* were published (60-day public comment period to 7 July 2021) [2021-05-08]

A final order adding Plastic Manufactured Items to Schedule 1 of CEPA 1999 was published [2021-05-12]

A final order adding Selenium and its Compounds to Schedule 1 of CEPA 1999 was published. [2021-05-12]

The proposed order adding Talc to Schedule 1 of the *Canadian Environmental Protection Act*, 1999 was published (60-day public comment period to 21 July 2021) [2021-05-22]

Final Screening Assessment for Chlorocresol was published. The *Proposed Risk Management Approach for Chlorocresol* was published (60-day public comment period to 21 July 2021. [2021-05-22]

11 June 2021:

Federal Environmental Quality Guidelines for Siloxane-D4, Selenium, and Aluminium were published. [2021-06-11]

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

Canadian Federal Environmental Quality Guidelines

Canadian FEQGs are recommended chemical thresholds to support federal initiatives. FEQGs set a concentration so that if a given chemical is at or below the FEQG threshold, there is low likelihood of direct adverse effects from the chemical on aquatic life exposed via the water or sediment, or where chemicals may bioaccumulate, in wildlife (birds and mammals) that consume aquatic life.

Those FEQGs currently out for comment are:

Aluminium – Draft public comment period ends 11 Aug 2021

Selenium – Draft public comment period ends 11 Aug 2021

Siloxane-D4 – Draft public comment period ends 11 Aug 2021

FEQGs are currently under development for: Perfluorooctanoic acid; Naphthenic acids; Rare earth elements; Triclocarban.

From: www.canada.ca/en/health-canada/services/chemical-substances/fact-sheets/federal-environmental-quality-guidelines.html#a6

• ACCC: Button Batteries: Tiny BUT a Big Danger

9 June 2021: If swallowed, a Button Battery can become stuck in a child's throat and result in catastrophic injuries and even death. Insertion of Button Batteries into body orifices such as ears and noses can also lead to significant injuries.

YouTube Video: https://youtu.be/JgQvwBz7R-g (1min 15s)

Ed: The website has good advice of managing these batteries.

From: www.productsafety.gov.au/news/button-batteries-tiny-batteries-big-danger

1 June 2021: ACCC Supplier Guidance released for Button/Coin Battery Standards:

A Guide for Business on the Application of Mandatory Standards (webpage with a 34 page pdf & Listen to pdf option) will help Suppliers understand the new requirements for secure battery compartments, child resistant packaging, and warnings and information.

The ACCC have also published:

- a Fact Sheet (webpage with a 4 page pdf & Listen to pdf option) summarising the new Standards for suppliers
- Summaries of the new Standards (webpage) on the Product Safety Australia website.

The four Mandatory Standards (with Explanatory Statements):

- Consumer Goods (Products Containing Button/Coin Batteries) Safety Standard 2020 (Federal Legislation Site)
- Consumer Goods (Products Containing Button/Coin Batteries) Information Standard 2020 (Federal Legisl'n Site)
- Consumer Goods (Button/Coin Batteries) Safety Standard 2020 (Federal Legislation Site)
- Consumer Goods (Button/Coin Batteries) Information Standard 2020 (Federal Legislation Site)

The Mandatory Standards have an 18 month transition period.

From: www.productsafety.gov.au/news/supplier-guidance-released-for-button-coin-battery-standards

• Hazardous Gas released from a Confined Space

This SafeWork NSW Animation profiles the manufacturing industry and is based on an actual incident in the Paper Industry involving hazardous gas (Hydrogen Sulphide) in a confined space & released immediately above the inside tank.

Video: www.youtube.com/watch?v=bo2XN43lXAc (6 min)

From: www.safework.nsw.gov.au/advice-and-resources/incident-animations

• Safety Alert: Swimming Pool Chemical Mixing Causes Toxic Gas

22 April 2021: Employees and swimming pool patrons were injured when a toxic gas was released into the pool area at an Aquatic centre.

The incident occurred after an earlier electrical fault caused the automatic dosing system, used to administer chemicals to the pool water, to inadvertently mix Sodium Hypochlorite (Pool Chlorine) and Hydrochloric acid (pool acid) together which resulted in a toxic Chlorine Gas.

The electrical fault caused the water filtering pump to shut down, resulting in no water flow within the pipeline. The Pool Chlorine and Pool Acid were automatically added into the pipeline that would normally return filtered water back into the swimming pool. Adequate water flow within the pipeline is necessary to prevent Chlorine Gas (being formed).

When dosed into a swimming pool, Pool Chlorine and Pool Acid should be added separately to the filtered water re-entering the pool.

From: www.worksafe.vic.gov.au/safety-alerts/swimming-pool-chemical-mixing-causes-toxic-gas

• WorkSafe NT: Hazard of Cutting an Empty Drum

23 April 2021: NT WorkSafe has charged a cattle mustering contractor with four breaches of the NT WHS Act over an Avgas 200L drum explosion that severely burnt a young 18 year old ringer, which occurred approx. 320 km south west of Katherine.

From: https://worksafe.nt.gov.au/forms-and-resources/news-and-events/media-releases/2021/four-charges-laid-over-avgas-drum-explosion-that-severely-burnt-young-ringer

Information Bulletin (webpage) **13 Oct 2020:** Cutting the top off or welding any drum should be considered dangerous – it is often unclear what has been in an empty drum.

Empty steel drums that have previously contained flammable materials can constitute an explosion or fire hazard many years after being emptied. A risk assessment should always be undertaken prior to grinding, cutting or welding drums.

From: https://worksafe.nt.gov.au/forms-and-resources/bulletins/hazards-of-cutting-empty-drums

Chemical Management

• Classification & Labelling for Work Haz Chemicals

12 April 2021: This AU GHS Health Hazards Poster shows GHS signal words, pictograms and hazard statements for each GHS hazard class and category under the WHS Regulations and can be used to assist in the preparation of labels or to help end-users of chemicals understand the link between each hazard class and the various pictograms, signal words and hazard statements.

Poster: www.safeworkaustralia.gov.au/sites/default/files/2021-04/classification_and_labelling_for_workplace_hazardous_chemicals_210412.pdf
(one page pdf preferably printed on an A3 page)

Editor: Compared to the 2012 Poster there are changes for Flammable Gases; Aerosols; Desensitised Explosives; Eye Irritation; Respiratory or Skin Sensitisation.

From: www.safeworkaustralia.gov.au/doc/classification-and-labelling-workplace-hazardous-chemicals-poster

• SafeWork Australia: AU GHS 7 Transition

Safe Work Australia has published a Webinar to help businesses navigate the transition to GHS 7. (29 Jan 2021)

From: www.safeworkaustralia.gov.au/media-centre/transition-ghs-7-webinar (14 min 18s)

The webinar is for businesses that manufacture, import, supply or use hazardous chemicals.

The Deadline for the GHS 7 transition (in all AU jurisdictions except WA) is 31 Dec 2022. Workplaces under WHS (& Vic OH&S) should not accept goods labelled to GHS 3 after this date. Manufacturers and Importers should ensure that goods imported or manufactures after that date are labelled to GHS7, with the Eye Irritation 2B issue addressed.

Editor: The Eye Irritation 2B issue may catch previously NOT GHS Hazardous products, that are acidic or alkaline where the solution pH is <3.5 or >10.5.

From: www.safeworkaustralia.gov.au/chemicals

And: www.safeworkaustralia.gov.au/ghs-7-transition

In Victoria the Occupational Health and Safety Regulations 2017 were updated to Version 9 to include:

Vic Part 1.1 Introductory Matters - Definition: GHS means the Globally Harmonized System of Classification and Labelling of Chemicals, seventh revised edition, published by the United Nations, as modified by Schedule 7;

And: **Vic General Transitional Provision: 560A** GHS - 24 months transition period. Until 31 Dec 2022: the third revised edition, fourth revised edition or fifth revised edition of the GHS (*Editor:* are referenced & also about the obligations)

From: https://content.legislation.vic.gov.au/sites/default/files/2021-02/17-22sra009%20authorised.pdf

And: www.worksafe.vic.gov.au/occupational-health-and-safety-act-and-regulations

In WA their Occupational Safety and Health Regulations 1996 Part 5 Division 1 Hazardous Substances: 5.1 Terms Used

"GHS means the Globally Harmonised System of Classification and Labelling of Chemicals 3rd Revised Edition"

From: www.slp.wa.gov.au/legislation/agency.nsf/dmirs_menu.html&category=8

Editor: There isn't any WA provision yet made to allow the GHS 7th Revised Edition to be used.

• Qld: Dust Lung Disease Medical Research Grant

25 May 2021: The Queensland Government is continuing its response for workers with occupational dust lung disease, particularly those with Coal Workers' Pneumoconiosis (CWP) and Silicosis, by offering a $5 million medical research grant over four years from 2021 to 2023, in one or more of the following priority areas:

- Understanding the pathogenesis of Silicosis (including accelerated Silicosis) and Coal Workers' Pneumoconiosis.
- Identifying factors to determine disease severity and risk of disease progression (linked to the ability to return to work).
- Determining the efficacy and sensitivity of methods for early diagnosis, prevention and progression of disease, including anti-fibrotic medications, pulmonary rehabilitation, whole lung lavage and other developing treatments.

Expressions of interest closed on 14 June 2021.

To download the Spec & Other docs you must be logged in.

From: www.worksafe.qld.gov.au/news-and-events/news/2021/$5m-medical-research-grant-for-dust-lung-disease

Editor: I included this as it is relevant to know about.

• DPIE NSW: Hunters Hill Uranium Remediation Project

26 April 2021: Property NSW, now part of Property & Development NSW, has been granted planning approval to proceed with is remediation plans for the Old Radium Hill Refinery site at Nelson Parade, Hunters Hill, including the offsite disposal of contaminated material at a licensed facility in Idaho, USA. This will solve a century-old contamination issue created by the private sector.

Excavation works are expected to start by mid-2021, with remediation works expected to take 13 months to complete.

From: www.dpie.nsw.gov.au/housing-and-property/divisions/property-and-development-nsw/environmental-service-group/hunters-hill

• SWA: COVID-19 & Improving Indoor Ventilation

5 Feb 2021: This Safe Work Australia (SWA) Fact Sheet has information about ventilation in Indoor Workplaces. Ensuring Heating, Ventilation and Air Conditioning (HVAC) systems are well-maintained and operating properly is important for Indoor Workplaces to manage the risk of COVID-19 transmission.

e.g. This includes not recirculating the air or limiting the level of recirculation. e.g. In areas with more than one person fans and portable air cleaners or purifiers should only be used where the air is not directly blowing from one person to another and where fresh air is available.

Fact Sheet (1page pdf)

From: www.safeworkaustralia.gov.au/doc/improving-ventilation-indoor-workplaces-covid-19

• Safety Alert: Choose Right Equipment for the Chemical

3 May 2021: SafeWork SA is reminding businesses who handle chemicals in the workplace to ensure that their equipment is compatible with the substances being handled.

In January 2021, a worker was decanting an acidic liquid when it was noticed that the plastic tap on the drum was leaking. When attempting to tighten the tap, the assembly failed causing acid to spill onto the worker resulting in chemical burns to the worker's arms and legs. One contributing factor was that the seal of the tap was incompatible with the chemical being decanted.

The SafeWork SA Code of Practice – Managing risks of hazardous chemicals in the workplace (June 2020, 113 page pdf) is available to assist businesses with practical Guidance on these issues.

From: www.safework.sa.gov.au/news-and-alerts/safety-alerts/incident-alerts/2021/choose-the-right-equipment-for-the-chemical

• UN GHS Sub-C'tee: Consultation on the 40th Session

9 June 2021 email: The provisional Agenda and available Meeting Papers are on the UN website at (AC.10/C.4) ECOSOC Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals (40th session) UNECE.

UNECE 40th Session: Agenda & Papers
https://unece.org/transport/events/ac10c4-ecosoc-sub-committee-experts-globally-harmonized-system-classification-2

Provisional Agenda for the Fortieth Session 5-7 July 2021
ST/SG/AC.10/C.4/79/Add.1 (23 April 2021, 4 page docx | pdf)

Note: Currently not all Agenda items have papers and the UNSCEGHS secretariat is expected to continue to release more Papers closer to the meeting.

Safe Work Australia are especially interested in your views on:

- Agenda item: 2 (i) Revision of Chapter 3.3 to fully incorporate Non-Animal Test Methods (29 page docx | pdf)
- Agenda item: 2 (e) Terms of reference of the informal working group on the Criteria for Germ Cell Mutagenicity (3 page docx | pdf)

Please provide any detailed comments on the papers to the Chemicals Policy team, Safe Work Australia via email to Chemicals@swa.gov.au by COB Tues 22 June 2021.

From: Safe Work Australia email & the above UNECE website

• Developments in the GHS - Extreme pH

From: https://unece.org/sites/default/files/2021-04/ST-SG-AC10-C4-2021-5e.pdf (21 April 2021, 8 page pdf)

"3.2.2.5 Classification based on extreme pH (pH ≤ 2 or ≥ 11.5) and acid/alkaline reserve (Tier 4 in Figure 3.2.1) In general, substances with an extreme pH (pH ≤ 2 or ≥ 11.5) are expected to cause significant skin effects, especially when associated with significant acid/alkaline reserve. A substance with pH ≤ 2 or ≥ 11.5 is therefore considered to cause skin corrosion (Category 1) in this tier if it has a significant acid/alkaline reserve or if no data for acid/alkaline reserve are available. **However, if consideration of acid/alkaline reserve suggests the substance may not be corrosive despite the extreme pH value, the result is considered inconclusive within this tier (see Figure 3.2.1). A pH > 2 and < 11.5 is considered inconclusive and cannot be used for classification purposes.** Acid/alkaline reserve and pH can be determined by different methods including those described in OECD Test Guideline 122 and Young et al. (1988), acknowledging that there are some differences between these ST/SG/AC.10/C.4/2021/5 4 methods (see 3.2.5.3.6). A competent authority may decide which criteria for significant acid/alkaline reserve can be applied."

Previously the statement of concern now replaced as in **bold** above was: "Where no other information is available for an overall weight of evidence assessment, mixtures with a pH ≤ 2 or a pH ≥ 11.5 and low/no acid/alkaline reserve should be classified as category 1."

Richard Greenwood's Comments: "I read this as now applying in circumstances where the acid or alkali is unidentified (or unknown), or where the person assessing lacks the expertise to determine if there will be acid or alkali reserve present, and therefore isn't qualified to do the assessment. *It is a recognition of the need for knowledgeable and experienced SDS writers*."

Editor: Richard is the Chairperson and Co-Convenor of the Chemical Hazard Communication Network

• Battery Storage and Insurance Risks Do the positives outweigh the negatives?

30 April 2021: The use of (utility-scale) batteries is increasing & shows no signs of slowing. Notwithstanding the potential exposures, Insurers need to find a way to work with the risks.

Stringent underwriting policies may be required until battery technology is more reliable. Insurers should focus on requiring the insured to use only high quality batteries, potentially providing the insured with an approved list of suppliers. Insurers should also make certain that their insureds are storing the batteries in containers with effective fire prevention mechanisms, and that they engage in regular maintenance.

From: www.clydeco.com/en/insights/2021/02/delay-in-start-up-cover-in-the-current-climate#

Alerted by AIDGC What's Happening Newsletter May 2021

Editor: A very interesting evaluation on the Clyde&Co website.

• WA DMIRS: ThinkSafe April 2021

ThinkSafe Magazine - April 2021 Online viewing (you can also download a pdf copy). Online publication (& pdf) for workplace safety and health in WA prepared by the WA Department of Mines, Industry Regulation and Safety.

April 2021 Chemical Related Topics: Diesel Workplace Exposure Standards Set for All WA Mines; Health Surveillance Requirements for Silica Strengthened; Hidden Hazards of Vapes; Demystifying Major Hazard Facilities; Pack Smart, Pack Safe: Understanding the Rules for Dangerous Goods Packaging; Increasing Asbestos Awareness Across WA Public Sector.

From:
www.commerce.wa.gov.au/publications/thinksafe-magazine

• WorkSafe NZ: New GHS Hazardous Substances System

28 April 2021: On 30 April 2021, New Zealand adopted a new GHS (7th Revised Edition) classification system for hazardous substances.

This change mainly affects the rules for importers, manufacturers and suppliers of hazardous substances. They have four years to update labelling, safety data sheets and packaging for hazardous substances. WorkSafe NZ Regulations under HSWA will continue to refer to the current EPA NZ HSNO classification system.

WorkSafe NZ's Hazardous Substances Calculator (NZ Hazardous Substances TOOLBOX website) refers to both systems. If you have information about the GHS classification of your substance, you can enter it into the Calculator to find out the controls under HSWA that apply to it.

Because the current NZ HSNO system and the new GHS (7th Rev. Ed) system co-exist, the EPA NZ has created a correlation table (6 page pdf) that shows the equivalent GHS classifications to the current (old) HSNO classifications.

From: www.worksafe.govt.nz/about-us/news-and-media/new-zealand-has-adopted-a-new-classification-system-for-hazardous-substances/

• EPA NZ: GHS 7th Rev Ed. Hazard Classification

May 2021: New Zealand has implemented a new classification system for Hazardous Substances based on the 7th Revised Edition of the Globally Harmonised System (GHS 7) on the 30 April 2021.

- Updated EPA NZ Notices explain the new product Labelling, Safety Data Sheet and Packaging Requirements. You're encouraged to comply with the new requirements sooner rather than later.
- Substances with an **Individual Approval issued after 30 April 2021** must comply with these three Notices **immediately**.
- **Individual Approvals** issued before 30 April 2021 have a 4-year transitional period, through to **30 April 2025**, to comply with the updated Labelling, Safety Data Sheets and Packaging Notices.
- Substances managed under a **Group Standard** must also comply with the Labelling, Safety Data Sheet and Packaging Notices by **30 April 2025**, regardless of when the substance was imported into or manufactured in New Zealand.

Read the EPA NZ Labelling, Safety Data Sheet and Packaging Notices (webpage with 10 Notices)

From: https://epa.govt.nz/industry-areas/hazardous-substances/new-zealands-new-hazard-classification-system/

• EPA NZ: Hazardous Substances Update #209

May 2021: There are separate Notes on issues with (*)

Glyphosate Call for Information (until 27 Aug 2021) (*)

Chemical Review triggers 123 Classification Updates (*)

GHS 7 now in Effect (*)

Explosives Import Certificate Amdmt Fee & Import Guidance

Methyl Bromide Reassessment: Latest Updates

Environmental Sustainability Star (≤30 yrs old) Search

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

And: http://createsend.com/t/r-FB305C0009EFBDA12540EF23F30FEDED

• OECD: Safer Chemical Alternatives Guidance

2021: Guidance on Key Considerations for the Identification and Selection of Safer Chemical Alternatives. OECD Series on Risk Management No. 60 (55 page pdf)

This Guidance was developed by the OECD Ad Hoc Group on Substitution of Harmful Chemicals to advance broader agreement on a general approach and criteria for the selection of safer alternatives, with a focus on chemical substitution. It is intended to advance a consistent understanding of the minimum requirements needed to determine whether a chemical alternative is safer than the priority chemical, product, or technology for substitution, independent of the entity performing the assessment or the alternatives assessment framework being used.

The Guidance includes 3.5. CASE EXAMPLE: Solvent for High-Performing Cleaning Products.

From: https://www.oecd.org/chemicalsafety/

And: www.oecd.org/chemicalsafety/risk-management/guidance-on-key-considerations-for-the-identification-and-selection-of-safer-chemical-alternatives.pdf

• OECD: IUCLID Management of Chemical Data

9 June 2021: Customisation Opportunities of IUCLID for the Management of Chemical Data – 2nd edition (83 page pdf)

The IUCLID (International Uniform Chemical Information Database) is a software application designed to record, store, maintain and exchange data on chemicals. It is a key software application for both regulatory bodies and the chemical industry where it is used in the implementation of various regulatory programmes. It can be customised to manage chemical data in different contexts and is a platform employing globally harmonised data elements pertinent to chemicals.

This Second Edition provides the latest updates on IUCLID features and processes, including visual "working" contexts for the preparation and management of data according to regulatory contexts or data processes, possibilities for data entry in multiple languages, and a matrix view of the use of IUCLID in OECD countries

IUCLID, available for free download from the website of the European Chemicals Agency (ECHA), is a computer software used by regulatory bodies and industry to record, store, maintain and exchange data on chemicals. A variety of countries currently use IUCLID in various regulatory contexts.

ECHA develops and maintains the IUCLID software and the underlying format in collaboration with the OECD. This collaboration allows international experts to identify worldwide IUCLID user needs, particularly those identified by users in regulatory settings. IUCLID is part of an "ecosystem" of IT tools developed and promoted by the OECD and its member countries around common harmonised electronic formats, the OECD Harmonised Templates for Reporting Chemical Test Summaries (OHTs), to support regulatory activity on chemicals and data sharing.

From: www.oecd.org/chemicalsafety/customisation-opportunities-of-iuclid-for-the-management-of-chemical-data-2nd-edition-e1199efc-en.htm

IUCLID 6 Software Download

IUCLID 6 is available in three different versions. These provide the same main functionalities, but are designed to cater to different sets of user requirements. **1/** IUCLID 6 ECHA Cloud services. **2/** IUCLID 6 Desktop. **3/** IUCLID 6 Server. The latest version of IUCLID 6 published for all users is 5.15.0. (this includes the ECHA Cloud services users).

In connection with your IUCLID 6 download, you might want to consult the following weblinks: IUCLID 6 Manuals | FAQ | IUCLID 6 Webinars (on YouTube) | Checksums for downloads

From: https://iuclid6.echa.europa.eu/download

• OECD: Chemical Safety and Biosafety Progress Report

June 2021: (46 page pdf Report): As of 1 Jan 2021, the OECD Council merged the Chemicals Committee and the Working Party on Chemicals, Pesticides and Biotechnology to form the Chemicals and Biotechnology Committee (CBC).

The Report Covers: **a/** Provision of Knowledge and Information; **b/** Assistance with Governance; **c/** Support for Capacity Building; **d/** Risk Management; **e/** Assessment and Management of Pesticides and Biocides; **f/** Assist countries in dealing with releases of hazardous chemicals from installations and products; **g/** Harmonisation of Regulatory Oversight of the Safety of Products of Modern Biotechnology.

The CBC committee has 12 sub-bodies: **1/** Working Party of National Co-ordinators of the Test Guidelines Programs.

2/ Working Party on Good Laboratory Practice. **3/** Working Party on Hazard Assessment. **4/** Working Party on Exposure Assessment. **5/** Working Party on Risk Management. **6/** Working Party on Manufactured Nanomaterials. **7/** Working Party on Pesticides. **8/** Working Party on Biocides. **9/** Working Party on Chemical Accidents. **10/** Working Party on Pollutant Release and Transfer Registers. **11/** Working Party on the Harmonisation of Regulatory Oversight in Biotechnology.

12/ Working Party on the Safety of Novel Foods and Feeds.

From: www.oecd.org/chemicalsafety/ And: www.oecd.org/chemicalsafety/progress-report-june-2021.pdf

• Development of Predictive Model for Skin Sensitization

27 May 2021: NICEATM has entered into an agreement with consumer products company Unilever to collaboratively test and further develop their Skin Allergy Risk Assessment (SARA) predictive model. SARA is a computational model that uses a variety of input data to estimate a probability that a chemical will cause an allergic skin reaction in humans. NICEATM will test the SARA model using a variety of chemical data sets, including chemicals of interest to U.S. & international regulatory agencies. NICEATM and Unilever will also work together to expand the SARA model to include data generated by NICEATM. The intent is to make the SARA model openly available for public use along with other NICEATM predictive models. Availability of the SARA model will help further reduce animal use for the endpoint of skin sensitization,

NICEATM: NTP Interagency Center for the Evaluation of Alternative Toxicological Methods

From: https://ntp.niehs.nih.gov/whatwestudy/niceatm/test-method-evaluations/skin-sens/index.html

And: https://doi.org/10.1016/j.comtox.2018.10.004 (Feb 2019)

Alerted by an NTP 27 May 2021 email: Collaboration on Predictive Model for Skin Sensitization

• EPA USA: Screening Chemicals for Thyroid Effects

1 June 2021: Using New Approaches to Screen Chemicals for Potential Thyroid Effects (webpage).

The Thyroid System regulates many important cellular processes of a baby's development during pregnancy as well as metabolic processes throughout life. EPA USA scientists are developing New Approach Methods (to Reduce Use of Animals in Chemical Testing) (webpage) to more quickly and efficiently screen chemicals for potential Thyroid effects. One part of this research is developing high-throughput assays that use automated equipment to quickly evaluate chemicals for their potential to disrupt normal Thyroid Function.

From: www.epa.gov/sciencematters

And: www.epa.gov/sciencematters/using-new-approaches-screen-chemicals-potential-thyroid-effects

• EPA USA: Risk Mgmt for Existing Chemicals

June 2021: Risk Management for Existing Chemicals under the EPA USA Toxic Substances Control Act (TSCA). This gives the authority to take action to address unreasonable risks to public health or the environment from chemicals currently on the market. If at the end of the risk evaluation process EPA determines that a chemical presents an unreasonable risk to health or the environment, the agency must immediately start the risk management process to reduce or eliminate these risks.

- Current risk management activities
- Meetings, Webinars, and other Engagement Opportunities
- Overview of public & stakeholder engagement opportunities
- Overview of risk management process

Upcoming Dates: e.g. 6 July 2021 - Trichloroethylene (TCE) and Perchloroethylene (PCE); 7 July 2021 - n-Methylpyrrolidone

From: www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-management-existing-chemicals-under-tsca

Final Risk Evaluation for Trichloroethylene (for info)

From: www.epa.gov/assessing-and-managing-chemicals-under-tsca/final-risk-evaluation-trichloroethylene

• CEFIC: EU Chemical Industry to Help Developing Countries

27 May 2021: The EU Chemical Industry is to Step Up Capacity Building Work to Help Developing Countries with Safe Chemicals Management Practices.

Servet Goren, Cefic Director International Affairs, speaking at the 2021 Helsinki Chemical Forum, 27-28 April 2021 (https://helsinkichemicalsforum.messukeskus.com/programmes/), on behalf of the International Council of Chemical Associations (ICCA https://icca-chem.org/).

Editor: There are 16 presentations that are downloadable, BUT video recordings of each day requires a login to watch.

"We need further collaboration among the SAICM stakeholders such as Capacity Building and Regulatory Cooperation initiatives through ICCA, and use the available chemicals data to support developing countries in their journey towards the sound management of chemicals and waste, while improving the existing data portals to directly support basic chemicals infrastructures globally".

Together with the United Nations Environment Program (UNEP), the chemical industry is developing an e-learning module which includes training to help developing countries extract the most relevant Environment, Health and Safety (EHS) information on chemical substances from different databases and portals. Cefic also encourages developing countries to use the MAD (Mutual Acceptance of Data) Agreement and follow GLP (Good Laboratory Practices) Principles, by the OECD.

As an active stakeholder in the Strategic Approach to International Chemicals Management (www.SAICM.org), Cefic plays a leading role in global regulatory cooperation.

SAICM Brochure from 2020 (7 page pdf)

Safer Use of Chemicals can Help Protect Biodiversity (weblink)

From: https://cefic.org/media-corner/newsroom/chemical-industry-to-step-up-capacity-building-work-to-help-developing-countries-with-safe-chemicals-management-practices/

• Please Support NTN with a Tax Deductible Donation

Editor: I regard that the **National Toxics Network** (NTN) (www.ntn.org.au & www.facebook.com/NTN) is a very worthwhile organisation to make a **Tax Deductible Donation** to, as it is the leading edge community organisation in Australia that has brought to attention the need to reassess chemical hazards and risks, to protect the Australian & World community & environment.

NTN takes responsible care very seriously, means NICNAS (now AICIS) reviews many important chemicals of concern issues due to NTN. Industry and professional associations in Australia are less pro-active in this area of reassessing chemicals of concern, so NTN carries out an important role.

Please provide your support *at: www.givenow.com.au/ntn*

• CSB: Investigations & Incidents 4/21-6/21

www.csb.gov/first-update-from-the-us-chemical-safety-board-on-482021-deployment-to-yenkin-majestic-paints-and-opc-polymers-corporation-in-columbus-ohio-/ 9 April 2021

An 8 April 2021, explosion and fire erupted at the Yenkin-Majestic paint and OPC Polymers Corporation. One employee was fatally injured and eight were transported to area hospitals for injuries. The blast shook neighboring buildings and at least one nearby business sustained damage.

Also: www.csb.gov/april-13-yenkin-majestic-paints-and-opc-polymers-deployment-update/. With Incident Information.

www.csb.gov/aghorn-operating-waterflood-station-hydrogen-sulfide-release-/ & a 2hr 42min Video of the Report Release

First of several Recommendations: For all waterflood stations where the potential exists to expose workers or non-employees to H_2S concentrations ≥10 ppm, mandate the use of personal H_2S detection devices as an integral part of every employee or visitor personal protective equipment (PPE) kit prior to entering the vicinity of the facility. Ensure detector use is in accordance with manufacturer specifications.

Approved Final Report 21 May 2021 (53 page pdf)

From: www.csb.gov/

And: www.csb.gov/investigations/current-investigations/

And: www.csb.gov/investigations/completed-investigations/

• USA OSHA Quick Takes e-News: April-June 2021

16 April 2021: **1/ Chemical Fatalities:** OSHA USA is actively investigating an incident at a food processing facility in Gainesville, USA where a Liquid Nitrogen Leak Killed Six Workers (2 April 2021). OSHA USA is also investigating reports of an Ammonia release that occurred on 11 March 2021.

17 May 2021: **1/ Beryllium Safety:** OSHA USA has new resources to help protect workers from occupational exposure to Beryllium.

Workers in industries where Beryllium is present may be exposed to Beryllium by inhaling or contacting beryllium in the air or on surfaces. Inhaling or contacting Beryllium can cause an immune response that results in an individual becoming sensitized to Beryllium. Individuals with Beryllium sensitization are at risk for developing a debilitating disease of the lungs called chronic beryllium disease (CBD) if they inhale airborne Beryllium after becoming sensitized. Beryllium-exposed workers may also develop other adverse health effects such as acute Beryllium disease, and lung cancer.

The element Beryllium is a grey metal that is stronger than Steel and lighter than Aluminium. Its physical properties of great strength-to-weight, high melting point, excellent thermal stability and conductivity, reflectivity, and transparency to X-rays make it an essential material in the aerospace, telecommunications, information technology, defense, medical, and nuclear industries. Beryllium is classified as a strategic and critical material by the USA Dept of Defense.

1 June 2021: **1/** An online hearing to discuss **updates** to the OSHA USA's **Hazard Communication Standard** will be held on 21 Sept 10am USA EDT, being held virtually using WebEx. OSHA USA expects the HCS update will increase worker protections and reduce the incidence of chemical-related occupational illnesses and injuries by further improving the information on the labels and Safety Data Sheets for hazardous chemicals.

From: www.osha.gov/quicktakes/ (chemical issues only)

AICIS (Industrial/Cosmetic Chemicals)

AICIS - Australian Industrial Chemicals Introduction Scheme

To access AICIS News & Notices go to:

www.industrialchemicals.gov.au/news-and-notices

• AICIS: Regulatory Notices 15 April to 15 June 2021

15 April 2021: New Chemical Public Reports

STD/1730: Licocare RBW 101, 102 Powder TP & 106 Flakes TP

STD/1731: Licocare RBW 300 Flakes TP

LTD/2128: Calcium/Zinc PVM/MA Copolymer

From: www.industrialchemicals.gov.au/news-and-notices/regulatory-notices

28 May 2021: Evaluations Notice: *www.industrialchemicals.gov.au/news-and-notices/evaluations-notice-28-may-2021*

Time period for each Evaluation ends: 31 Dec 2021

a/ 1-Butanone,2-(dimethylamino)-1-[4-(4-morpholinyl)phenyl]-2-(phenylmethyl)-

b/ 1-Propanone,2-methyl-1-[4-(methylthio)phenyl]-2-(4-morpholinyl)-

c/ Alkyl pyridinium surfactants

d/ Carbamic acid, monoammonium salt (ammonium carbamate)

e/ Cashmeran (4H-Inden-4-one, 1,2,3,5,6,7-hexahydro-1,1,2,3,3-pentamethyl-)

f/ Cesium salts

g/ Chemicals not considered for in depth evaluation—not commercially active in Australia

h/ Chemicals that are unlikely to require further regulation to manage risks to the environment

i/ Chemicals that are unlikely to require further regulation to manage risks to human health

j/ Dichloromethane (Methane, dichloro-)

k/ Ethanone, 1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)-,[3R-(3.alpha.,3a.beta.,7.beta.,8a.alpha.)]- (Acetyl Cedrene)

l/ Galaxolide and a related polycyclic musk

m/ Maleic acid esters (Short chain)

n/ Nickel soaps

o/ Nonanedioic acid (azelaic acid)

p/ Pentabromodiphenyl Ether (pentaBDE)

q/ Phenol, 4-(1,1-dimethylpropyl)- or (4-tert-Pentylphenol)

• AICIS: Inventory Notices 16 Apr 21 to 15 Jun 2021

16 April 2021: Chemicals added to the Inventory 5 years after issue of Assessment Certificate. CAS No.s: 2606032-52-2; 1602855-99-1; 716360-25-7; 1299471-40-1; 1579867-09-6; 1211908-05-2; 1412938-13-6; 1642807-22-4; 2624124-20-3; 1255644-49-5; 1466519-86-7; 116633-52-4.

21 April 2021: Chemicals added to the Inventory 5 years after issue of Assessment Certificate.
CAS No.s: 94-49-5; 1883583-80-9; 1850357-57-1.

22 April 2021: *Correction of Chemical Names.* There are 31 CAS No.s: with corrected chemical names listed here.

29 April 2021: Chemicals added to the Inventory 5 years after issue of Assessment Certificate.
CAS No.s: 2630973-00-9; 1227292-98-9; 1630965-00-2; 1198762-69-4; 949164-11-8; 58228-06-1; 110489-05-9

20 May 2021: Chemicals added to the Inventory following issue of Assessment Certificate (Early Listing).
CAS No.: 2101458-08-4.

25 May 2021: Chemicals added to the Inventory 5 years after issue of Assessment Certificate.
CAS No.s: 2103279-22-5; 17351-62-1; 478796-04-2; 1338579-13-7; 10353-86-3; 1548594-88-2; 1449492-46-9; 2640158-23-0; 131298-48-1; 53185-52-7.

15 June 2021: Variation of Inventory Listing following Evaluation. CAS No.: 30989-05-0. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-, 1,1',1"-Triester with Boric Acid (H3BO3). Formula: C21H45BO12. Specific Info is advised.

Note: For the above ***"Chemicals Added to the Inventory".*** "Obligations to provide information apply. You must tell us within 28 days if the circumstances of your importation or manufacture (introduction) are different to those in our assessment." AICIS.

From: www.industrialchemicals.gov.au/news-and-notices/inventory-notices

• AICIS: News and Updates 29 March to 11 June 21

Editor: I have only included significant items. I have left out **6.**

29 March 2021: New Guidance: Categorisation of chemicals that are Intentionally released to the Environment during use.

29 March 2021: New Guidance: Categorisation of chemicals with an end use in Firefighting.

29 March 2021: New Guidance: Categorisation of chemicals with an end use Offshore.
(Drilling; Oil & Gas Extraction; Offshore Refining)

1 April 2021: Updated Guidance on Confidential Information in your Pre-Introduction Report.

15 April 2021: Draft Cost Recovery Implementation Statement 2021-22 (With proposed fees & charges to be applied from 1 July 2021. Comment closed 14 May 2021. Draft 24 page pdf)

20 April 2021: Extra Guidance on the Categorisation of CHEMICALS with an End Use In Articles that are children's toys or children's care products

19 May 2021: Reminder: Are your details up to date? in your AICIS Business Services account. IF your details aren't correct, you won't receive the AICIS reminder email to renew your Registration. Log on to the AICIS Business Services.

21 May 2021: I manufacture or import antibacterial skin-care products - do I need to register with AICIS?

And: I manufacture or import anti-dandruff and anti-acne skin-care products - do I need to register with AICIS?

31 May 2021: Call for information: chemicals with No Known Commercial Use in Australia. AICIS have identified 188 chemicals on the Australian Inventory of Industrial Chemicals that AICIS believe are not being manufactured, imported or used in Australia for commercial purposes. EVA00046 - Draft Evaluation Statement - 28 May 2021 (12 page pdf).
Comment closes 25 June 2021.

Editor: If your overseas supplier originally (say 20 years ago) gave you a CAS-ON-AICS (now AIIC) statement, you would not even know you had any of these 188 chemicals in your imported chemical products.
4 weeks is not sufficient time! We need a real world timeframe! An Industry Association has requested an 8 weeks extension.

31 May 2021: Call for information: low concern chemicals that May Not Need Further Health Risk management controls.
EVA00044 - Draft Eval'n Statement - 28May2021 (17p pdf).
Comment closes 25 June 2021.

And:
Call for information: low concern chemicals that May Not Need Further Environmental Risk management controls.
EVA00045 - Draft Eval'n Statement - 28 May 2021 (57p pdf)
Comment closes 25 June 2021.

Editor: The AICIS Chemical Evaluation Section seems to think businesses importing industrial and cosmetic chemicals have technical specialists just waiting to do the extensive checking that these two documents require.
4 weeks is not sufficient time! We need real world timeframes! An Industry Association has requested an 8 weeks extension.

From: www.industrialchemicals.gov.au/news-and-notices/news-and-updates

3 June 2021: Version 1.2 of the Categorisation Guide. To see what's changed check out the Guide's Version history.

Webpage: www.industrialchemicals.gov.au/help-and-guides/guide-categorising-your-chemical-importation-and-manufacture

From: www.industrialchemicals.gov.au/news-and-notices/news-and-updates

• ChemIntro Software: Beta Testers Needed

June 2021: Adrian Thomas (an Industrial & Cosmetic Chemicals Introduction Consultant) and Mike Dewhirst (a Chemical Management Software Developer) have co-operated to create the ChemIntro Software.

https://chemintro.com/about/

Their intention is to make the determination of the AICIS Introduction Type and the Outcomes of what is needed to be done, MUCH simpler and MORE certain.

Their webpage informs: "The Act dictates in exquisite detail exactly how your industrial chemical may be Introduced. Our software (ChemIntro) understands the rules precisely!"

Note: For all the toxicological and ecotoxicological endpoints you select in the ChemIntro software, you need to have the Data available to support your decisions. AICIS expects you to provide this Data when your chemical Introduction is Audited.

Beta Testers Needed: Ian and Mike are at the stage where they need Beta Testers to use the software and double check that it gives correct information, plus improve their webpage.

ChemIntro Videos: www.sharedtrain.com/course/13/

Contact Info: www.chemicalia.com/ & www.climate.com.au/

From: https://chemintro.com/

Editor's Comment: Via one of my customers, I have had the opportunity to try out the ChemIntro Software on two industrial chemicals: **1/** A trace ingredient <0.1% for a <25kg Introduction (with difficult Tox data) and **2/** the other an almost 100% ingredient for 100-1000kg Introduction. The software was very helpful to quickly determine the type of Introduction needed as I did not need to go back over all the AICIS Introduction documents I last looked at 6 months ago.

In 2019 Industry asked NICNAS for a consistent Introduction document to follow but it did not come to pass, in Oct, in Dec, by March 2020, by June 2020, and is still not available.

The ChemIntro Software appears to be a good option. **Note:** Once ChemIntro is finalised, there will be charges to use it.

Scheduled Poisons & TGA Issues

• Poisons Standard June 2021 (SUSMP No.33)

SUSMP No. 33 (Poisons Standard June 2021)

The 745 page **compilation 26 May 2021** at:

www.legislation.gov.au/Details/F2021L00650/Download

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.

www.legislation.gov.au/Details/F2021L00650/6c01c01d-335d-4ae8-876d-179b8240941a (745 page pdf)

Changes are detailed in the Explanatory Statement (html) (& 3 page pdf) supporting Poisons Standard June 2021 at:

www.legislation.gov.au/Details/F2021L00650/Download

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

• Poisons Std June 2021 - Explanatory Statement

The Poisons Standard June 2021 repeals and replaces the Poisons Standard February 2021, principally to incorporate a number of changes to existing entries, and to include a number of specified substances in the Poisons Standard for the first time.

Final decisions were published on the TGA website in relation to: 1/ Adapalene, on 24 Aug 2020; 2/ Melatonin, on 28 Sept 2020; & 2-Hydroxyethyl Methacryalate, Bilastine, Magnesium Hydroxide and Tetrahydrofurfuryl Alcohol, on 22 April 2021.

A further, minor amendment has been incorporated in the *Poisons Standard June 2021* in relation to Bilastine, to exempt Bilastine from the entry for Antihistamines in Appendix F. This was inadvertently omitted from the final decision on Bilastine that was published on 22 April 2021.

The *Poisons Standard June 2021* also incorporates a number of new substances to the Poisons Standard for the first time, including specific entries for: Deutetrabenzine, Lemborexant, Luspatercept, Risdiplam and Trabectedin in Schedule 4.

A number of these substances were also listed in Appendix K, including Deutetrabenzine, Lemborexant and Trabectedin.

From the Explanatory Statement (html) at:
www.legislation.gov.au/Details/F2021L00650/Download

• Scheduling Invitations and Submissions

Editor: I only cover chemicals (and not medicines).

5 May 2021: Proposed amendments via ACMS-ACCS #28

3.3 Sodium Nitrite: *Alert:* The information in the Consultation Document contains details of self-poisonings some people may find distressing.

Consultation: Proposed Amdts to the Poisons Std (Sodium Nitrite) - Joint ACMS/ACCS #28, June 2021 (11p pdf, docx)

Proposal: The Delegate proposes to create a new Schedule 10 entry for Sodium Nitrite for products containing concentrations above 15% of Sodium Nitrite; delete the Schedule 7 entry; and amend the Schedule 6 entry to allow for concentrations of up to 15%, other than when it is excluded from these entries. Sodium Nitrite is also in Schedule 2 and some concentrations and uses are unscheduled.

Editor: Schedule 10 is Substances of Such Danger to Health as to Warrant Prohibition of Sale, Supply and Use.

Editor: If there isn't an entry in Schedule 7, how can the 100% raw material be stored and then supplied for manufacture of allowed products? I assume we will need to arrange specific State authorisations to store the 100% raw material?

Sodium Nitrite CAS 7632-00-0: The impetus for this proposal is reported misuse and concern associated with the increased use of Sodium Nitrite in deliberate, self-poisoning causing death. Sodium Nitrite induces Methaemoglobinaemia causing death. There has been a substantial increase in Sodium Nitrite related deaths as of 2017 & 2018, with no cases 2009-2016.

Sodium Nitrite is considered an essential nitrite salt for industry purposes, used as a precursor to organic compounds, such as pharmaceuticals, dyes, & pesticides, and most commonly as a food additive used for curing meats. It is used as a medicine, with Sodium Thiosulfate, for treatment of Cyanide poisoning.

Consultation closed 27 May 2021.

From: www.tga.gov.au/consultation-invitation/consultation-proposed-amendments-poisons-standard-sodium-nitrite-joint-acmsaccs-28-june-2021

6 May 2021: Proposed Amendments via ACCS #31: (pdf)

1.1 2-Amino-5-Methylphenol

1.2 6-Methoxy-N2-Methyl-Dihydrochloride-2,3-Pyridinediamine

1.3 Eugenol **1.4** Lead Acetates & other Lead Compounds

From: www.tga.gov.au/consultation-invitation/consultation-proposed-amendments-poisons-standard-accs-31-june-2021

1 June 2021: Proposed Amendments to the Poisons Standard - Joint ACMS/ACCS #28 (pdf)

2.1 Ethanol **2.2** Isopropanol

When present in hand sanitiser preparations & include labels.

2.3 Methanol Proposes a new schedule entry for Methanol in Schedule 10 for hand sanitiser preparations containing more than 2% methanol to mitigate public health risk (*Schedule 10:* Substances of such Danger to Health as to Warrant Prohibition of Sale, Supply and Use)

From:
www.tga.gov.au/consultation-invitation/consultation-proposed-amendments-poisons-standard-joint-acmsaccs-28-june-2021

• Scheduling Delegate's Final Decisions

18 May 2021: Notification of Amendments in relation to **New Chemical Entities (NCEs)** (Editor - in Schedule 4)

Deutetrabenzine; Eslicarbazepine Acetate; Lemborexant; Luspatercept; Luspatercept; Trabectedin.

2 June 2021: Notice of Final Decisions - ACMS #32, ACCS #29, Joint ACMS-ACCS #26.

Psilocybin and MDMA. **3.1** Amygdalin & Hydrocyanic Acid

3.2 Bilastine (correction) **3.3** Budesonide And Formoterol

4.1 Azoxystrobin **4.2** Triticonazole

5.1 Azelaic Acid **5.2** 2-Hydroxyethyl Methacrylate (2-HEMA)

5.3 Magnesium Hydroxide **5.4** Tetrahydrofurfuryl Alcohol

5.5 Cannabidiol (Private Application)

From: www.tga.gov.au/scheduling-decision-final/notification-amendments-poisons-standard-relation-new-chemical-entities-nces-may-2021

• TGA: Nicotine e-Cigarettes Laws are Changing

5 May 2021: From 1 Oct 2021 you will no longer be able to legally buy these products from overseas websites without first talking with a GP and getting a prescription. The main reason a GP may provide a prescription is for the purposes of smoking cessation.

The products captured by the changes include:

- Nicotine e-Cigarettes
- Nicotine Vaping Products (also known as eJuice, vape juice, eLiquid)
- Novel Nicotine Delivery Systems, such as heat-not-burn tobacco products.

Products **not** captured by the changes include:

- Nicotine Replacement Therapies, such as sprays, patches, lozenges, chews and gums
- e-Cigarette products that **do not contain** vaporiser nicotine.

From 1 Oct 2021, Child Resistant Closures for Nicotine Vaping Products will also become mandatory to reduce the risk to children of accidental ingestion.

The changes are being made as between 2015 & 2019, e-cigarette use by young people in Australia increased by 96%; and evidence that Nicotine e-cigarettes act as a 'gateway' to smoking in youth and exposure to Nicotine in adolescents may have long-term consequences for brain development.

From: www.tga.gov.au/blogs/tga-topics/nicotine-e-cigarettes-laws-are-changing

Food Chemical Issues

• P1056: Caffeine Review: Comment at a Later Date

3 June 2021: FSANZ has completed an administrative assessment and prepared the following Proposal. Assessment has commenced and an opportunity to comment will be available at a later date which will be publicly notified.

Proposal P1056 will review the permissions for Caffeine in sports foods and general foods and consider the risk it poses to sensitive sub-populations. It seeks to address issues raised in Urgent Proposal P1054 - Pure and highly concentrated Caffeine products which was prepared as an emergency interim response and prohibited the retail sale of foods in which total Caffeine is present in a concentration of 5% or more (if the food is a solid or semi-solid food) or 1% or more (if the food is a liquid food).

From: www.foodstandards.gov.au/code/proposals/Pages/p1056.aspx

• A1205: Adenosine 5' Triphosphate (ATP) as a Nutritive Substance in Sports Foods

12 May 2021: This Application is to include Disodium Adenosine 5' Triphosphate (Na2ATP) as a substance that may be used as Nutritive Substances in Standard 2.9.4 - Formulated Supplementary Sports Food.

Executive Summary (2 page pdf)

From: www.foodstandards.gov.au/code/applications/Pages/A1205.aspx

• A1211: Maltogenic Alpha Amylase Enzyme from GM Bacillus Licheniformis

21 May 2021: This Application seeks to permit a new source microorganism, a genetically modified Bacillus Licheniformis, for permitted enzyme Maltogenic Alpha Amylase.

Executive Summary (1 page pdf)

From: www.foodstandards.gov.au/code/applications/Pages/A1211.aspx

• A1214: Nicotinamide Riboside Chloride as Vitamin B3 in Food for Special Med. Purposes

22 April 2021: This Application is to amend the Food Standards Code to permit the use of Nicotinamide Riboside Chloride as a permitted form of Vitamin B3 in Food for Special Medical Purposes (FSMPs).

Executive Summary (1 page pdf); Risk Assessment (49p pdf)

From: www.foodstandards.gov.au/code/applications/Pages/a1214.aspx

• A1218: β-Galactosidase from Bacillus Subtilis Enzyme

29 April 2021: This application seeks approval for a "β-Galactosidase (EC 3.2.1.23)" Enzyme derived from a genetically modified organism for use as Processing Aid in dairy food applications.

Executive Summary (1 page pdf); Risk Assessment (16p pdf)

From: www.foodstandards.gov.au/code/applications/Pages/A1218.aspx

• A1222: Steviol Glycosides from Yarrowia Lipolytica

11 June 2021: FSANZ invites written submissions (21 page pdf) on the Assessment 1222, **by 22 July 2021.**

This application seeks approval to permit the use of a Steviol Glycoside mixture, Rebaudioside MD, that is produced by fermentation from a genetically modified Yarrowia Lipolytica (Y. Lipolytica), expressing Steviol Glycoside biosynthesis pathway genes, as an intense sweetener.

Exec Summary (4p pdf); Risk & Tech Assessment (49p pdf)

From: www.foodstandards.gov.au/code/applications/Pages/A1222---Steviol-Glycosides-from-Yarrowia-lipolytica.aspx

• EFSA: New Risk Assessment to Protect Bees

20 May 2021: An integrated, holistic framework for assessing the combined effects of multiple stressors on honey bees, known as MUST-B.

The MUST-B opinion proposes a systems-based approach that combines modelling and monitoring systems for the ERA of multiple stressors such as pesticides and other environmental chemicals, parasites and diseases, as well as factors such as availability of food, climate and beekeeping management practices.

The model is based on a bee colony simulator, called ApisRAM, which assesses either single or multiple pesticides in interaction with other stressors and factors. ApisRAM is still in development, but it will be ready for use in pesticide risk assessment in the next two or three years.

The model will be powered in the future by real-time data collection from sensor-equipped sentinel bee hives.

From: www.efsa.europa.eu/en/news/protecting-bees-new-way-forward-risk-assessment

- **EFSA: Titanium Dioxide no longer considered safe when used as Food Additive E171**

6 May 2021: The European Food Safety Authority (EFSA) has updated its safety assessment of the food additive Titanium Dioxide (E 171), following a request by the European Commission in March 2020.

Prof Maged Younes, Chair of EFSA's expert Panel on Food Additives and Flavourings (FAF), said: "Taking into account all available scientific studies and data, the Panel concluded that Titanium Dioxide can no longer be considered safe as a food additive. A critical element in reaching this conclusion is that we could not exclude Genotoxicity concerns after consumption of Titanium Dioxide particles. After oral ingestion, the absorption of Titanium Dioxide particles is low, however they can accumulate in the body".

EFSA's scientific experts applied for the first time the 2018 EFSA Scientific Committee Guidance on Nanotechnology to the safety assessment of food additives. Titanium Dioxide E 171 contains at most 50% of particles in the nano range (i.e. less than 100 nanometres) to which consumers may be exposed.

As Genotoxicity may lead to carcinogenic effects, it is essential to assess the potential Genotoxic effect of a substance to conclude on its safety.

Prof Matthew Wright, both a member of the FAF Panel and chair of EFSA's working group on E171, said: "Although the evidence for general toxic effects was not conclusive, on the basis of the new data and strengthened methods we could not rule out a concern for Genotoxicity and consequently we could not establish a safe level for daily *intake* of the food additive."

From: www.efsa.europa.eu/en/news/titanium-dioxide-e171-no-longer-considered-safe-when-used-food-additive

- **EFSA: Grouping Chemicals for Joint Assessments**

25 May 2021: Public consultation: Draft Guidance Document on scientific criteria for Grouping Chemicals from across the food and feed safety spectrum, into assessment chemical mixture groups (website) for human Risk Assessment of combined Exposure to multiple chemicals.

People, animals and the environment can be exposed to multiple chemicals from a variety of sources at the same time. This draft EFSA document is the latest instalment in their long-term strategy to deploy tools and approaches for assessing risks from chemical mixtures.

The draft Guidance Document proposes:

- Using 'Hazard-driven' criteria to define groups of chemicals based in the first instance on toxicity information about their behaviour in humans. If this kind of information is lacking, they can be grouped based on their common effects on humans, e.g. all the relevant chemicals that damage the liver (EFSA already uses this approach to assesses the cumulative risks of groups of pesticides)
- Since there are many possible combinations of chemicals, methods to prioritise Chemical Groups are needed. These can be both Risk-based (i.e. taking account of both their hazardous properties and human exposure to them), or solely Exposure-driven.

The proposed Chemical Mixture Group Guidance is a follow up to *EFSA's 'MixTox' Guidance* (March 2019 website) which created the methodological framework to assess combined exposure to multiple chemicals.

Public Consultation: https://connect.efsa.europa.eu/RM/s/publicconsultation/a0c1v00000HnXIB/pc0014

Draft SC opinion MIXTOX2 for PC (51 page pdf)

"In this Guidance Document, a framework is proposed to apply hazard-driven criteria for grouping of chemicals into Assessment Groups using mechanistic information on toxicity as the gold standard where available (i.e. common mode of action or adverse outcome pathway) through a structured weight of evidence approach. However, when such mechanistic data are not available, Grouping may be performed using a specific effect on target organs or a common adverse outcome. Toxicokinetic data can be useful for Grouping particularly when common toxicologically relevant metabolites are shared among chemicals." "As a starting point, a default value of >10% contribution of a single chemical to the combined risk is proposed."

Consultation Closes: 10 July 2021

From: www.efsa.europa.eu/en/news/grouping-chemicals-joint-assessments-have-your-say

Alerted by John Frangos, Toxicologist.

Agricultural Chemicals

- **APVMA's Response to the Current Mouse Plague**

9 June 2021:

1. APVMA role 2. APVMA Reg'n & Permit Approval process

3. What is Bromadiolone?

Bromadiolone is a second-generation anti-coagulant rodenticide used for the control of rodents. This 2nd generation anti-coagulant rodenticide is highly effective after a single feed.

4. Is Bromadiolone approved for use in Australia? Products containing Bromadiolone are approved by the APVMA for use in certain non-crop situations and are on PubCRIS Database.

5. Emergency Permit Applications for Bromadiolone

On 13 May 2021, the APVMA received 2 emergency permit applications from the NSW Dept of Primary Industries seeking permits to use an unregistered Bromadiolone-based mouse bait around the perimeter of crops. On 1 June 2021, NSW DPI provided additional information to the APVMA. As part of its scientific assessments, the APVMA is now considering the information provided by NSW DPI.

6. How the APVMA assess Permits

All Permits must meet the statutory safety, efficacy and trade criteria, and assessments to satisfy the APVMA in this regard are carried out prior to completing the evaluation and making a decision on the Permit Application, and includes assessing potential impacts on the safety of non-target species.

7. Current Emergency Permits issued by the APVMA for the control of mice in Crop Situations
The APVMA has issued 6 emergency permits (from 27 Jan 2021 to 7 June 2021) for the control of mice in crop situations and will continue to prioritise emergency permit applications in relation to the mouse plague.

From: https://apvma.gov.au/node/86021

• EPA NSW: Use Pesticides Correctly when Baiting Mice

3 June 2021: EPA NSW has asked the community to Use Pesticides Correctly when Baiting Mice.

"The safe baiting of mice is an important step in reducing mice numbers and pesticide users must make sure they handle baits safely and are careful to always follow the directions on the label to protect their family, neighbours, domestic animals, wildlife and the environment from harm.

Mixing and blending pesticides can seriously impact your health, family and pets. Please only use pesticides as directed on the label."

The safe handling advice follows an EPA investigation into bird deaths in NSW, including around Forbes, Parkes, Dubbo, Narromine, Condobolin and the Riverina. Toxicology results have confirmed some of the bird deaths were caused by baits.

Guidance on the Handling and Disposal of Dead Mice (pdf)

Guidance on handling native wildlife in areas where Zinc Phosphide has been deployed (pdf)

General warning about native wildlife in areas where Zinc Phosphide baits are used for mouse control (pdf)

From: www.epa.nsw.gov.au/news/media-releases/2021/epamedia210603-epa-asks-the-community-to-use-pesticides-correctly-when-baiting-mice

• APVMA: Bromoxynil Butyrate – New Ag Active

6 April 2021: An application for the approval of a new active constituent, Bromoxynil Butyrate which is a herbicide proposed for use in control of broadleaf weeds in bulb onions. It is a new Ester form of Bromoxynil. Currently, there are approvals for the Phenol form (Bromoxynil), & the Heptanoate & Octanoate Esters.

Common Name: Bromoxynil Butyrate (Bromoxynil Butanoate); IUPAC name: 2,6-Dibromo-4-Cyanophenyl Butyrate; CAS No: 3861-41-4; Minimum Purity: 967 g/kg; Formula: $C_{11}H_9Br_2NO_2$; MW: 347.0; Chemical Family: Benzonitrile; Mode of Action: It is a Nitrile Group herbicide, which acts as an inhibitor of photosynthesis (PSII inhibitor) and mitochondrial oxidative phosphorylation in plants.

Bromoxynil is listed in Schedule 6 of the SUSMP (with no exceptions nor cut-offs) which includes its salts and derivatives. Bromoxynil Butyrate is rapidly metabolised to Bromoxynil in mammals and is therefore a Schedule 6 poison..

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

From: Ag&Vet Gazette, 6 April 2021 p18-19 (pdf | docx)

From: https://apvma.gov.au/node/84111

• APVMA: Polyoxin D Zinc Salt - New Ag Active

4 May 2021: An application for the approval of a new agricultural active constituent, Polyoxin D Zinc Salt (which will be manufactured as a technical concentrate of the active constituent), for use as a fungicide.

Common Name: Polyoxin D Zinc Salt; IUPAC name: Zinc 5-(2-Amino-5-O-Carbamoyl-2-Deoxy-L-Xylonamido)-1-(5-Carboxy-1,2,3,4-Tetrahydro-2,4-Dioxopyrimidinyl)-1,5-Dideoxy- ß-D-Allofuranuronate; CAS No: 146659-78-1 (1:1 Zn salt);
Formula: $C_{17}H_{21}N_5O_{14}Zn$ (1:1 Zn salt); MW: 586.76 (1:1 Zn);
Chemical family: Peptide nucleosides. Mode of action: Polyoxin D, the active portion of the Polyoxin D Zinc salt, competitively inhibits Chitin Synthase Enzymes, leading to inhibition of septation, chaining, and osmotic swelling of the fungal cell.

The Scheduling Delegate made a final decision to include Polyoxin D Zinc Salt in Schedule 5 of the SUSMP, with an implementation date of 1 Oct 2020.

The APVMA is satisfied that the proposed use of Polyoxin D Zinc Salt would not be an undue toxicological hazard to the safety of people exposed to it during its handling and use.

From: Ag&Vet Gazette, 4 May 2021 p19-20 (pdf | docx)

From: https://apvma.gov.au/node/85466

• APVMA: Bromethalin - New Ag Active

4 June 2021: An application for the approval of a new active constituent, Bromethalin, for use as a new Rodenticide in damp or dry situations in and around industrial, commercial, agricultural and domestic buildings.

Common Name: Bromethalin; IUPAC Name: N-Methyl-2,4-Dinitro-N-(2,4,6-Tribromophenyl)-6-(Trifluoromethyl) Aniline;
CAS No: 63333-35-7; Minimum Purity: 950 g/kg; Formula: $C_{14}H_7Br_3F_3N_3O_4$; MW: 577.9; Chemical Family: Diphenylamine

Bromethalin is included in Schedule 6 of the SUSMP when present in rodent baits containing 0.01% or less of Bromethalin and in Schedule 7 (Dangerous Poison) otherwise.

The APVMA accepts the findings and recommendations of its advisors on these criteria.

Comment is invited: The APVMA invites any person to submit a relevant written submission as to whether Bromethalin should be approved. Submissions should relate only to matters that are considered in determining whether the safety criteria set out in section 5A of the Agvet Code have been met.

Submissions must be received by the APVMA within 28 days of the date of this 4 June 2021 notice. *Editor: By 1 July 2021*

From: Ag&Vet Special Gazette, 4 June 2021 p1-2 (pdf | docx)

From: https://apvma.gov.au/node/86511

• WorkSafe NZ Guidance: Agrichemical Retailers

19 March 2021: WorkSafe NZ has produced 11 Information Sheets (dated Feb 2021) for Rural Supply Retailers on the essentials of managing, handling & storing Agrichemicals.

Creating an Inventory (2 page pdf); Safety Data Sheets (2 page pdf); Certified Handlers (2 page pdf); Incompatible Substances (2 page pdf); Signage (2 page pdf); Location Compliance Certificates (2 page pdf) & Examples (2 page pdf); PPE and Safety Equipment (2 page pdf); Spill Kits and Preparing for a Spill (2 page pdf); How to deal with spills (2 page pdf);Tracking Very Hazardous Substances (2 page pdf).

From: www.worksafe.govt.nz/topic-and-industry/hazardous-substances/guidance/industry-guidance/agrichemical-retailers

• EPA NZ: Glyphosate: Call for Information

28 April 2021: There is ongoing public debate about the effects of Glyphosate on the environment and people's health. Glyphosate is currently approved for use in the EU until 15 December 2022. That approval is now being reviewed (by the EU), with a decision due in mid-2022.

The EPA NZ want to find out from industry, professional users and communities. **1/** How glyphosate products are being used; **2/** What glyphosate products you use; **3/** How you use them; **4/** What you do to reduce the risk when using them; **5/** Impacts on Maori; **6/** Benefits and alternatives to glyphosate; **7/** Impacts and risks to health, environment, and economy.

This call for information is the very first step in understanding how Glyphosate is currently used in New Zealand. IF there are grounds to reassess Glyphosate and a formal reassessment application is made, you will have an opportunity to make submissions on the applic'n once it has been publicly notified.

Call for Information Poster (1 page pdf)

Any person or organisation can respond to this call for information. You can answer some or all of the questions.

Complete the Online Response Form

OR *Download the Response Form* as a 25 page pdf or docx

and email to Glyphosate@epa.govt.nz

Responses must be received by 5pm, Friday 27 Aug 2021.

The Use of Glyphosate in New Zealand (webpage)

From: https://epa.govt.nz/glyphosate-call-information

• EPA NZ: Use of Organophosphates & Carbamates

Call for Information closed 28 May 2021: The EPA NZ conducted a call for information to inform a potential reassessment of substances containing Organophosphates and Carbamates (OPCs) used as active ingredients in a Veterinary Medicine or as a Pesticide.

Substances containing the following active ingredients:

Bendiocarb; Carbaryl; Chlorfenvinphos; Coumaphos; Fenitrothion; Fenthion; Formetanate; Furathiocarb; Maldison / Malathion; Methiocarb; Methomyl; Propetamphos; Propoxur; Temephos; Tetrachlorvinphos; Thiodicarb.

Five of these active ingredients (Carbaryl, Fenitrothion, Fenthion, Maldison / Malathion, Propoxur) are on the EPA NZ Priority Chemicals List.

From: www.epa.govt.nz/public-consultations/in-progress/call-for-information-on-use-of-organophosphates-and-carbamates-opcs/

• EPA NZ: 123 Ag Hazard Classifications Updated

27 May 2021: The hazard classifications of 123 substances have been updated as part of the latest Chemical Review by the EPA NZ.

Editor: Practically ALL the 123 updated substances are agricultural use chemicals or agricultural use mixtures.

New information such as study data, and reviews or assessments by overseas chemical regulators, have prompted Hazard Classification updates for these 123 substances – including single chemicals and mixtures.

Examples of Hazard Classification changes are:

Updated Hazard Classifications of two agrichemicals, Pymetrozine & Clorpropham, to reflect their cancer-causing properties.

Metamitron, a herbicide used by farmers, is less toxic than previously thought, so has had some of its Hazard Classifications downgraded or removed.

Tea Tree Oil, which can cause skin and eye irritation, will now have a warning listed on how Toxic it is if inhaled in high doses during manufacturing. Consumers, who generally only use a little Tea Tree Oil at a time, should not be concerned by the change.

Suppliers, manufacturers, and users of chemical products should check the application documents to see whether their products are affected by the changes.

Read the Chemical Review Decision (17 May 2021, 46p pdf)
Editor: There are 22 pages of changes (pages 12-33)

From: https://epa.govt.nz/news-and-alerts/latest-news/agrichemicals-and-tea-tree-oil-amongst-chemical-classification-updates/

Dangerous Goods

• Vic: Dangerous Goods Regulations Strengthened

25 May 2021: From 1 July 2021 Victorian Duty Holders storing or handling Notifiable Goods above certain quantities will have to follow strict New Reporting Requirements following amendments to Dangerous Goods regulations.

The Victorian Dangerous Goods (Storage and Handling) Regulations 2012 will require all duty holders occupying premises with prescribed quantities of Dangerous Goods to notify WorkSafe Vic at least every two years.
Previously, notification was required every five years.

If there are significant changes, as prescribed in the Regulations, to a site where Dangerous Goods are stored and handled, an additional notification will also be required within three business days of the change occurring.

Existing Victorian Duty Holders will have six months from 1 July to submit a notification to WorkSafe that complies with the amended regulations, unless a prescribed change occurs within that period, in which case duty holders must notify WorkSafe within three business days.

An Online Notification Form is being developed to assist Duty Holders and replace the digital & paper forms previously used.

More information will be available on the WorkSafe Vic's website from 1 July 2021.

From: www.worksafe.vic.gov.au/news/2021-05/dangerous-goods-regulations-strengthened

Dangerous Goods (Storage and Handling) Amendment (Notification) Regulations 2021. Statutory rule number 49/2021

21-049sra authorised.pdf 21-049sr.docx (12p, 25 May 2021)

Dangerous Goods (Storage and Handling) Regulations 2012 Statutory rule number 132/2012 (dated 1 Jan 2021)

12-132sra007 authorised.pdf 12-132sr007.docx (105 pages)

Page 77: Part 5—Notification, 66 Notification to Authority

(1) An occupier of premises where Dangerous Goods are stored and handled in quantities that exceed the relevant quantities specified in the column headed "Manifest Quantity" in the table in Schedule 2 must ensure that the Authority is notified of the presence of those Dangerous Goods.

Page 82: Schedule 2—Quantities of Dangerous Goods

From: https:/www.legislation.vic.gov.au/as-made/statutory-rules/dangerous-goods-storage-and-handling-amendment-notification-regulations

• Vic Review: Dangerous Goods Act 1985 & Regs

June 2021: Update on the Independent Review of the Victorian Dangerous Goods Act and associated Regulations.

The Review is considering a number of complex issues, including those raised via submissions (now closed) to the Consultation Paper, which require further analysis and targeted consultation.

This work is expected to be completed by 31 Dec 2021, after which a Final Report including any recommendations will be submitted to the Victorian Minister for Workplace Safety. (Editor: In early 2022).

Engage Victoria website: The updated timelines are now reflected on the website. Further information and updates about the Review will be made available on the website (including the publication of Submissions). As at 15 June 2021 there is no further information available.

From: Email from WorkSafe Vic & the Engage Victoria website https://engage.vic.gov.au/independent-review-dangerous-goods-act-1985-and-regulations

Editor: Specialists and Industry Managers **need to discuss the likely changes prior** to the Vic Act & Regs being finalised.

• National Major Hazard Facilities Forum Info

4-5 May 2021: *Editor* – Even though this event has occurred I have included the information as there may be relevant information and contacts for your business.

The Forum looked at the ability for systems to absorb and rebound from disruptions or adapt to cope with surprises.

Over two interactive days, participants were able to engage with Major Hazard Facility operators, safety practitioners, and regulators with modern safety theory. They heard from industry experts including Trish Kerin (IChemE Safety Centre), Dr. Drew Rae (Griffith University), Dr. Tristan Casey (Griffith University), Dr. David Provan (Forge Works) and more – as well as industry and national regulator representatives.

Relevant connections included: Safety Science Innovation Lab at Griffith University; & the Safety of Work podcasts.

National Major Hazard Facilities Forum Program (3 page pdf)

Speaker bios and information; A list of all speakers and presentations across the virtual two day event; information about the event. The webinar presentations were recorded and are available to the delegates.

From: www.worksafe.vic.gov.au/events/national-major-hazard-facilities-forum

• ADG Code Maintenance Project 2021-2022

9 April 2021: The NTC provided their first update on the ADG Code Maintenance Project.

A marked-up draft of amendments to date is now available. See docx document links below.

Learn more about how to provide feedback on:
- the proposed fixed cycle for future amendments
- table 1.1.1.2 in Part 1
- the draft code, if you have time.

The TDG-MA Group first meeting was on Thurs 25 March 21.

Proposed amendments to the ADG Code were discussed, including:
- adoption of updates in UN 22
- correction of historical errors of past UN amendments
- incorporation of a CAP determination relating to bundles of cylinders
- **proposal to correct an anomaly relating to Table 1.1.1.2**
- consolidation of defined terms into a single list
- correction of other typographical and formatting errors.

A first draft of ADGC 7.8 with 'tracked changes' in Word is available for review and comment.

The latest round of feedback closed on 21 May, 2021.

Timeline: Feb 2021 Consulting on Issues

Nov 2021 Consulting on the Draft ADG Code

Jan 2022 Consulting on Legislation July 2022 Code Public'n

ADG Code Maintenance Project 20201- UPDATE 1

OR www.ntc.gov.au/sites/default/files/assets/files/ADG-Code-Maintenance-Project-2021_UPDATE%201.pdf

Support docs 9 April 2021:

ADG Code Issue resolution proposal Issue ID S2004-8.pdf

Draft ADG Code-Part 1.docx

Draft ADG Code-Part 2.docx

Draft ADG Code-Part 3.docx

Draft ADG Code-Parts 4-13.docx

Project Manager: Debra Kirk email: *DKirk@ntc.gov.au*

From: www.ntc.gov.au/transport-reform/ntc-projects/adgc-maintenance-2021

• ADG Code 7.7 is compulsory from 1 Oct 2021

The Australian Dangerous (ADG) Code 7.7 is compulsory from the 1st Oct 2021, in all States and Territories.

ADG 7.7 is downloadable from: www.ntc.gov.au/codes-and-guidelines/australian-dangerous-goods-code

ADG 7.7: www.ntc.gov.au/sites/default/files/assets/files/ADG%20Code%207.7_0.pdf (released July 2020)
(1286 pages, and includes the Sept 2020 corrections)

• Dangerous Goods Emergency Action Codes List 2021

31 March 2021: The UK National Chemical Emergency Centre (NCEC) website provides a Brief Overview of Updates and Changes in the Dangerous Goods Emergency Action Codes (EAC) List 2021.

This UK EAC List 2021 is effective immediately in connection with the use of ADR/RID 2021 Edition and is mandatory (in the UK & regions that use it) from 1 July 2021 and the Emergency Action Code List 2019 should no longer be used from then.

Download: *https://the-ncec.com/en/resources/the-dangerous-goods-emergency-action-code-list-2021 (website)*

Document: https://d18hkfaesybon0.cloudfront.net/ncec/media/downloads/dgeac-2021.pdf (204 pages)

From: https://the-ncec.com/en/news-en/the-dangerous-goods-emergency-action-code-list-2021-is-now-available

Alerted by Mike Dewhirst

Editor: In Australia the EAC is known as the Hazchem Code, and the ADG Code 7.7 is based on the UK EAC List 2013.

• Free Dangerous Goods Course for Beginners

Complete Dangerous Goods for Beginners Course: Free.

www.yourlicence.edu.au/elearning/course/view.php?id=83

• FRV: Specialist Hazmat Crews in Campbellfield

10 May 2021: Approx. 55 firefighters, including specialist crews, responded to a Hazmat incident in Campbellfield at a tilt slab construction factory on Monday morning, after several callers reported white fog coming from the factory.

Crews arrived on scene in four minutes to find a chemical reaction had occurred inside the factory. Wearing breathing apparatus, they evacuated people in the nearby area.

Crews worked to put a dry agent on top of the chemical to prevent it reacting further with moisture in the air. The incident was brought under control in just under two hours.

From: www.frv.vic.gov.au/specialist-hazmat-crews-scene-campbellfield

And: www.news.com.au/national/victoria/news/factory-evacuated-as-firefighters-battle-hazardous-material-spill-in-campbellfield/news-story/0357dd790fe84a523ca5536499c0c48a

• Fuels Institute: Diesel Storage Tanks & Degradation

31 March 2021: Diesel Fuel Quality Council: Industry Practices to Minimize Degradation and Improve Fuel Quality (4th Qtr 2020)

Contaminated fuel can impact engine performance and fuel economy. Besides the negative impact on a fuel retailer's reputation, fuel storage and equipment owners also risk equipment degradation and replacement costs. Because liabilities and risks associated with fuel quality issues are often considered the responsibility of the owner/operator marketing the fuel to the consumer, it is vital that fuel quality be monitored and any issues be mitigated in a timely fashion.

Editor: To download the 24 page Best Practices Report, you need to provide your Name and Email.

From: www.fuelsinstitute.org/Research/Reports/Diesel-Storage-Tanks-Industry-Practices-to-Minimiz

Alerted by the AIDGC What's Happening, May 2021

• Emergency Risk Communic'n: Chem Release Incidents

Chemistry in Australia June-August 2021, page 28-31: Emergency Risk Communication for Chemical Release Incidents.

Editor: I have included some excerpts to encourage everyone to read this RACI Chemistry in Australia PhD Research article.

Good communication of emergency risk is about more than robust procedures; an understanding of communication practice is also needed.

Many people in Melbourne will remember the August 2018 fire at a Tottenham warehouse. The warehouse was illegally storing unknown chemical and industrial waste in a large number of 44-gallon (200L) drums. Seven months later, another fire started at a chemical waste storage facility in Campbellfield. This warehouse contained stockpiled and incorrectly stored chemicals.

These incidents, such as chemical spills and fires, are incredibly challenging for Emergency Response teams to manage. When chemical release incidents occur, emergency responders face significant uncertainty and a need to urgently act to protect public health. Part of the public health response strategy includes Emergency Risk Communication.

Academic risk communication research tends to focus on the public, being those receiving communication. There is also a need for research focusing on the communicators. To address this, Madeleine Thomas's PhD research explores government Emergency Risk Communication practice. It provides a deeper understanding of the Practitioners, their practices, and the context in which this communication occurs. It shows how communication practices are not simply mechanical and objective; rather they are intuitive, collaborative & responsive.

Organisational capacity factors include human resources, inter-organisational relationships, strategic prioritisation and program management. Organisational motivation factors include culture and the perceptions of practitioners. External environmental factors include scientific knowledge and technology, the media, stakeholders' level of interest and the political, legal and economic environment. These organisational factors are linked and interact.

If we want to improve Emergency Risk Communication and best support Practitioners, we need to appreciate the complexity of working during chemical release incidents.

This PhD research is by Madeleine.Thomas@monash.edu at BehaviourWorks Australia, Monash Sustainable Development Institute, Monash University.

From: https://Chemaust.Raci.Org.Au/Article/June%E2%80%93august-2021/Emergency-Risk-Communication-Chemical-Release-Incidents.Html

Environmental Notes on Chemicals

• National Pollutant Inventory Data for 2019–20

31 March 2021: Each year, more than 4000 industrial facilities estimate their emissions and waste transfers of toxic substances and report them to the NPI. Now in its 22nd year, the NPI helps communities, governments and researchers understand and monitor the sources of industrial pollution and waste and helps identify priorities for decision making.

The NPI estimates emissions for 93 toxic substances & provides the source & location of emissions around Australia:

- search the NPI data(link is external)
- download NPI data on data.gov.au(link is external)
- view NPI facilities on the National Map

From: www.environment.gov.au/news/2021/03/31/national-pollutant-inventory-npi-data-2019%E2%80%9320-now-available

• NEPC: Ambient Air Quality NEPM: O_3, NO_2 & SO_2

15 April 2021: Variation to **A**mbient **A**ir **Q**uality NEPM – Ozone (O_3), Nitrogen Dioxide (NO_2) and Sulfur Dioxide (SO_2).

Key Changes to the Ambient Air Quality Measure agreed by AU Ministers April 2021 (April 2021, 2 page pdf)

Public Consultation on the Proposed Variation - Summary of submissions & the NEPC response (April 2021, 73 page pdf)

Alters the Desired Environmental Outcome (DEO) of the AAQ NEPM to focus on minimising health risks associated with air pollution exposure. The intention of this AAQ NEPM is to monitor at sites that provide an indication of the air quality experienced by people generally in a region.

The amendment includes:

Establishes an 8-hour averaging O_3 standard of 65 ppb

Significantly strengthens NO_2 reporting standards for 1-hour and annual average NO_2 to 80 ppb and 15 ppb respectively

Significantly strengthens SO_2 reporting standards for 1-hour and 24-hour SO_2 to 100 ppb and 20 ppb respectively

Removes annual SO_2, and 1-hr & 4-hr O_3, averaging periods

Changes the form of the Standards to the maximum value with no allowable exceedances

Applies the existing Exceptional Events Rule that applies to the Particle Standards to O_3 given the linkages between elevated O_3 levels and fire events

Extends annual reporting of population exposure from Particles as PM2.5 to O_3 and NO_2

NEPC: National Environment Protection Council.
NEPM: National Environment Protection Measure.

From: www.nepc.gov.au/nepms/ambient-air-quality/variation-ambient-air-quality-nepm-ozone-nitrogen-dioxide-and-sulfur

EPA Vic Lead the New NEPM Standards (10 May 2021):
EPA Vic played the lead role in coordinating the review of the national Air Quality Standards which have been agreed by the National Environment Protection Council.

From: www.epa.vic.gov.au/about-epa/news-media-and-updates/news-and-updates/epa-leads-new-nepm-standards

• NTN: Chemical Pollution Causes Fish Declines

28 April 2021: Escalating Chemical Production Threatens Aquatic Food Chain. NTN and IPEN have released a new report "Aquatic Pollutants in Oceans and Fisheries April 2021" which is available in English, Spanish and French. The Report is a synthesis of scientific evidence showing the widespread evidence for the impacts of chemical pollution and its role in the decline of ocean health and fisheries. The Report outlines the directions forward to end toxic pollution in our oceans.

Over 3 Billion people rely on fish as a significant source of animal protein, especially those in the world's poorest countries.

According to the UN Food and Agriculture Organization], a third of commercial fish stocks are harvested at biologically unsustainable levels and 90% of Fisheries are exploited to their maximum capacity.

Media Release (2 page pdf)

Key Findings Headings & some of the Key Points:

1/ Overfishing is not the sole cause of fishery declines: "Exposures to environmental pollutants are adversely impacting fertility, behaviour, & resilience, & negatively influencing the recruitment & survival capacity of aquatic species."

2/ Chemical pollutants have been impacting oceanic and aquatic food webs for decades and the impacts are worsening: "Estimates indicate up to 80% of marine chemical pollution originates on land and the situation is worsening."

3/ Pollutants including industrial chemicals, pesticides, pharmaceuticals, heavy metals, plastics and microplastics have deleterious impacts to aquatic ecosystems at all trophic levels from plankton to whales: "Endocrine disrupting chemicals, which are biologically active at extremely low concentrations, pose a particular long-term threat to fisheries. Persistent pollutants such as mercury, brominated compounds, and plastics biomagnify in the aquatic food web and ultimately reach humans."

4/ Aquatic ecosystems that sustain fisheries are undergoing fundamental shifts as a result of climate change: "Oceans are warming and becoming more acidic with increasing Carbon Dioxide deposition. Melting sea ice, glaciers and permafrost are increasing sea levels and altering ocean currents, salinity and oxygen levels. Increases in both de-oxygenated 'dead zones' and coastal algal blooms are being observed."

5/ Climate change and chronic exposures to pesticides all can amplify the impacts of pollution by increasing exposures, toxicity and bioaccumulation of pollutants in the food web: "Methyl Mercury (MeHg) and PCBs are among the most prevalent and toxic contaminants in the marine food web."

6/ We are at the precipice of disaster, but have an opportunity for recovery: "Progress requires fundamental shifts in industry, economy and governance, the cessation of deep-sea mining and other destructive industries, and environmentally sound chemical management, and true circular economies. Regenerative approaches to agriculture and aquaculture are urgently required"

National Toxics Network (NTN)
(www.ntn.org.au & www.facebook.com/NTN)

International **P**ollutants **E**limination **N**etwork https://ipen.org/

From: https://ntn.org.au/chemical-pollution-causes-fish-declines/

• EPA Vic: Geelong North Shore Acid Spill

9 April 2021: A truck driver who drove away from a spill of Sulphuric Acid in Geelong on the 18 Oct 2018, has been fined $50,000 and ordered to pay nearly $95,000 for the clean up, as well as thousands in court costs. EPA Vic prosecuted Wallan man Charles Roy Johnson over the spill of more than 1000L of Sulphuric Acid into a roadside drain on Madden Avenue, North Shore.

From:
www.epa.vic.gov.au/about-epa/news-media-and-updates/news-and-updates/north-shore-acid-spill-a-$150k-mess

• New AU Rules for Exports of Plastic Waste

25 May 2021: In March 2020, the Australian, state and territory governments, and the Australian Local Government Association, as members of the former Council of Australian Governments (COAG) agreed to regulate the export of waste glass, plastic, tyres and paper.

Recycling and Waste Reduction Act 2020)

Recycling and Waste Reduction (Export—Waste Plastics) Rules 2021 (Rules) (24 May 2021) (19 pages)

Explanatory Statement for Act & Rules (25 May 2021) (36p)

The Rules come into effect in two phases:

From **1 July 2021**, you can only export waste plastics that have been: sorted into single resin or polymer type; or processed with other materials into processed engineered fuel. You will no longer be able to export mixed waste plastics.

From **1 July 2022**, you can only export waste plastics that have been: sorted into single resin or polymer type and further processed, for example hot washed flakes or single resin pelletised; or processed with other materials into processed engineered fuel.

Note: There are strict specification requirements for the plastic to be almost free from contamination & other types of wastes.

And you will need: a licence to export your waste; to declare each consignment to us before you declare to the Australian Border Force's Integrated Cargo System.

From:
www.environment.gov.au/protection/waste/exports/plastic

• Plastics Stewardship AU: Operation Clean Sweep

Plastics Stewardship Australia members recognise plastic waste does not belong in the world's oceans, water ways or on land and believe that industry has an important role to play in dealing with this complex issue.

Chemistry Australia and its members of Chemistry Australia support Operation Clean Sweep® Australia.

Operation Clean Sweep® is a program run in Australia by Tangaroa Blue Foundation, & is designed to help the plastics and logistics industries reduce the loss of plastic resin pellets from all parts of the plastics value-chain into the environment.

Video: https://youtu.be/r_1ypl9tQZc (3 min 19 sec)

Operation Clean Sweep® aligns with the United Nations Sustainable Development Goals. (see the separate Note following)

News 4-3-2021: Chemistry Australia welcomes comprehensive National Plastics Plan which is a significant step toward advancing a more circular plastics economy in Australia.

Outline of the plastics raw material industry, packaging industry and broader supply chain's long-term commitment to:

- Support increased recovery of plastic products at end of life,
- Help designers and manufacturers use plastics to achieve United Nations Sustainability Goals,
- Strengthen uptake of Operation Clean Sweep to keep plastic pellets out of our oceans and waterways, and
- Provide knowledge and information on the new Plastics Stewardship Australia website.

From: https://plasticsstewardshipaustralia.org.au/

• CSIRO: Ending Plastic Waste Collaborations

May 2021: The CSIRO have been working with collaborators from across industry, research & government to co-design this mission; which is in development and will continue to evolve.

e.g. Major research program to tackle plastic waste, with a goal is an 80% reduction in plastic waste entering the environment by 2030.

e.g. Reimagining the future of plastics. Each year, 90 Billion tonnes of primary materials are extracted and used globally for plastics. Only 9% is recycled, with economic, social, environmental and health impacts.

With a ban on exporting Australia's waste in place, immediate transformation is required to build a successful waste sector, deliver new industries and jobs, and stop plastic pollution ending up on land and in our oceans.

From: www.csiro.au/en/about/challenges-missions/Ending-plastic-waste

• BASEL Convention: Transboundary Waste Pilot Projects

6 April 2021: The Basel Convention Plastic Waste Partnership and the Secretariat of the Basel, Rotterdam and Stockholm conventions (BRS) are moving forward with the roll-out of over 50 pilot projects across the world. The Basel Convention's Plastic Waste Amendments, became effective on 1 Jan 2021.

Overall, the Projects focus on the environmentally sound management of plastic waste, the prevention and minimization of the generation of plastic waste, and the control of transboundary movements of plastic waste. The come under the implementation of the Plastic Waste Amendments accelerating efforts to ensure waste plastics are only traded with countries that have the necessary infrastructure to allow for the environmentally sound management of plastic waste.

Many projects are kicked off through the framework of the Basel Convention Plastic Waste Partnership.

PWP Pilot Project Proposals: www.basel.int/Implementation/Plasticwaste/PlasticWastePartnership/CallforPWPpilotprojectproposals/tabid/8494/Default.aspx

From: www.basel.int/Implementation/PublicAwareness/PressReleases/PWPprojectslaunch/tabid/8797/Default.aspx

• ACC: Advanced Plastics Recycling & Emissions

18 March 2021: Advanced recycling technologies take a raw material – in this case, used plastics with their inherent hydrocarbon/energy value – and create valuable new materials that can be turned into new plastics, chemicals, lubricants, waxes, coatings and transportation fuels, and more.

A recently released Study (18 March 2021, 25 page pdf), from the Good Company, a sustainability consulting firm based in Eugene, Ore. USA (https://goodcompany.com/), looked at the air emissions from advanced recycling facilities, specifically pyrolysis-based advanced recycling facilities. Like other manufacturers, these advanced recycling facilities must comply with multiple requirements to operate. They're covered by the USA Federal Clean Air Act as well as State & Local Regs. They need to obtain operating permits and continue to monitor and report various air emissions as they operate.

The Report looked at emissions for six Criteria Air Pollutants, from pyrolysis-based advanced recycling facilities, and compared them to publicly available EPA USA air quality standards and Federally reported air emissions data. The study also compared these air emissions to those from other manufacturing facilities and institutions.

- The Report found no measurable Lead or Dioxin emissions from pyrolysis facilities.
- The highest emissions – Nitrogen Oxides and Carbon Monoxide – are due primarily to the use of natural gas for process energy and heat.
- The study also found that advanced recycling facilities produced very low levels of hazardous air pollutants (HAPs), well below EPA USA permitting requirements.

From: https://blog.americanchemistry.com/2021/03/advanced-plastics-recycling-and-the-air-we-breathe/ (ACC SmartBrief)

• United Nations Sustainable Development Goals

17 Goals to Transform Our World: The Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including poverty, inequality, climate change, environmental degradation, peace and justice.

17 Goals: *www.un.org/sustainabledevelopment/sustainable-development-goals/*

From: www.un.org/sustainabledevelopment/

• EPA USA: Preventing Unsafe New PFAS Entering Market

27 April 2021: In support of the Biden-Harris Administration's commitment to tackling pollution from Per-and Polyfluoroalkyl Substances (PFAS) and protecting human health and the environment, the EPA USA announced important policy shifts in its review of new PFAS before they can enter the market.

EPA USA's New Chemicals Program is implementing a new strategy for reviewing and managing Low Volume Exemptions (LVE) requests for PFAS.

Due to the scientific complexities associated with assessing PFAS, and the hazard potential associated with various

sub-classes of PFAS, it is challenging to conduct an appropriately robust review of LVE requests for PFAS in the 30 days the regulations allow.

While EPA USA will consider each LVE application individually, the Agency generally expects that pending and new LVE submissions for PFAS would be denied.

Doing this will allow the Agency additional time to conduct a more thorough review through the pre-manufacture notice review process and, as appropriate, put measures in place to mitigate the potential risk of these chemicals as the agency determines whether to allow them to enter commerce.

Additionally, EPA USA is exploring ways to work cooperatively with companies to voluntarily withdraw previously granted LVEs. This would build upon a 2016 outreach effort that resulted in companies withdrawing more than half of the 82 long-chain PFAS LVEs that existed at the time.

From: www.epa.gov/chemicals-under-tsca/epa-announces-changes-prevent-unsafe-new-pfas-entering-market

• Qld Govt: Ambient PFAS Monitoring Program Report

This Report was prepared by the Qld Dept of Environment and Science (DES).

The Qld Per- and Poly-FluoroAlkyl Substance (PFAS) monitoring program was designed to better understand the concentrations of these chemical compounds in the environment. The Queensland Government undertook a state-wide sampling program between May 2019 & March 2020, with water samples collected every two months at 55 sites covering the coast from the Wet Tropics to South East Qld.

Although PFAS are chemical compounds considered to be widely distributed throughout the environment, the results from this 12-month ambient monitoring program for water, sediment and biota indicate this may not be the case in Queensland.

Of the 55 ambient sites monitored, no PFAS were reported in any water sample collected from eight sites (15% of total). At 21 of the 55 sites (38% of total), only Perfluorooctane sulfonate (PFOS) was found at around the limit of reporting (LOR) of 0.0001 µg/L. The highest concentrations and variety of PFAS were found at sites surrounded by urban and industrial land.

Queensland Ambient PFAS Monitoring Program 2019-2020 Report (Oct 2020, 81 page pdf)

From: www.qld.gov.au/environment/pollution/management/disasters/investigation-pfas/monitoring-program-report

• EPA NSW: Govt PFAS Investigation Program

28 April 2021: View a map of the sites in NSW that may be contaminated with PFAS, learn how to reduce your exposure to these dangerous chemicals, and read about our investigation of the issue.

From: www.epa.nsw.gov.au/your-environment/contaminated-land/pfas-investigation-program

• UNEP Report: Mitigating Methane Emissions

6 May 2021: UNEP Report: Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions.

The Assessment Report (website link), for the first time, integrates the climate and air pollution costs and benefits from Methane mitigation. Because Methane is a key ingredient in the formation of ground-level Ozone (smog), a powerful climate forcer and dangerous air pollutant, a 45% reduction would prevent 260000 premature deaths, 775000 asthma-related hospital visits, 73 billion hours of lost labour from extreme heat, and 25 million tonnes of crop losses annually.

Cutting Methane is the strongest lever we have to slow climate change over the next 25 years and complements necessary efforts to reduce Carbon Dioxide.

Methane, a Short-Lived Climate Pollutant (SLCP) with an atmospheric lifetime of roughly a decade, is a potent greenhouse gas tens of times more powerful than Carbon Dioxide at warming the atmosphere. Methane contributes to the formation of ground-level Ozone, a dangerous air pollutant.

In the troposphere, Methane plays an important role in regulating both the oxidation capacity as a whole and the amount of Ozone in particular. Methane's primary sink is oxidation through the Hydroxyl radical. When Nitrogen Oxides (NO_x) and sunlight are present, this oxidation process leads to the production of Ozone (O_3). As Ozone is also a greenhouse gas, the net impact of Methane emissions on climate is larger than the direct impact of the increased Methane – Ozone adds about 38% to the forcing associated with Methane alone

Methane's short atmospheric lifetime means taking action now can quickly reduce atmospheric concentrations and result in similarly rapid reductions in climate forcing & Ozone pollution.

More than half of global Methane emissions stem from human activities in three sectors: fossil fuels (35% of human-caused emissions), waste (20%) and agriculture (40%).

Currently available measures could reduce emissions from these major Sectors by approximately 180 Mt/yr, or as much as 45% by 2030. This is seen as a cost-effective step required to achieve the United Nations Framework Convention on Climate Change (UNFCCC) 1.5°C target.

Full Assessment Report (173 page pdf)
(Note: It includes the Executive Summary at the start)

Executive Summary for Decision Makers (14 page pdf)

From: www.unep.org/resources/report/global-methane-assessment-benefits-and-costs-mitigating-methane-emissions

Also: www.unep.org/news-and-stories/press-release/global-assessment-urgent-steps-must-be-taken-reduce-methane

• EPA Vic: Preparing Victorians for New Laws

The Victorian *Environment Protection Act 2017* will come into effect on 1 July 2021. The Act aims for fairness for people who run their business legally. It will strengthen our powers to investigate businesses. There will also be large increases to penalties for rogue operators.

The new Subordinate Legislation – final Regulations and the Environmental Reference Standard (ERS) are available at: www.epa.vic.gov.au/about-epa/laws/new-laws/subordinate-legislation

Readiness Roadmap to the new Vic Environment Protection Act is for all of EPA Vic's stakeholders:

- The Victorian community: This includes citizens, community groups and traditional owners.
- Industry: This primarily means those that will need an EPA Vic permission to operate. It includes people who hold a licence, permit or registration with EPA Vic or will need to in future.
- Businesses: This means all businesses who have obligations under the Act. For example, businesses such as restaurants, mechanics, hairdressers and others that may not necessarily need an EPA Vic permission to operate.
- Government: includes local councils & govt departments.

From: www.epa.vic.gov.au/about-epa/laws/new-laws/readiness-roadmap

• EPA Vic: Waste Tracker from 1 July 2021

24 May 2021: Waste Tracker is a new system to track **reportable priority waste**. This system replaces waste transport certificates.

Waste Tracker will allow EPA to see the handling of waste around the state in real time. This information will allow EPA to see any unusual activity and help our compliance work.

Changes come into effect on 1 July 2021. You can start preparing to use Waste Tracker now.

Waste Tracker will replace the current electronic Waste Transport Certificate system. The Waste Tracker Certificate system will close on Friday 16 July 2021. All waste transport certificates must be receipted by this date and EPA will take enforcement action for any outstanding certificates.

Waste Tracker is only a Waste Tracking System. It doesn't replace commercial transaction records, logistics or inventory management systems.

27 May 2021: The EPA Vic Portal opened; You can create a portal account for Waste Tracker; Training resources were published to help you learn the new system.

To sign-up and link employees in Waste Tracker, complete the Waste Tracker Business Sign-Up Form. Only someone authorised by the business, such as a CEO, can complete this Form on behalf of the organisation.

EPA Vic will start processing business Sign Up Forms from 27 May 2021. This may take up to 10 working days to complete. Someone may also contact you to confirm information.

Linked employees will receive a confirmation email to let them know they are linked to their organisation in Waste Tracker.

From Late June 2021: Waste Tracker goes live; You can start preparing waste records for movement from 1 July 2021.

1 July 2021: New laws come into effect; All reportable priority waste must be tracked through Waste Tracker.

Waste Tracker Webinar 23 Feb 2021 Video (43 min 33 sec)

From: www.epa.vic.gov.au/for-business/business-forms-permits-online-tools/waste-tracker

• EPA Vic: Investigation into a Fire & e-Waste Stockpiling

14 May 2021: EPA Vic has laid 12 charges against MRI (Aust) Pty Ltd following a comprehensive investigation into a fire and e-waste stockpiling at their premises in Sydney Road Campbellfield.

The charges allege that the MRI (Aust) Pty Ltd caused pollution of the atmosphere and the waters of Merlynston Creek and Foden Reserve as a result of a fire which occurred on 9 Aug 2020, as well as contravening certain conditions of its licence relating to the storage of e-waste at its premises.

Further charges allege that between Dec 2019 and Aug 2020, the company contravened a condition of its Licence which placed limits on the quantity of e-waste stored at the premises, and also contravened the requirement of a minor works pollution abatement notice that it cease accepting e-waste until it reduced the amount of such waste stored at its premises.

From: www.epa.vic.gov.au/about-epa/news-media-and-updates/news-and-updates/epa-lays-charges-for-pollution-remedial-notice-and-licence-contravention-offences

• Wikipedia: "X-Press Pearl" Ship Fire & Loss Incident

On 20 May 2021, the "X-Press Pearl" container ship caught fire off the coast of Colombo, Sri Lanka. The vessel was engulfed in flames by 27 May and declared a total loss. It was still afloat, and the fire was thought to be under control by Sri Lankan firefighters by the late hours of 27 May 2021. After burning for 12 days, the vessel sank on 2 June as it was being towed away to deeper waters. The incident was deemed the worst marine ecological disaster in Sri Lankan history for the chemical products that spilled.

The ship departed the Port of Hazira, India, on 15 May 2021. The container vessel, which carried 1486 containers, with contents including 25 tons of Nitric Acid, other chemicals, cosmetics and Low-Density Polyethylene (LDPE) pellets, arrived in Colombo on 19 May. The ship was on the return leg of a 30-day round-trip voyage from Port Klang, Malaysia, to Qatar and Dubai. Sri Lankan officials believe the fire was caused by a Nitric Acid leak which the crew had been aware of since 11 May 2021.

From: https://en.wikipedia.org/wiki/X-Press_Pearl

• EPA NSW re: Flood - Clean-Up for Chemicals

04 April 2021: The EPA sought community assistance for the safe clean-up of household chemicals and problem wastes after recent flood and storm weather events.

To protect the safety of the community and the environment, the EPA NSW urged households to take flood-damaged household chemicals to their nearest Community Recycling Centre (e.g. paint, gas bottles, batteries, fluoro globes and tubes, oil and smoke detectors).

If the flood-damaged chemicals / waste cannot be taken to a Community Recycling Centre, residents should safely store the waste, if possible, until the next local Household Chemical CleanOut event.

From: www.epa.nsw.gov.au/news/media-releases/2021/epamedia210404-clean-up-of-flood-damaged-household-chemicals

• EPA NSW Fine: Hosing Spilt Chemical down Drain

7 April 2021: Hosing spilt chemical (Paraquat herbicide) down into a stormwater drain lead to $15000 fine from EPA NSW

The EPA NSW has fined a Goulburn company $15000 for polluting waters after herbicide was allegedly washed into a stormwater drain from a chemical spray truck at their Goulburn site on 30 Nov 2020.

The spill was reported by a member of the public the following day. The herbicide was detected by EPA NSW officers in the Mulwaree River 2.3 km downstream from the site of the spill on 2 Dec 2020. EPA NSW officers also noticed puddles of blue liquid on the ground at the premises. Testing later showed these puddles had high concentrations of Paraquat.

"The company told the EPA they spent four hours hosing the spilt herbicide into the stormwater as they were concerned for their worker's safety." "This resulted in natural waterways being polluted, with the Paraquat solution washed from the premises to the Mulwaree River via the stormwater system.

"The lesson here is do not try to clean up chemical spills yourself. The correct procedure is to call triple zero for expert assistance and to also report the spill to the EPA."

From: www.epa.nsw.gov.au/news/media-releases/2021/epamedia210407-hosing-spilt-chemicals-down-drain-leads-to-$15000-fine-from-nsw-epa

• EPA Vic: Bradbury Chemical Waste Facility Clean-Up

20 April 2021: EPA Vic began the next phase of its clean-up at the Bradbury Industrial Services facility in Thornycroft St, Campbellfield, with the start of debris removal works by specialist contractors. Fire destroyed the premises in April 2019. The Clean-Up is expected to take approx. six months.

"This was a busy chemical processing facility, but it became one of the worst industrial fires the state has seen. EPA took immediate action to ensure there would be no offsite contamination impacts once the site was handed back by emergency services to the owners. However, when the owners were unable to comply with EPA Vic Notices, we used our powers to intervene to cause a clean-up of the site," said EPA Vic CEO Lee Miezis.

"Now, with the (EPA Vic's) principal contractor Symal Infrastructure, the lengthy and complex process of safely removing the waste (will be started), recycling what can be recycled and appropriately disposing of anything that cannot".

EPA Vic laid charges against Bradbury on 16 Mar 2020 for various alleged breaches of the Environment Prot'n Act 1970.

From: www.epa.vic.gov.au/about-epa/news-media-and-updates/news-and-updates/bradbury-clean-up-begins

• EPA Vic: Lemon Springs Illegal Waste Clean Up

5 May 2021: Works to excavate and clean up the Lemon Springs illegal waste dump site (south of Kaniva in the State of Victoria's north west), continue with important infrastructure such as work huts, a triage structure and access roads established and detailed testing being conducted by clean up contractor EnviroPacific Services.

The first excavation and removal of waste was due to occur in late April 2021. This was to include sampling, classifying and transportation to an appropriately licensed facility for disposal.

Planning is currently underway to install additional groundwater monitoring wells in various locations on the site. EPA will continue to update the community on results throughout the clean up and remediation works. Results to date continue to indicate no contamination.

From: www.epa.vic.gov.au/about-epa/news-media-and-updates/news-and-updates/lemon-springs-works-continue

And: www.epa.vic.gov.au/lemonsprings (17 May 2021)

26 May 2021: The first truckloads of waste materials have started rolling out of the illegal waste dump site at Lemon Springs in the state's north west. EPA Vic estimates about 100 tonnes of waste has already been excavated from the site and taken to appropriately licensed EPA Vic facilities for treatment and disposal.

From: www.epa.vic.gov.au/about-epa/news-media-and-updates/news-and-updates/lemon-springs-update

• EPA WA: Covalent Lithium Hydroxide Refinery Proposal

31 May 2021: The Proposal is for the construction & operation of a Lithium Hydroxide Refinery at Lot 15 Mason Rd, Kwinana within the Kwinana Industrial Area, approx. 31 km south of the Perth Central Business District. The Proposal will process Spodumene ore concentrate, to produce battery grade Lithium Hydroxide Monohydrate, primarily for use in Lithium ion batteries for electric vehicles.

EPA WA Report 1700 May 2021- Covalent Lithium Hydroxide Refinery_Assessment Report.pdf (53 page pdf)

From: www.epa.wa.gov.au/proposals/covalent-lithium-hydroxide-refinery

• Cefic: Launches a Future Chemistry Network to Help Accelerate Chemical Innovations

20 April 2021: Imagine a future where resources are circular and no new waste is produced, sustainability is at the core of business models, emissions are at net zero, and there is zero harm to human health and the environment. If we wish to reach this future by 2050, and meet the ambitions of the EU Green Deal, it is vital to speed up creation of the right conditions for this future to become reality.

Cefic has taken the initiative to launch a multi-stakeholder platform for supporters of sustainable chemistry to raise awareness and help promote stronger opportunities for sustainable chemistry in the EU.

Policymakers, industry, NGOs, academia, scientists, researchers, thought leaders and other stakeholders committed to further the interests of sustainable chemistry in Europe are invited to join.

https://cefic.org/thought-leadership/future-chemistry-network/

From: https://cefic.org/media-corner/newsroom/cefic-launches-a-future-chemistry-network-to-help-accelerate-chemical-innovations/

• ChemSec: Chemical Recycling Issues Webinar

10 June 2021: Webinar: Everything you Need to Know about Chemical Recycling (3 speakers)

(YouTube Video 43 min 12 sec) Slides (12 slide pdf)

Editor: There isn't a transcript (yet) from the webinar.
There are about 20 minutes of questions discussed at the end.

"Building a viable system for recycling of plastics is one of the most important sustainability challenges of our time, and absolutely necessary in order to realize a Circular Economy."

"So it is no surprise that several chemical companies are competing to promote different methods of chemical recycling. Learn more about the possibilities and limitations of the current chemical recycling technologies."

This webinar builds on the 17 May 2021 ChemSec Policy Paper The Promised Land of Chemical Recycling is Clouded by Shortcuts like Mass Balance and Book & Claim (webpage)

From: https://chemsec.org/webinar-everything-you-need-to-know-about-chemical-recycling/

And: https://chemsec.org/

ChemSec: the International Chemical Secretariat, is an independent non-profit organisation that advocates for substitution of toxic chemicals to safer alternatives.

• CO_2 Decarbonisation Study to Produce 2 Alcohols

Reuters 14 May 2021: Royal Dutch Shell said it will be working with the National University of Singapore (NUS) in a research project worth USA $3.4 million over three years to convert Carbon Dioxide to fuels and petrochemicals

Researchers from Royal Dutch Shell and the NUS will develop electrochemical processes to produce Ethanol and n-Propanol from Carbon Dioxide, a byproduct from industrial processes, the two organizations said in statements on their websites.

Ethanol and n-Propanol can be blended with gasoline to produce cleaner burning fuels or further be dehydrated to produce Ethylene and Propylene, basic building blocks for plastics, they said.

Current methods of converting Carbon Dioxide to fuels and chemicals are unable to produce the desired types of chemicals with yields that meet industrial needs, NUS said.

Assoc. Prof Yeo & his NUS team will work closely with the Shell researchers to discover new catalysts & develop eco-friendly processes to produce liquid fuels like Ethanol and n-Propanol from Carbon Dioxide, at a commercially viable scale

From: *www.reuters.com/business/environment/shell-singapore-university-work-34-mln-decarbonisation-study-2021-05-14/*

And: https://news.nus.edu.sg/nus-and-shell-join-hands-to-advance-decarbonisation-solutions/

And: www.shell.com.sg/media/2021-media-releases/nus-and-shell-join-hands-to-advance-decarbonisation-solutions.html

Standards & Codes

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

https://infostore.saiglobal.com/en-au/Search/Standard/?sortKey=date-desc&productFamily=STANDARD

AS 1940:2017 Amd 2:2021. The storage and handling of flammable & combustible liquids. Amendment, 2 pages, Free. *To correct the missing fire door in Fig 4.1(b)(i)*

AS/NZS 1604.1:2021. Preservative-treated wood-based products. Products and treatment. Sets out requirements for preservative-treated wood-based products that require protection against decay, insect or marine borer attack. Published: 16April2021. 66 pages. Hardcopy $198.67. pdf $232.67 (3 users).

AS/NZS 1604.3:2021. Preservative-treated wood-based products Test methods. Specifies requirements for testing and analysing preservatives and preservative-treated wood-based products. Includes penetration spot tests, retention tests and solution analysis. 16April2021. 96 pages. Hardcopy $256.45. pdf $300.36 (3 users).

• Draft Standards Open for Public Comment

Standards Australia has updated its process for downloading a Draft Standard. Visitors to SAI Global Infostore (above) are no longer able to download the drafts (even though most are in the SAI Global search list (website as above).

All drafts are now available directly from Standards Australia by clicking on "Download draft". There is a simple "word" search function.

https://sapc.standards.org.au/sapc/public/listOpenCommentingPublication.action

Current Projects are listed at the end of each month on the Standards.org.au website via Connect, & in a spreadsheet www.standards.org.au/getmedia/e7eab815-b8a6-4740-bd4c-7ea955910512/Current_Projects.xlsx.aspx (as at 1 June 2021)

The above 1 June 2021 Spreadsheet again includes:

Safety in laboratories (various); Road tank vehicles for dangerous goods (various); Selection and use of emergency procedure guides for the transport of dangerous goods – plus several EPGs are being updated; The storage and handling of / corrosive substances; / of oxidizing agents; / of Toxic Substances; / of Class 9 (Miscellaneous) DG; / of liquid and liquefied Polyfunctional Isocyanates; / of mixed classes of dangerous goods, in packages & IBCs; / of non-flammable cryogenic and refrigerated liquids.

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.

• NZ Standards – Latest Publications & Program

BS EN IEC 60079-10-1:2021 Explosive Atmospheres, Classification of Areas. Explosive gas atmospheres. Published 12April2021. 118 pages. Hardcopy NZ$ 595.40 (+postage); pdf NZ$ 595.40.

AS/NZS 1604.1:2021 Preservative-Treated wood-based products - Part 1: Products and treatment. Published 16April2021. 76 pages. Hardcopy NZ$ 166.00 (+postage); pdf NZ$ 149.40.

ISO 9038:2021 Determination of Sustained Combustibility of Liquids. . Published 23April2021. 12 pages. Hardcopy NZ$ 91.24 (+postage); pdf NZ$ 91.24.

BS ISO 17088:2021 Plastics. Organic recycling. Specifications for compostable plastics. Published 28April2021. 32 pages. Hardcopy NZ$ 371.63 (+postage); pdf NZ$ 371.63.

ISO 17088:2021 Plastics: Organic Recycling - Specifications for compostable plastics. Published 26April2021. 23 pages. Hardcopy NZ$ 185.62 (+postage); pdf NZ$ 185.62.

BS EN 15344:2021 Plastics. Recycled Plastics. Characterization of Polyethylene (PE) Recyclates. Published 27May2021. 18 pages. Hardcopy NZ$ 267.73 (+postage); pdf NZ$ 267.73.

BS EN ISO 9038:2021 Determination of Sustained Combustibility of Liquids. Published 2June2021. 22 pages. Hardcopy NZ$ 267.73 (+postage); pdf NZ$ 267.73.

IEC 62990-2:2021 Workplace Atmospheres - Part 2: Gas Detectors - Selection, installation, use and maintenance of detectors for toxic gases & vapours. IEC 62990-2:2021 gives guidance on the selection, installation, use and maintenance of electrical equipment used for the measurement of toxic gases and vapours in workplace atmospheres. Published 4June2021. 62 pages. Hardcopy NZ$ 487.65 (+postage); pdf NZ$ 487.65.

ISO 15995:2021 Gas Cylinders — Specifications and Testing of LPG cylinder valves — Manually Operated. This document specifies the requirements for design, specification, type testing & production testing & inspection of dedicated LPG manually operated cylinder valves for use. Pub: 10June2021, 25 pages, Hardcopy NZ$185.62 (+postage); pdf NZ$185.62.

Download a copy of the NZ Stds April 2021 Work Program: https://www.standards.govt.nz/assets/documents/work-programme/Work-Programme-2021-04.pdf (7 page pdf)

e.g. AS/NZS IEC 31010:2020 Amd 1, Risk management - Risk assessment techniques. E.g. AS/NZS 60079.10.1 Sup 1, Supplement to Explosive atmospheres - Part 10.1: Classification of areas - Explosive gas atmospheres

From: www.standards.govt.nz/latest-publications/

And: www.standards.govt.nz/develop-standards/standards-nz-work-programme/

• NFPA Codes, Reports, News

All NFPA documents are at: www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards

Current NFPA Stds Newsletter: *www.nfpa.org/Codes-and-Standards/Standards-development-process/NFPA-News (pdf)*

NFPA News-&-Research: *www.nfpa.org/News-and-Research*

Editor: No new Hazardous Materials items to 14 June 2021

Standards Seeking Public Development Input

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

Standards Seeking Public Comment

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

Choose a document for comment from the List of NFPA Codes & Standards or filter by Development Stage for "Codes accepting Public Comment".

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

Courses, Seminars etc, Networks

• RACI: GHS 7 SDS Authoring Basics, 22 June 2021

Full day 9.00am-4.30pm Workshop via the Zoom platform.

Introduction to the GHS; Activity 1: Identification of SDS Information; Activity 2: Classification according to the GHS.

Program (1 page pdf)

Non Member $400; Student Concession Non Member $300
RACI / Reciprocal Society Member $350
RACI Student Concession Member $250

From: https://raci.org.au/RACI/Web/Event_Display.aspx?EventKey=HSD1202

• Fire Fighting Foam Transition Symposium: 23 June 21

Brisbane (in-person) & as a Virtual Event: The ALGA (Australasian Land & Ground Water Association) symposium will offer delegates a full day of live-streamed presentations from local and international speakers exploring:

- The development and status of firefighting foam regulations and the drivers behind the changes
- Foam transition approaches and viable alternatives
- Lessons learned and areas for further research

This event is available in-person (Brisbane) or as a live Virtual Event anywhere in the world. Agenda (1 page pdf)

Editor: 10am-5pm Brisbane in Europe is 2am-9am, so the Conference will also be available as recorded Webinars.

Event Cost (excluding GST):

Non-Member $750; Member $375; Student incl. Bundle: $200

From: https://landandgroundwater.com/page/fire-fighting-foam-transition-symposium

• Hazardous Areas Conference, Brisbane, 7-8 July 2021

Sofitel Brisbane Central: It will cover the safe use of electrical, mechanical and instrumentation equipment in hazardous, flammable or explosive atmospheres. Price $1795. (7p pdf)

Brochure_8thHazardousAreasConferenceBrisbaneAustralia.pdf

There may be a Zoom Webinar Option for Remote Attendees.

From: www.events.idc-online.com/upcoming-conferences/hazardous-areas-conference-brisbane-australia

• RACI: Complying with AICIS Webinar 14 July 2021 AICIS Requirements, Categorisation, Reporting

14 July 2021: 6.00pm–8.00pm Zoom Webinar

AICIS Requirements, Categorisation, Reporting

Presenter Mr Adrian Thomas FTSC: The Australian Industrial Chemicals Introduction Scheme (AICIS) introduced a new risk based introduction scheme which is radically different from the previous NICNAS scheme. AICIS is very relevant to ALL businesses importing chemicals into Australia.

Non Member $40; Student Concession Non Member $25
RACI Member $30; RACI Student Concession Member $20

From: https://raci.org.au/RACI/Web/Event_Display.aspx?EventKey=HSD1213

• DGAG Discuss/Chat Combined Meeting 18 Aug 21

Dangerous Goods Advisory Group Discuss/Chat meeting, **Wed 18th Aug 2021** will be a combined Physical Meeting and Zoom Meeting between 5.45 pm to initially meet up and then run between 6.00pm and 8.00pm and tidy up by 8.15pm, at the Liardet Community Centre Meeting Room in Port Melbourne (to Covid Rules).

Zoom attendees please join from 5.50pm. (Please allow that some difficulties may occur, as this is not my office set-up.)

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

IF you would like to be added to the Dangerous Advisory Group / Chemical Hazard Communication Network meeting email issues list, please email Jeff.Simpson@haztech.com.au. You don't have to be in Melbourne, to be on this email list.

• ACTRA: Advances in Risk Assessment - Sydney

25-27 Aug 2021: Advances in Risk Assessment: Petroleum Toxicology and Neurotoxicology. 13th ACTRA Annual Scientific Meeting (Thurs & Fr) and Continuing Education Day (Wed) at the Crowne Plaza, Sydney Darling Harbour.

Call for Abstracts Closes 18 June & Early Bird Closes 25 June.

Non-Member: Standard ASM&CE $1200. Student $500

From: https://actra.org.au/

And: https://clems.eventsair.com/actra-asm-ce-day-2021/

• AIDGC Conference 24 Sept 21 Sydney & Webinar

Expected to be both a Sydney Location & a Webinar

From: https://aidgc.org.au/ & https://aidgc.org.au/news-events/

• R4Risk Online Training / Webinars / Presentations

They include HAZOPS, Risk Management; Process Safety.

From: https://r4risk.com.au/wp/

• IChemE Training

Face-to-Face Training (Search: Melbourne, Brisbane, Perth)
Fundamentals of Process Safety
HAZOP Leadership and Management
HAZOP Study for Team Leaders and Team Members
Layer of Protection Analysis (LOPA)
Practical Distillation Technology
Process Safety Leadership and Culture

Online Training Asia Pacific time zones
Carbon Footprint Reduction for Manufacturing Industry
Fundamentals of Process Safety
HAZOP Study for Team Leaders and Team Members
Hydrogen Workshop
Inherent Safety in Design and Operation Development

From: www.icheme.org/career/training/

• Various Chemical Management Courses

See www.haztech.com.au for courses I am aware of:

www.haztech.com.au/hazardous-chemicals-management-training-resources-in-australia-nz/

Haztech Environmental: Chemical Hazard Classifications done & reviewed. SDSs prepared & reviewed. Labels prepared & reviewed. Chemical Management & Safety Regulatory Advice & 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 30 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.

Hazmat & Environment Notes" publication times are approx: end March, early June, mid Aug, mid Oct, and early Dec.
Renewals are notified with your last issue. The date of your last issue of your subscription will be given on the top right corner of the envelope label, e.g. Mar 22 or normally in the Subject of the Email in which you receive the Hazmat Notes pdf file.

Haztech Environmental | 18 Laurel St | TAX INVOICE
ABN: 27 630 291 348 | Ashburton, VIC 3147 | Date 16th June 2021

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Please start my subscription to Hazmat & Environment Notes from the **April-May-June 2021 Newsletter**.

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