Hazmat & Environment Notes June-Aug 2021

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Hazardous Chemicals

• ECHA: SVHC Candidate List Updated with 8 Chemicals

8 July 2021: ECHA's Candidate List of Substances of Very High Concern (SVHC) now contains 219 chemicals that may harm people or the environment.

Most have been added to the SVHC Candidate List because they are hazardous to human health as they are toxic for reproduction, carcinogenic, respiratory sensitisers or endocrine disruptors.

1/ 2-(4-tert-Butylbenzyl)Propionaldehyde and its individual stereoisomers; **2/** Orthoboric Acid, Sodium salt; **3/** 2,2-bis(Bromomethyl)propane1,3-diol (BMP); 2,2-Dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA); 2,3-Dibromo-1-propanol (2,3-DBPA); **4/** Glutaral; **5/** Medium-Chain Chlorinated Paraffins (MCCP) (UVCB substances consisting of more than or equal to 80% Linear Chloroalkanes with Carbon Chain Lengths within the range from C14 to C17); **6/** Phenol, Alkylation Products (mainly in Para position) with C12-rich branched Alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP); **7/** 1,4-Dioxane; **8/** 4,4'-(1-Methylpropylidene)bisphenol.

From: https://echa.europa.eu/sv/-/candidate-list-updated-with-eight-hazardous-chemicals

• ECHA: Chromium Trioxide widely Used in the EU

8 June 2021: Notifications from 1026 sites across Europe submitted by May 2021 confirm that Chromium Trioxide is still widely used in functional or hard chrome plating and surface treatment. The annual usage is estimated to be 7000 tonnes. The Substance of Very High Concern (SVHC) was placed on the Authorisation List in 2013 and its use has needed a specific Authorisation in the EU since 2017.

By notifying the uses to ECHA, companies confirm that they follow the conditions for use set in the Authorisation decisions granted to their suppliers. As part of the conditions, they must inform ECHA by the end of 2021 how their workers are exposed to Chromium Trioxide.

From: https://echa.europa.eu/sv/-/chromium-trioxide-widely-used-in-plating-and-surface-treatment

Editor: Chromium Trioxide is CrO3 which is Cr^{6+} (not Cr^{3+})

• ECHA: Current Chemical Classification Consultations

ECHA Harmonised Classification and Labelling Consultations. Parties concerned are invited to comment on Hazard Classes open for consultation.

Comment Periods close from 3 Sept 2021 to 8 Oct 2021

Acetone Oxime	CAS 127-06-0
Formaldehyde …%	CAS 50-00-0
Multi-Walled Carbon Tubes	No CAS
Peracetic Acid …%	CAS 79-21-0
Propyl 3,4,5-Trihydroxy Benzoate	CAS 121-79-9
S-metolachlor (ISO)	CAS 87392-12-9
Sulfur	CAS 7704-34-9
α-Methyl-1,3-Benzodioxole-5-Propionaldehyde	CAS 1205-17-0

From: https://echa.europa.eu/harmonised-classification-and-labelling-consultation

• AU Parliament: Minamata Convention on Mercury

The Treaties Committee invited interested persons and organisations to make submissions by 19 July 2021.

- Treaty being considered: Minamata Convention on Mercury (Kumamoto, 10 October 2013).
  Text & Annexes Info Booklet Sept 2019 (72p pdf)
- Submissions (18 downloadable Submissions)
- Media Release (for 9 Aug 2021 Public Hearing)
- Public Hearings (9 Aug 2021 transcript is not yet available)
- Committee Membership (16 Parliament Members)

From: www.aph.gov.au/Parliamentary_Business/Committees/Joint/Treaties/MinamataConvention

Alerted by: https://www.facebook.com/NTN

• UNEP: Agreement Anniversary against Toxic Mercury

16 Aug 2021: In August 2017, one of the world's most recent environmental accords came into force: The Minamata Convention on Mercury.

It addresses anthropogenic mercury releases through its entire lifecycle: mining, import and export, products and processes, emissions to air, releases to land and water, contaminated sites, waste management, and many others.

Since the Minamata Convention on Mercury entered into force in 2017, 132 parties from around the world have been working together to disrupt the trade, raise public awareness, build institutional capacity, and create mercury-free products.

From: www.unep.org/news-and-stories/story/world-marks-anniversary-agreement-against-toxic-mercury

• ChemSec: Resorcinol – Possible Endocrine D.C.

23 June 2021: Resorcinol (CAS: 108-46-3) is a chemical ChemSec "added to the SIN List in 2011. It is a textbook example of an Endocrine Disrupting Chemical (E.D.C.), since it has been known for many decades to interfere with Thyroid Hormones. However, it has neither been officially recognized as an endocrine disrupting chemical, nor regulated yet."

"It has a wide variety of uses – in production of rubber and plastics, but also in cosmetic products, especially hair dye. It is classified as acutely toxic to the environment and irritating to the skin and eyes."

"At the REACH Committee meeting, (ChemSec) expect the Commission to finally make the decision that would place Resorcinol among other SVHCs (Substances of Very High Concern) on the REACH Candidate List.

https://chemsec.org/why-resorcinol-is-the-terminator-of-hazardous-chemicals-and-should-be-shut-down-permanently/

• Canadian Chemicals Management Plan Website

Screening Assessments & Evaluations (some entries)

From 18 June 2021:

The Performance Measurement Evaluation for DEHP was Published. [2021-06-18]

Two new fact sheets published: 1. Use of margins of exposure & risk quotients in risk assessment, and 2. Canadian exposure factors used in human health risk assessments. [2021-06-25]

Additional Risk Characterization Document in Support of the Draft Screening Assessment for Zinc & its Cpds: Pulp & paper sector exposure & risk characterization: published. [2021-06-25]

Final Screening Assessment for Coal Tars and their Distillates was published. The *Risk Management Approach for Coal Tars and their Distillates* and the proposed order adding coal tars to Schedule 1 of the *Canadian Environmental Protection Act*, 1999 were also published. [2021-06-26]

July 2021:

The *Final Screening Assessment for Corn, steep liquor* was published. [2021-07-10]

Proposed *Regulations for Prohibiting the Manufacture and Import of Wheel Weights Containing Lead in Canada* were published for a 70 public comment period ending 11 Sept 2021. [2021-07-03]

Final *Formaldehyde Emissions from Composite Wood Products Regulations* & final *Directive Concerning Testing for Formaldehyde Emissions* were published. [2021-07-07]

Final Screening Assessment for Corn, steep liquor was published. [2021-07-10]

Final Screening Assessment for the Anthraquinones Group was published. The *Proposed Risk Management Approach for Solvent Violet 13* was also published for a 60-day public comment period ending on 15 Sept 2021. [2021-07-17]

August 2021 (to 14th):

Health science summary: Long-chain perfluorocarboxylic acids (LC-PFCAs) their salts & related cpds published. [2021-08-05]

Summary of feedback received on the Discussion Paper: A proposed Integrated Management Approach to Plastic Products was published. [2021-08-05]

Final Screening Assessment for Lotus Corniculatus, Extract was published. [2021-08-14]

The *Draft Screening Assessment 2H-azepin-2-one, hexahydro- (caprolactam)* was published for a 60-day public comment period ending on October 13, 2021. [2021-08-14]

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

• EPA NSW: Lead Exposure Risks in Homes & Gardens

10 Aug 2021: EPA NSW reminded Wollongong residents to be aware of the risks of exposure to lead and other heavy metal contaminants from a range of historical sources around the home, especially when renovating and gardening.

Information on Lead Safety (website with videos and fact sheets) and the Literature Review (website) & Literature Review Report (29 June 146 page pdf) can be found on the EPA NSW website.

From: www.epa.nsw.gov.au/news/media-releases/2021/epamedia210810-nsw-epa-reminds-residents-to-be-safe-around-lead-in-homes-and-gardens

• EPA USA: n-MethylPyrrolidone Consultations

July 2021: n-MethylPyrrolidone (NMP) is used in manufacturing for solvent cleaning and surface treatment of metals, textiles, resins and plastics. Common consumer uses include paints and coatings, glues and adhesives, paint and adhesive removers, lubricants, and automotive care products.

EPA USA held Environmental Justice (EJ) Consultations regarding the development of risk management actions for NMP on 7 July 2021 and 13 July 2021. These consultation sessions provided an overview of the TSCA risk management requirements, the findings from the final risk evaluations, the tools available to manage the unreasonable risks from NMP, and an opportunity for input on environmental justice concerns. The Environmental Justice Consultation period will extend through August 27, 2021.

View materials from the consultation sessions. Materials for the webinars, including presentations and fact sheets.

NMP Fact Sheet for July 2021 EJ Consultations (7 page pdf)

Slides for July 2021 NMP EJ Consultations (37 slide pdf)

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

• EPA USA: 3D Printer Emissions being Studied

15 June 2021: EPA USA Researchers Continue to Study the Emissions of 3D Printers.

Studies have found that the 3D printing process releases gases and particulates which could pose health risks to users. These emissions include volatile organic compounds, referred to as VOCs, some of which are hazardous to human health when inhaled. The particles released are of ultrafine size (1–100 nm), and researchers have found that they are small enough to be deposited deeper into the respiratory system and can be more difficult to clear from the body.

There are different types of thermoplastic filament material available to choose from, with the most popular material choices being Poly-Lactic Acid (PLA) and Acrylonitrile Butadiene Styrene (ABS). PLA filament is derived from renewable sources like corn and is advertised for its abilities to reduce greenhouse gases during use and to biodegrade. ABS is derived from processing petroleum and is often used in industry because of its chemical resistance.

From: www.epa.gov/sciencematters/epa-researchers-continue-study-emissions-3d-printers

• WorkSafe NZ: Worker Poisoned with 1080 Vapour

29 July 2021: Basic health and safety obligations not met.

A Rolleston NZ - based pest bait manufacturing organisation has been fined NZ $275,000 over an incident in which a worker was poisoned in May 2019 and nearly lost his life.

Pest Control Research Limited Partnership (PCR) manufactures pest control products including baits containing Sodium Fluoroacetate (more commonly known as 1080) as the toxic active ingredient.

Cumulatively design, fabrication and process errors ultimately resulted in workers being exposed to highly toxic vapour from a failure in the manufacturing process and in PCR's overall safety management systems.

From: www.worksafe.govt.nz/about-us/news-and-media/worker-poisoned-basic-health-and-safety-obligations-not-met/

• EPA Vic: Fumigant Chemical Incident Charges

28 July 2021: The EPA Vic has laid a total of three charges against a Torquay Victoria company, I,C&J Santospirito P/L, following an investigation into an alleged chemical incident.

EPA Vic alleges that Santospirito improperly used a fumigant resulting in the production of Methyl Isothiocyanate (MITC). MITC affects the eyes and respiratory tract.

Several nearby residents reported breathing difficulties as well as stinging and watering eyes.

From: www.epa.vic.gov.au/about-epa/news-media-and-updates/news-and-updates/epa-lays-charges-over-torquay-chemical-incident

Chemical Management

• REACH: Revised Certain Information Requirements

29 June 2021: The law (now in effect) will apply from 8 January 2022. The main changes concern:

a/ requirements for surface tension and water solubility of metals and sparingly soluble metal compounds;

b/ requirements for in vitro testing for eye irritation and in vivo testing for skin or eye irritation;

c/ requirements and adaptations for 28-day and 90-day repeated dose toxicity studies;

c/ specific rules for adapting reproductive toxicity studies;

d/ general rules for adaptation based on: - use of existing data; - weight of evidence; - substance-tailored exposure-driven testing; and - grouping of substances – in particular, those of unknown or variable composition, complex reaction products and biological materials (UVCBs);

e/ new rules for adapting studies on fate and behaviour in the environment based on a low octanol-water partition coefficient;

f/ new specific rules for adapting for dissociation constant and viscosity; and

g/ additional requirements for human health and environmental testing to be performed at appropriately high dose levels.

From: https://echa.europa.eu/sv/-/upcoming-changes-to-reach-information-requirements

• Training Hazardous Substances NZ Certifiers

Editor: As there appears to be no professional add-on chemical management subjects for science or engineering degrees or advanced diplomas (with adequate chemistry knowledge) in Australia, the NZ requirement to Train Hazardous Substances NZ Certifiers, may be a sensible way to have this training, as further professional add-on chemical management subjects we can utilise in Australia.

Hazardous Substances Compliance Certifiers Workforce Initiative: For a job that protects the environment and everyone's lives. "Incorrect handling, storage of or exposure to hazardous substances can lead to serious adverse outcomes for the environment, and people's health and safety."

Hazardous Substances Compliance Certifiers:

- issue compliance certificates confirming workplaces, workers, or equipment comply with Health and Safety (Hazardous Substances) Regulations (which quite similar to what the various Australian Regulations require)

- are qualified professionals, authorised by WorkSafe NZ
(In Australia "authorisation" is not as explicitly required)

Hazardous Substances Compliance Certifiers deal with products or chemicals that: can explode; are flammable; are toxic to people; are corrosive; are environmentally toxic.

Generally, it takes around three years training to become an independent Hazardous Substances Compliance Site Certifier.

To complete the process toward the Compliance Certifier qualification, the first part of the Hazardous Substances training program is undertaking two papers at Massey University NZ. The candidate must decide the specialist field they wish to pursue, and then follow a specialist strand in this field to achieve Certifier qualification in the target speciality. From this point they can pursue additional specialist strands to further their field of Certification Authority.

HASANZ in-conjunction with HSPNZ, NZIHSM, Skills Organisation and Massey University, NZ, with support of WorkSafe NZ are developing a hazardous substances training programme.

251.272 - Occupational Health and Safety 2 is available with a hazardous substance focus. Semester 2, 2021.

250.318 - **Special Topic - Hazardous Substances Compliance Certifier** - available from Semester 1 2022.

For 251.272: Students who successfully complete this course should be able to: **1/** Describe the nature and effects of chemical hazards commonly encountered in the workplace. **2/** Explain the application of New Zealand legislation relating to hazardous substances and the strategies for the control of toxic substances in the workplace. **3/** Explain principles of fire and explosion prevention and control. **4/** Describe the properties and effects of noise, methods of determining exposure, and strategies to maintain a safe working environment. **5/** Analyse how an occupational hygiene framework can be used to identify the health hazards arising from physical and biological aspects of a range of work environments.

From: https://hspnz.co.nz/

&: https://hspnz.co.nz/about-us/become-a-compliance-certifier

Editor's Comment: In Australia already competent Dangerous Goods Specialists can become full members of the AIDGC, but training courses are not available.

https://aidgc.org.au/about-us/become-a-member/

It may be possible to complete relevant subjects out of Occupational Hygiene courses in Australia. e.g. At RMIT in Melbourne; University of Wollongong in NSW; & Edith Cowan University in WA.

• AU HCIS is Missing Exposure Standards Notes

Editor: A colleague has been brought to my attention that the Hazardous Chemical Information System (HCIS) Search Exposure Standards database is *missing* the Skin (absorption) & Skin Sensitization Notes for ALL the entries requiring them. Fortunately the Carcinogen & Asphyxiant Notes are still listed!

Following up another colleague, he informed me that the "Skin" & Sens" Notes have been missing for at least a year.

There is no alert on the HCIS Search Exposure Standards webpage that the "Skin" & Sens" Notes are missing.

To fix this error and have the legally required information for an Exposure Standard under jurisdictional laws, until these Notes are added, we all need to download the "Workplace Exposure Standards for Airborne Contaminants" document from:

www.safeworkaustralia.gov.au/doc/workplace-exposure-standards-airborne-contaminants

Safe Work Australia states "This document contains the list of Workplace Exposure Standards (WES) and guidance on their application. Compliance with the WES is required under jurisdictional Work Health and Safety (WHS) laws."

WES 16 Dec 2019 (42 pages pdf or docx)

The HCIS Search Exposure Standards webpage is at:

http://hcis.safeworkaustralia.gov.au/ExposureStandards

BUT this database is *missing* the Skin (absorption) and Skin Sensitization Notes.

14411 results were loaded into this HCIS database on 1 July 2021: Are all these entries the same as WES 16 Dec 2019?

Feedback: Safe Work Australia are fixing the problem ASAP.

• Threshold of Toxicological Concern (TTC) Values

5 Aug 2021: Moving from One-Size-Fits-All to Fit-for Purpose TTC Values. Speaker(s): Ron Brown, PhD, Risk Sciences Consortium; & Grace Patlewicz, PhD, EPA USA.

Threshold of Toxicological Concern (TTC) values have historically been derived from comprehensive datasets that include structurally diverse compounds that span a wide range of toxicological or carcinogenic potency. The goal of this "one-size-fits-all" approach is to derive a TTC value that is adequately protective for any data-poor compound that a person may be exposed to, with the exception of very highly potent Cohort of Concern compounds. However, there is increasing interest in developing fit-for-purpose TTC values for compounds in specific use categories (e.g., cosmetics, medical devices, food, consumer) or structural classes. This webinar will explore recent efforts to develop fit-for-purpose TTC values and describe the factors that should be considered (e.g., chemical space) when deriving TTC values for compounds in specific use or structural categories.

Webinar Recording (1hr 27m video) (Starts at 3min 23sec)

(Closed Caption subtitles are available)

Webinar Intro Slides (4 page landscape pdf) |

Webinar Presentation Slides (55 page landscape pdf)

From: www.toxicology.org/groups/ss/ctss/events.asp

Alerted by John Frangos, Toxicologist.

There are other Toxicology Focus Webinars available: https://www.toxicology.org/education/pw/webinars.asp

• SWA: Clean Air-Clear Lungs Campaign & Risks

23 June 2021: The Clean Air-Clear Lungs campaign is a national campaign (to run until Dec 2021) to raise awareness of occupational lung diseases & educate & inform Australian employers on how to manage the risks in the workplace.

Work processes can release invisible dusts, gases, fumes, vapours, mists and microorganisms into the air, that you, your workers and others breathe at work that can be hazardous and cause damage to your health.

Occupational lung diseases are conditions of the respiratory system caused by workplace exposure to hazardous chemicals and dusts.

Four key industries most at risk of occupational lung diseases are targeted including:

- *Manufacturing workers* can be exposed to hazards in the air that are invisible to the naked eye, such as fumes and dust.
- *Construction workers* can be exposed to hazards like dust from concrete and fumes from welding.
- *Engineered stone workers* can be exposed to silica dust in all parts of their work process – from preparing & working on the slab, to cleaning up the workplace & disposing of waste.
- *Agricultural workers* can be exposed to a range of hazards in the air, such as pesticides, chemicals, and fuels.

From: www.safeworkaustralia.gov.au/clearlungs

From: www.safeworkaustralia.gov.au/media-centre/news/clean-air-clear-lungs-identify-and-assess-risks

And: www.safeworkaustralia.gov.au/media-centre/news/clean-air-clear-lungs (28 June 2021)

And: www.safeworkaustralia.gov.au/media-centre/news/safe-work-australia-launches-occupational-lung-disease-campaign

• NSW Drug Misuse & Trafficking Regulation 2021

June 2021: The NSW Dept of Communities & Justice sought comments on the Consultation Draft of the Drug Misuse and Trafficking Regulation 2021 and Regulatory Impact Statement.

Two documents to understand the proposed changes:

- Proposed Drug and Misuse Trafficking Reg 2021 [25p pdf]
- Regulatory Impact Statement [17 page pdf]

The Proposed Reg **adds** the following **Precursors** to Sched: 1.

1/ 2-Methyl-3-(3,4-MethyleneDioxyPhenyl) Propanamide (Helional Amide)

2/ 2-Methyl-3-(3,4-MethyleneDioxyPhenyl) Prop-1-ylidene Hydroxylamine (Helional Aldoxime)

3/ alpha-Acetylphenylacetic Acid

4/ 1-Phenyl-1,2-Propanedione

5/ Propionyl Chloride.

The Proposed Reg **adds** the following **Items** to Schedule 3.

1/ Flat bottom Reaction Flask (capacity 500mL or greater)

2/ Separating Funnel (capacity 500mL or greater).

The closing date for submissions was Friday 16 July 2021.

From: www.justice.nsw.gov.au/justicepolicy/Pages/lpclrd/lpclrd_consultation/lpclrd_statements.aspx

• Vic Drugs, Poisons, C.Subs (Precursor Supply) Regs 2021

6 Aug 2021: Consultation is open on the Proposed Drugs, Poisons and Controlled Substances (Precursor Supply) Regulations 2021.

Regulatory Impact Statement – Vic Drugs, Poisons and Controlled Substances (Precursor Control) Regulations 2021 (13 July 2021, 35 page pdf)

The proposed Vic Precursor Control Regs **will now prescribe 136 precursor chemicals and 12 precursor apparatus.**

The changes comprise:

- 39 new chemicals added to the list of precursor chemicals in Schedule 1 (including 3 gases contained in cylinders which are being transferred to the chemical list in Schedule 1 from the equipment list in Schedule 3) and 4 new apparatus added to list of precursor apparatus in Schedule 3, and

- 3 chemicals and 4 apparatus which have been determined to no longer pose a risk as precursor chemicals or equipment and which are to be removed from the Regulations.

The proposed changes are listed in detail in Appendix A.

Vic Precursor Supply Regulations - Exposure Draft (12p pdf)

Letter of Adequacy – Vic Precursors Regs 2021 RIS (4p pdf)

Consultation closes 5pm Monday 6 Sept 2021.

From: https://engage.vic.gov.au/drugs-poisons-and-controlled-substances-precursor-supply-regs-2021

• AU Federal: Customs Tariff Amendment Bill 2021 (2022 Harmonized System Changes)

23 June 2021 (11 Aug 2021 Before the Senate): This Bill amends the Customs Tariff Act 1995 (Customs Tariff Act) to implement the outcomes of the sixth review of the Harmonized Commodity Description and Coding System. The chapters, headings, subheadings (both international and domestic), and legal notes contained in Schedule 3 to the Customs Tariff Act will be amended to:

- create new tariff classifications to better identify emerging technologies;
- create and remove tariff classification to reflect changing patterns of international trade;
- improve monitoring of substances of concern, including chemicals controlled under international agreements such as the Montreal Convention and the Chemical Weapons Convention; and
- improve the monitoring of certain environmental goods which are potentially being over-exploited.

From: www.aph.gov.au/Parliamentary_Business/Bills_Legislation/Bills_Search_Results/Result?bId=r6734

Bill: https://parlinfo.aph.gov.au/parlInfo/download/legislation/bills/r6734_first-reps/toc_pdf/21074b01.pdf;fileType=application%2Fpdf

ExplanatoryMemorandum: https://parlinfo.aph.gov.au/parlInfo/download/legislation/ems/r6734_ems_9c2a555d-fcd3-4cf9-8cf9-1d7758a5aa06/upload_pdf/JC002735.pdf;fileType=application%2Fpdf

• Safety Alert: Asbestos found in Imported Gaskets

19 July 2021 SafeWork SA Asbestos Safety Alert:

In March 2021, the Australian Border Force (ABF) examined two gaskets in a consignment of after-market parts and components imported from China destined for use in construction plant. The two gaskets were compatible with models of Komatsu and Shantui Bulldozers. The gaskets were sampled and tested & found to contain **Chrysotile Asbestos**.

Read the full Safety Alert (webpage) about Asbestos in SAN DA Branded Gaskets (3 page pdf | docx), for further details.

From: www.safework.sa.gov.au/news-and-alerts/safety-alerts/incident-alerts/2021/asbestos-found-in-imported-gaskets

• CSIRO WHS Enforceable Undertaking 2021

March 2021: CSIRO entered into an enforceable undertaking with Comcare to strengthen safety systems and outcomes following an explosion at a Melbourne laboratory in 2017. The undertaking includes commitments to improve risk assessment training and hazard identification in high-risk environments.

On 6 June 2017 at CSIRO's Clayton facility in Victoria, an incident occurred involving the ignition of Hydrogen gas which had leaked from a 50-litre autoclave, resulting in injuries to a worker. The autoclave was being used to conduct an experiment at the time.

CSIRO Enforceable undertaking documents:

- Notice of acceptance (1 page pdf)
- CSIRO enforceable undertaking (27 page pdf)
- Reasons for decision (5 page pdf)
- CSIRO enforceable undertaking variation June 2021 (1p pdf)

From: www.comcare.gov.au/scheme-legislation/whs-act/regulatory-guides/whs-undertakings

• Qld: Working with Reusable Chemical Containers

May 2021: Worksafe Qld

Workers fell ill after using a truck wash supplied to a site in an IBC which they had noticed had an abnormal smell. An investigation revealed the IBC contained both the truck wash and Paraquat – a toxic Poisons Schedule 7 herbicide.

Due to IBC supply issues, the truck wash manufacturer went outside its usual supply chain and did not notice the IBC also had a Gramoxane label on it. Gramoxane contains Paraquat and even though they triple rinsed the IBC and cleaned it out with a detergent, the IBC was found by laboratory testing to still have residual levels of the toxic herbicide.

IBCs are refillable and convenient for bulk liquid transport, but there are risks in reusing containers that have previously held toxic chemicals. Reuse should only be for the same product. Reusing chemical containers to store water or feed can expose people or livestock to hazardous chemical residues.

Used IBCs should be returned to an authorised recycler or disposed of in accordance with the manufacturer's recommendations.

From: www.worksafe.qld.gov.au/news-and-events/newsletters/esafe-newsletters/esafe-editions/esafe-rural/may-2021/working-safely-with-reusable-chemical-containers

Alerted by AIDGC What's Happening June 2021

• How to Transport and Store Hydrogen? - Facts and Figures

June 2021: ENTSOG, GIE and Hydrogen Europe have joined forces on a paper that answers a number of fundamental questions about gaseous and liquid Hydrogen Transport and Storage. This Fact Sheet provides an objective and informative analysis on key concepts, terminology and facts and figures from different public sources.

From: www.hydrogeneurope.eu/publications/

Alerted by AIDGC What's Happening July 2021

• NSW Resources Regulator: Spontaneous Combustion

March 2021: *TRG - Development of a Spontaneous Combustion Principal Hazard Management Plan for Underground Coal Mining Operations [96 page pdf]*

This document provides mine operators with Guidance on developing and documenting a Principal Hazard Management Plan (PHMP) for Spontaneous Combustion in underground coal mining operations.

This NSW Guide supersedes MDG 1006 Spontaneous Combustion Management Guideline and MDG 1006-TR Technical Reference for Spontaneous Combustion Management Guideline.

From: www.resourcesregulator.nsw.gov.au/safety-and-health/publications/mdg/technical-reference-guides

• Grosvenor Mine Explosion Report Part II Released

31May 2021: The Queensland Coal Mining Board of Inquiry examined the nature and cause of the serious accident at Grosvenor mine, near Moranbah, Qld, as well as 40 high potential incidents involving Methane exceedances between 1 July 2019 and 5 May 2020.

The Board of Inquiry made recommendations for improving safety and health practices and procedures to mitigate against the risk of similar incidents happening in the future.

From: https://coalminesinquiry.qld.gov.au/

ABC: "Queensland Coal Mining Board of Inquiry releases report into Grosvenor explosion"

14 June 2021: Five miners were seriously injured in the blast at the Grosvenor Mine in May 2020. The Queensland Coal Mining Board of Inquiry was set up to examine the cause of

the blast & other Methane exceedances at the underground mine between July 2019 & the day before the.

"The gas emissions being generated by the mine's rate of production were in excess of the capacity of the mine's gas drainage system," the Report said. It also found Spontaneous Combustion had not been factored into risk assessments, and that no adjustment to production had been made to allow for the lack of capacity in gas drainage.

From: www.abc.net.au/news/2021-06-14/coal-mining-inquiry-report-grosvenor-explosion/100213202

• EPA NZ: Hazardous Substances Update #210

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

Industry input sought on Glyphosate (* now 24 Sept 2021)

Methyl Bromide

Reminder: Hydrofluorocarbon (HFC) Permits

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

• EPA NZ: Hazardous Substances Update #211

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

Glyphosate Call for info Closing 27 Aug 2021 (* now 24Sept21)

EPA NZ responds to Sentencing in Christchurch Chemical Incident that nearly claimed the life of a worker in Christchurch in May 2019 from a highly toxic vapour while manufacturing Sodium Fluoroacetate (known as 1080) (29 July 2021).

Methyl Bromide Update (Recapture Rules Hearing Closed)

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

• NTP: Non-Animal Approach to Identify Skin Sensitizers

Aug 2021: "New chemical testing approach will help to replace animal use"

NIEHS researchers and collaborators developed this first internationally harmonized guideline describing this new, non-animal approach to identify skin sensitizers, which was published 14 June 21 by the Organisation for Economic Co-operation & Development (OECD).

Once the non-animal approach was developed, the National Toxicology Program (NTP) Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM) collaborated with colleagues at the German Federal Institute for Risk Assessment to assemble a set of human skin sensitization test data to support the OECD guideline. This data set was used to evaluate the new approach and demonstrate that it predicts human effects better than the currently accepted animal test.

From: https://ntp.niehs.nih.gov/update/2021/08/chemical-testing/index.html

• OECD New Test Guideline for Skin Sensitisation

14 June 2021: OECD published a new Guideline on Defined Approaches for Skin Sensitisation (OECD GL No. 497, 14 June 2021) (webpage, then a 54 Page pdf is available).

This is a new type of OECD Guideline that uses several types of combined information to provide chemical safety information and can replace the need for animal test data.

The Defined Approaches (DAs) were validated using an extensively curated large set of human and mouse reference data on skin sensitisation. The first three DAs included in this Guideline use combinations of OECD validated in chemico & in vitro test data, in some cases along with in silico information.

From: www.oecd.org/chemicalsafety/testing/oecdguidelinesforthetestingofchemicals.htm

• OECD Test Guideline: Fish Cell Line Acute Toxicity

14 June 2021: OECD published Test Guideline No. 249: Fish Cell Line Acute Toxicity: The RTgill-W1 Cell Line Assay (webpage, then a 51 Page pdf is available).

This is a significant step in the implementation of the 3Rs-principles (Reduction, Replacement, Refinement), the guiding principles for more ethical use of animals in testing.

The project to develop this Test Guideline was led by Switzerland and Norway and resulted in a method that identifies chemicals that are toxic to fish by testing cell cultures instead of whole animals.

YouTube Video: Testing with Fish Cells rather than Fish (2m)

From: www.oecd.org/chemicalsafety/testing/oecdguidelinesforthetestingofchemicals.htm

• NTP USA: UPDATE Newsletter

June-Aug 2021: The USA National Toxicology Program UPDATE Newsletter topics.

June 21: The NTP Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM)
Development of predictive model for skin sensitization.

July 21: Novel toxicity assessment strategies highlighted at National Toxicology Program (DNTP) board meeting

Aug 21: NICEATM and ICCVAM activities at World Congress; Slides and video available from ICCVAM Public Forum

Aug 21: New chemical testing approach will help to replace animal use. NIEHS researchers and their collaborators developed the recently accepted non-animal testing method, which will be used globally.

From: https://ntp.niehs.nih.gov/update/2021/index.html

Subscribe to NTP News and/or NICEATM News (by email)

• CSB: Investigations & Incidents July 21 - Aug 21

From: www.csb.gov/

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

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

27 July 2021: LyondellBasell Chemical Release Incident

3 Aug 2021 LyondellBasell Incident Update: On the evening of 27 July 2021, a release occurred in the Acetyls unit at the LyondellBasell (LYB) La Porte Complex, Texas Approximately 100,000 pounds of acetic acid was released during a maintenance event. Two contract employees were fatally injured, and 30 other personnel were transported to medical facilities for evaluation and/or treatment. One person remains hospitalized.

From: www.csb.gov/update-on-lyondellbasell-deployment/

29 July 2021: New CSB Safety Video Released on Aghorn Operating Investigation Entitled: **"Silent Killer: Hydrogen Sulfide Release in Odessa, Texas"**

https://youtu.be/jh2HWT8gPeY (17 minutes)

The 26 Oct 2019, Hydrogen Sulfide release at the Aghorn Operating waterflood station in Odessa, Texas, fatally injured an Aghorn employee who was working at the facility that evening, as well as his spouse who attempted to locate him at the facility after he did not return home.

The CSB's safety video includes a new animation of the events leading up to the incident, and interviews with both the CSB's Chairperson and the Supervisory Investigator for this investigation.

From: www.csb.gov/csb-releases-aghorn-safety-video/

• 22 Groups Press for Urgent Reform at USA CSB

16 July 2021: The USA Chemical Safety Board, the agency charged with investigating toxic chemical fires, explosions and releases, is understaffed, facing a record backlog and needs urgent reforms, say 22 labor, environmental, scientific and public interest organizations.

These Groups, in a letter to CSB Chairperson Katherine Lemos, call for the Agency to rebuild its investigative capacity in order to fully protect workers and communities from potentially deadly hazards.

More information: www.nationalcosh.org/2021-07_CSB_Letter

From: www.chemicalprocessing.com/industrynews/2021/22-groups-press-for-urgent-reform-at-chemical-safety-board/

Alerted by AIDGC What's Happening, July 2021

• USA OSHA Quick Takes e-News: July-Aug 2021

1 July 2021: **1/ Fireworks Safety:** Employers must protect workers in the fireworks industry. **2/ Combustible Dust Violations:** A grain facility was cited after a worker was severely injured in a dust explosion. **3/ Sting and Bite Prevention:** A new fact sheet helps to protect outdoor workers from allergic reactions to insects.

2 Aug 2021: **1/ Small Business Handbook:** This revised handbook (83 page pdf) provides self-inspection checklists to identify workplace hazards (including chemicals) and resources for small businesses. **2/ Chemical Safety Violations:** A poultry processing plant and three other companies were fined nearly $1 million after a preventable nitrogen leak killed six workers. **3/ Safety Resource:** Hazard Alert on SoapStock Tank Explosion from welding igniting venting gases (3 page pdf)

16 Aug 2021: **1/** OSHA initiative to protect workers in the tank cleaning industry from atmospheric & confined space hazards.

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 Notice 23 June 2021

23 June 2021: New Chemical Assessment Statement Published CA09351 Flotation Agent: 13-Propanediamine-n-3-c11-14-Isoalkyloxypropyl-Derivs-C13-Rich-Acetates. (H&E)

From: www.industrialchemicals.gov.au/news-and-notices/new-chemical-assessment-statement-published-23-june-2021

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

• AICIS: Inventory Notices 22 Jun 21 to 14 Aug 2021

28 June 2021: Chemicals Added to the Inventory 5 years after issue of Assessment.
CAS No.s: 41438-38-4; 1471342-08-1; 230309-38-3; 910661-93-7; 887649-35-6; 1682646-06-5; 2097442-28-7; 52550-44-4.

19 July 2021: Chemicals Added to the Inventory 5 years after issue of Assessment.
CAS No.s: 82199-03-9; 158800-93-2; 1323360-50-4; 862993-96-2; 22208-25-9; 82904-80-1; 186688-25-5.

26 July 2021: Chemical added to the Inventory following issue of Assessment Certificate (Early Listing)
CAS: 13107-10-3, Formula: $C_{12}H_{20}N.Cl$

17 August 2021: Chemicals added to the Inventory 5 years after issue of Assessment - 17 August 2021
CAS No.s: 2653976-99-7; 2653977-04-7; 70248-14-5; 1447806-11-2; 1562268-85-2; 890833-85-9; 127970-91-6; 2665688-06-0; 2665688-17-3; 890051-63-5.

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.

22 June 2021: Correction of chemical names - 22 June 2021
Inventory notice: AICIS have updated (2nd to 7th June 2021) the names of some chemicals (*Editor:* 101 updates, e.g. Barium Hydroxide ($Ba(OH)_2$), Monohydrate, CAS: 22326-55-2)

23 July 2021: Variation of Inventory listing following Revocation of CBI approval. CAS No: 2653977-03-6

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

• AICIS: News and Updates 23 June to 2 Aug 21

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

23 June (previously 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 now closes Friday 20 Aug 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 now closes Friday 20 Aug 2021.

And:
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 now closes Friday 20 Aug 2021.

24 June 2021:

New National Chemicals Management Standard National reforms for use, handling and disposal of industrial chemicals will help protect the environment, reduce pollution and deliver more consistent regulation, says the Department of Agriculture, Water and the Environment (DAWE).

Industrial chemicals will be scheduled on the IChEMS register according to their level of concern to the environment, with risk management measures also prescribed. DAWE is working with States and Territories on a plan for each jurisdiction to incorporate the IChEMS register into their laws. (*Editor:* No Jurisdiction Laws are in place as of mid August 2021)

Scheduling on the IChEMS register is expected to start in early 2022.

DAWE says it will continue to consult with key stakeholders as the IChEMS implementation progresses, including on cost-

recovery arrangements. (*Editor:* Cost-Recovery arrangements are via AICIS, but will be additional to the AICIS charges).

Find out what IChEMS means for you and for details on how to join the IChEMS mailing list: Chemicals.Management@environment.gov.au

e.g. In 2022 IChEMS identifies ratifying chemicals in the Stockholm Convention on Persistent Organic Pollutants

IChEMS will be a single source of information for risk management decisions. It will instruct regulators and users on the risks of chemicals and how they should be managed to prevent environmental harm. IChEMS are developing 7 scheduling groups to classify each industrial chemical from low to high concern and will assign proper measures for safe use, handling and disposal.

Editor: Labelling Environmental Hazards to the existing GHS Hazard classifications has not been a focus for this Standard, even though Labelling Environmental Hazards has been seen as good practice (for over 20 years) in Australia by businesses!

28 June & 28 July 2021: Graeme Barden has been appointed as the new AICIS Executive Director of the nation's industrial chemicals assessment and regulatory body, the Australian Industrial Chemicals Introduction Scheme.

Minister, The Hon Mark Coulton MP: "He brings significant technical experience in chemical regulation policy and has previously held leadership roles in the Office of Chemical Safety & Health Protection Policy Branch of the Federal Dept."

Introducing the new AICIS Executive Director.

Graeme "first became involved in this area as an environmental risk assessment manager for NICNAS in the early 2000s, and again when leading the Office of Chemical Safety (OCS) within the Dept of Health in the early 2010s." "Having worked in and around chemical regulation at various times and in various roles since 1993, (Graeme has) had the opportunity to talk with people who offer industry and community perspectives."

30 June 2021: 2021-22 AICIS Registration & Application Fees See the specific AICIS Fees & Charges Note following.

8 July 2021: Evaluations Public **Comment Period Extended** 17 Chemical Group Evaluations (first alerted 28 May 2021).

List of Chemicals covered by Evaluations.xlsx *(929 CAS No.s)*

Comment now closes Friday 20 Aug 2021

Editor: Look over the chemicals in *"*Chemicals not considered for in depth evaluation—**not commercially active** in Australia" as these are chemicals that could (as some time) be withdrawn from the AIIC.

EVA00046 - Draft Eval'n Statement - 28 May 2021 (12p pdf)

14 July 2021: Registration & Renewal for 2021-22 AICIS year

By 1 Sept 2021: If you're going to continue to introduce Industrial Chemicals after 31 August 2021. It is an offence under the Industrial Chemicals Act 2019 to introduce an industrial chemical when you are not registered.

28 July 2021: Agent can help to comply with AICIS obligations

From 1 Aug 2021, your AICIS Agent can submit a "post-introduction declaration" for Exempted Introductions on your behalf via the AICIS Business Services portal. Your first "post-introduction declaration" is due by 30 Nov 2021 and covers the period from **1 July 2020** to 31 August 2021.

2 Aug 2021: The online form to submit a post-introduction declaration is now available on AICIS Business Services under the tile 'Post-Introduction Declaration (PID)'. Read the AICIS **updated (30 July 2021) instructions** on how to submit a Post-Introduction Declaration for Exempted Introductions.

• AICIS Categorisation Guide Version 1.2 Changes

28 May 2012: Version 1.2 Changes in the Web based Guide

- New step: 'Step 0 - Introductions in the Listed Category'
- Added 'Who is this Guide for' in 'Before you start categorising your introduction' & removed information covered in step 0.
- Removal: 'Information you need to work out your introduction category' (covered in Step 0)
- Clearer Outcomes Guidance & next steps in step 4.1 & 5.1
- More information in step 4.4 including restrictions on use of animal test data.
- More information in step 5.4 including restrictions on animal test data.
- Replaced references to checking the General Rules with more explanatory text.
- More information about water treatment products and designated kind of release to the environment in the context of working out your environment categorisation volume.

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

• AICIS: Some of the Fees and Charges

1 July 2021: The AICIS Registration level is based on the total value of the relevant industrial chemicals you introduced in the previous financial year. GST does not apply.

Note: A $75 fee applies to Registration (& is included below).

Level 1 - $0 to $49,999	$75
Level 2 - $50,000 to $74,999	$150
Level 3 - $75,000 to $99,999	$175
Level 4 - $100,000 to $249,999	$325
Level 5 - $250,000 to $499,999	$575
Level 6 - $500,000 to $2,999,999	$3,075
Level 7 - $3,000,000 to $4,999,999	$5,075
Level 8 - $5,000,000 or more	$40,075

Examples of other charges are for Assessment Certificates:

Apply for an assessment certificate - health and environment focus	$34,965
Apply for an assessment certificate - health focus	$23,375
Apply for an assessment certificate - environment focus	$23,375
Apply for an assessment certificate - very low to low risk	$7,435
Apply for an assessment certificate - comparable hazard assessment	$17,515
Apply for an assessment certificate (consolidated application) - additional chemical that has the same end use as the first chemical and meets the similarity criteria	$7,015
Apply to vary a term of an assessment certificate	$4,735

From: www.industrialchemicals.gov.au/fees

& AICIS Cost Recovery Implementation Statement 2021-22 (June 2021 33 page pdf)

• AICIS: Annual Declarations Process – Take Care

Editor's Comment: Before you go to Login to AICIS Business Services make sure you read the specific webpage about this before you proceed. Otherwise you will arrive at the *Submit Annual Declaration* which is really the *Prepare Annual Declaration* button, & maybe not understand your obligations.

Editor's Comment: The person preparing and submitting the Annual Declaration will need to be a senior Manager employee of the Business (who has the Business's authorisation to make the Declaration). They must ensure they have the applicable technical information to do the Annual Declaration. It is a higher declaration of annual sign-off than was required for the previous Annual <100kg No Unreasonable Risk Chemicals & Chemical Permits submission information under NICNAS.

Your Annual Declaration will include: 1/ the introduction categories for the chemicals you imported or manufactured during our registration year, & 2/ a Declaration that all of your Introductions were authorised under Sections 25 to 30 of the Commonwealth's Industrial Chemicals Act 2019.

Note: Your first Annual Declaration is due by 30 November 2021 and covers the period **1 July 2020** to 31 August 2021. (**Editor:** In *future* Annual Declaration is for 1 Sept to 31 Aug)

Step 1: Log on to the AICIS Business Services online portal and go to the Annual Declaration tile.

Step 2: Click on 'Submit Annual Declaration' in the Actions column next to the relevant registration year.

Step 3: Select all the Introduction categories that apply.

From: www.industrialchemicals.gov.au/business/reporting-and-record-keeping-obligations/annual-declaration-all-introducers

19 Aug 2021: There is basic information Annual Declaration Animated Video to help you in the process. This animated two-and-a-half-minute video outlines the type of information you'll need to confirm your introductions were authorised under the AICIS laws – and how to submit the information online.

www.industrialchemicals.gov.au/sites/default/files/2021-08/What%20is%20an%20annual%20declaration.mp4

• AICIS Post-Intro Declaration for Exempt Intros

The AICIS Post-Introduction Declaration is a once-off declaration that you must submit after you introduce the following Exempted Introductions for the first time:

a/ polymers of low concern b/ low-concern biopolymers

c/ chemicals that you have categorised as very low risk for human health and the environment

Although these chemical introductions are categorised as exempted, AICIS still need to know about them. It helps AICIS to target their audits, and **reassures** our community stakeholders that you can demonstrate that these chemical introductions **are very low risk**.

The following people can submit the PID:
1/ the registered importer or manufacturer who introduced the chemicals; or 2/ their agent or consultant.

Step 7 (on the webpage below) has details of the level of information expected.

You must know the total number of different new **polymers of low concern** that you're introducing, and only submit one PID.

You must know the total number of different new **low concern biopolymers** that you're introducing, and only submit one PID.

You must submit a **separate** post-introduction declaration for **each new chemical** you introduced in a registration year:

a/ marketing name, trade name or name used

b/ proper chemical name (CAS or IUPAC name) & CAS No.

c/ volume, end use & maximum concentration for the chemical

d/ IF the end use is in cosmetics, a statement about the use of animal test data to determine the highest indicative risk.

Frm: www.industrialchemicals.gov.au/business/reporting-and-record-keeping-obligations/exempted-introduction-declarations

Scheduled Poisons & TGA Issues

• Scheduling Delegate's Final Decisions

19 July 2021:

Final Decisions on proposed amdmts referred to Advisory C'tee on Chemicals Scheduling (ACCS #29, Nov 2020)

4.1 Azoxystrobin & **4.2** Triticonazole: Interim Decisions confirmed not amending the current Schedule 5 for both.

See: Notice of Final Decisions - ACMS #32, ACCS #29, Joint ACMS-ACCS #26, November 2020 meetings (22 April 2021, 16 pages pdf | docx)

Final Decisions on proposed amendments referred to the Advisory C'tee on Medicines & Chemicals Scheduling (Joint ACMS-ACCS #26, Nov 2020)

5.1 Azelaic Acid was not rescheduled.

5.2 2-Hydroxyethyl Methacrylate (2-HEMA)

Schedule 5 entry amended: added "except: c/ in other preparations containing 0.1 per cent or less of 2-hydroxyethyl methacrylate when labelled "Avoid contact with skin".

5.3 Magnesium Hydroxide - new entry in SUSMP Appendix B (Substances Considered not requiring Control by Scheduling).

5.4 Tetrahydrofurfuryl Alcohol, excluding its derivatives.
– new entry in SUSMP Schedule 6

5.5 Cannabidiol (private application). The final decision was to confirm the Delegate's interim decision to not amend the current Poisons Standard with respect to cannabidiol (CBD).

From: www.tga.gov.au/scheduling-decision-final/notice-final-decisions-acms-32-accs-29-joint-acms-accs-26-november-2020-meetings

• Scheduling Delegate's Interim Decisions

Chemicals covered include:

20 July 2021: Interim Decisions on proposed amendments to the Poisons Standard - ACMS/ACCS/Joint ACMS-ACCS meetings, March 2021. (pdf | docx)
Consultation closed on 17 Aug 2021.

3 Interim Decisions (via ACMS-ACCS #27, March 2021)

3.3 Interim decision re: Hemp Seed Oil

Interim amendment to the existing Schedule 9 entries for Cannabis and Tetrahydrocannabinols to exclude Hemp Seed Oil for oral consumption from scheduling when compliant with the Food Standards Code.

Except iv) hemp seed oil containing 75 mg/kg or less cannabidiol and 10 mg/kg or less tetrahydrocannabinols.

4 Interim Decisions (via ACCS #30, March 2021)

4.1 Interim decision re: Lead (in paint) Proposal to reduce the permissible level for Lead compounds from 0.1% to 0.009% was agreed. **b)** in paints (other than anti-fouling or anti-corrosive paints), tinters, inks or ink additives except in preparations containing 0.009% or less of Lead calculated on the non-volatile content of the paint, tinter, ink or ink additive.

4.2 Interim decision re: Cyflumetofen (new Schedule 5)

4.3 Interim decision re: Isocycloseram (new Schedule 6)

4.4 Interim decision: 1,4-Benzenediamine, 2-(methoxymethyl) The Poisons Standards S6 & S10 entries were not amended.

From: www.tga.gov.au/scheduling-decision-interim/notice-interim-decisions-proposed-amendments-poisons-standard-acmsaccsjoint-acms-accs-meetings-march-2021

- **Nitrous Oxide (30 July 2021 Interim Decisions)**

Notice of Interim Decisions on proposed amendments to the Poisons Standard (Nitrous Oxide) March 2021 (11p pdf | docx)

Proposed Amendment is:

Schedule 6 – New Entry

NITROUS OXIDE **except** when included in Schedule 4.

Schedule 4 (existing entry)

NITROUS OXIDE for human therapeutic use.

NITROUS OXIDE when included in Schedule 6.

112 (WARNING – May cause irreversible nerve damage if inhaled.) 38 (Do not intentionally inhale contents.)

The purposes for which this substance is to be used and the extent of use of a substance:

- Used therapeutically as an analgesic / anaesthetic agent
- Legitimate non-therapeutic uses include; creating whipped cream, mousses and foams; infusing flavours into drinks in the restaurant and catering industry; nitrous oxide injection systems for racing cars; and various scientific applications.

Comment closes Friday 27 Aug 2021.

From: www.tga.gov.au/scheduling-decision-interim/notice-interim-decisions-proposed-amendments-poisons-standard-nitrous-oxide-march-2021

- **TGA: Listed Medicine Ingredients – Aug 21 Update**

20 Aug 2021: TGA Listed Medicine Ingredients and requirements for their use have been updated in the Therapeutic Goods (Permissible Ingredients) Determination (No. 2) 2021 (there are Volume 2 to Volume 6 to download)

Explanatory Statement (14 pages pdf | docx)
The requirements imposed under the Determination are principally designed to ensure or support the quality and safety of listed medicines that contain permitted ingredients.

A complete list of the 61 changed ingredients is on the TGA website below.

From: www.tga.gov.au/update-listed-medicine-ingredients-august-2021

Food Chemical Issues

- **P1010: Formulated Supplementary Sports Foods**

15 July 2021: To inform the Assessment, FSANZ is now calling for Data on Substances for use in Sports Foods, which are designed to assist sports people in achieving specific nutritional or performance goals.

Formulated Supplementary Sports Foods are 'Special Purpose' foods that may contain specified ingredients which are either not permitted to be added to 'general purpose' foods and drinks, or are added at a higher level.

FSANZ invites interested stakeholders to provide technical, toxicological and nutritional information relating to substances which they consider should be added or present in contemporary Sports Foods. To be considered as part of FSANZ's assessment, information must satisfy the eligibility requirements (on the *&:* webpage).

Guidance for Submitters (5 pages pdf | docx)

The Call for Data closes Thurs 9 Sept 2021

From: www.foodstandards.gov.au/code/proposals/Pages/P1010.aspx

&: www.foodstandards.gov.au/code/changes/Pages/Call-for-data-on-substances-used-in-contemporary-sports-foods.aspx

Editor: There are a range of Esters of Amino Acids (not listed by FSANZ) that are already on the shelves of Australian Sports Food Supplements shops (found by reading the ingredient labels), that neither FSANZ, nor State Health Depts have done anything about. I have previously alerted to these not listed forms of Amino Acids in this newsletter.

- **A1210: Maltogenic Alpha Amylase Enzyme from GM Saccharomyces Cerevisiae**

18 June 2021: This Application seeks to permit a new source microorganism, being a genetically modified Saccharomyces Cerevisiae, for the permitted enzyme, Maltogenic Alpha Amylase. Intended to be used as a Technological Aid in baking processes to reduce crumb firmness and staling in bread and other bakery products.

Executive Summary (3 pages pdf); Application (87 page pdf)

From: www.foodstandards.gov.au/code/applications/Pages/A1210.aspx

- **A1227: Arabinofuranosidase Enzyme from GM Trichoderma Reesei**

8 July 2021: This Application seeks approval to permit a new source microorganism, being a genetically modified Trichoderma Reesei, for the already permitted enzyme Arabinofuranosidase. Intended to be used as a Processing Aid in processing of grains and potable alcohol production.

Executive Summary (4 pages pdf)

From: www.foodstandards.gov.au/code/applications/Pages/A1227%20-Arabinofuranosidase-enzyme-from-GM-Trichoderma-reesei.aspx

- **A1228: Xylanase Enzyme from GM Trichoderma Reesei**

8 July 2021: This Application seeks approval to permit a new source microorganism, being a genetically modified Trichoderma Reesei, for the already permitted enzyme, xylanase. Intended to be used as a Processing Aid in processing of grains, potable alcohol production, brewing, and processing of fats and oils.

Executive Summary (4 pages pdf)

From: www.foodstandards.gov.au/code/applications/Pages/A1228---Xylanase-enzyme-from-GM-Trichoderma-reesei.aspx

- **A1229: Carboxypeptidase from GM Aspergillus Oryzae as a Processing Aid (Enzyme)**

8 July 2021: This Applications seeks to approve the use of Carboxypeptidase, sourced from GM Aspergillus Oryzae, as a Processing Aid in the manufacture and/or processing of proteins, yeast and flavourings; the manufacture of bakery products; and brewing.

The Carboxypeptidase preparation is used as a Processing Aid in Protein Hydrolysis of Peptide bonds in manufacturing and/or processing of Proteins, Yeast, and flavouring, the manufacture of bakery products and in brewing. Generally, Carboxypeptidase degrade Proteins into shorter Proteins / Peptides and free Amino Acids.

Executive Summary (4 pages pdf)

From: www.foodstandards.gov.au/code/changes/circulars/Pages/Notification%20Circular%20161-21.aspx

- **A1231: Maltogenic Alpha-Amylase from GM Escherichia Coli as a Processing aid (Enzyme)**

3 Aug 2021: This Application seeks to approve the use of Maltogenic Alpha Amylase, sourced from GM Escherichia coli, as a Processing Aid in baking, brewing & starch processing.

Maltogenic Alpha Amylase (E.C. 3.2.1.133, CAS No.: 160611-47-2) is an Enzyme catalysing the hydrolysis of (1→4)-alpha-D-Glucosidic linkages in starch Polysaccharides to produce Maltose (dimer of glucose units) and Maltotriose (trimer of glucose units) as main hydrolysis products.

Executive Summary (2 pages pdf)

From: www.foodstandards.gov.au/code/applications/Pages/A1231---Maltogenic-alpha-amylase-from-GM-Escherichia-coli-as-a-processing-aid-%28enzyme%29.aspx

- **A1235: Enzymatic Production of Rebaudioside I**

20 Aug 2021: Approval is sought for a new specification for the Steviol Glycoside, Rebaudioside I, produced by enzymatic bioconversion of Stevia Leaf Extract. The bioconversion enzymes are derived from a genetically modified yeast strain, Pichia Pastoris.

Sweegen is seeking to amend The Code to encompass the acceptability and permissibility of their new manufacturing methodology as another means to safely and effectively produce Rebaudioside I.

Executive Summary (redacted) (4 page pdf)

From: www.foodstandards.gov.au/code/applications/Pages/A1235-Enzymatic-production-of-rebaudioside-I.aspx

- **FSANZ: Review of TiO_2 as a Food Additive**

8 July 2021: FSANZ is calling for data on Titanium Dioxide and its safety when used as a Food Additive in Australia and New Zealand.

Information supplied through the call will assist FSANZ in reviewing the safety of Titanium Dioxide as a Food Additive following the recent release by the European Food Safety Authority (EFSA) of an Updated Safety Assessment (alerted in the April-June 2021 Hazmat & Env. Notes).

Titanium Dioxide is a food additive typically used to enhance the colour and appearance of foods.

EFSA's expert Panel on Food Additives and Flavourings recently concluded that although the evidence for general toxic effects was not conclusive, Titanium Dioxide can no longer be considered safe as a food additive.

FSANZ are seeking information from interested parties regarding the particle size of Titanium Dioxide used in food as well as relevant information on its safety as a food additive. Particular focuses of FSANZ's Review are the evidence relating to potential Genotoxicity of Titanium Dioxide, and information relating to the particle size of Titanium Dioxide used as a Food Additive.

Call for Data on Titanium Dioxide: (5 page docx | pdf)

Submissions close Friday 17 Sept 2021

From: www.foodstandards.gov.au/consumer/foodtech/Pages/titanium-dioxide-call-for-data.aspx

- **EFSA: Draft Opinion on Intake Level for Dietary Sugars**

22 July 2021: European Food Safety Authority (EFSA) explains its Draft Scientific Opinion on a Tolerable Upper Intake Level (UL) for dietary sugars. While it was not possible to set a UL, EFSA's scientists concluded that the intake of added and free sugars should be as low as possible.

Fact Sheet (4 page pdf)

Consultation Closes: Thurs 30 Sept 2021

Remote Meeting: 21 Sept 2021 9.00-13.00 CEST
(You must Register by 13 Sept 2021)
www.efsa.europa.eu/en/events/stakeholder-meeting-draft-scientific-opinion-tolerable-upper-intake-level-dietary-sugars

EFSA Opinion on Intake: Expected to be finalised by end 2021

From:
www.efsa.europa.eu/en/corporate-pubs/efsa-explains-draft-scientific-opinion-tolerable-upper-intake-level-dietary-sugars

And: www.efsa.europa.eu/en/news/safety-dietary-sugars-draft-opinion-open-public-consultation

- **EFSA: Food Chemical Hazards Database**

1 June 2021: (OpenFoodTox)

Since its creation in 2002, EFSA has produced risk assessments for more than 4950 substances in over 2000 Scientific Opinions, statements and conclusions through the work of its scientists. For individual substances, a summary of human health and – depending on the relevant legislation and intended uses – animal health and ecological hazard assessments has been collected and structured into EFSA's chemical hazards database: OpenFoodTox.

OpenFoodTox is a tool and source of information for scientific advisory bodies and stakeholders with an interest in chemical risk assessment. You can download summary data sheets for each individual substance in pdf or xls format by opening the dashboard. EFSA updates OpenFoodTox on a regular basis.

Download Version 4 (19 May 2021) spreadsheet from:
https://zenodo.org/record/3693783#.YSCYfmSuapp

Chemical Hazards (web access):
www.efsa.europa.eu/en/microstrategy/openfoodtox

From: www.efsa.europa.eu/en/data-report/chemical-hazards-database-openfoodtox

Agricultural Chemicals

- **Pesticides & Veterinary Medicines Regulatory Review**

28 May 2021:
Final Report of the Independent Review of the Pesticides and Veterinary Medicines Regulatory System in Australia.
(325 page pdf docx)

The Review (since Sept 2019) examined the Pesticides and Veterinary Medicines regulatory system's aims, structure and operation, and make recommendations to ensure that it is contemporary, fit for purpose & reduces unnecessary red tape.

In undertaking the Review, the Panel:

1/ assessed the appropriateness, effectiveness and efficiency of the regulatory framework underpinning the operations of the National Registration Scheme

2/ considered what the goals of Australian agvet chemical regulation should be

3/ considered the current and future requirements of Australia's regulatory framework for agvet chemicals

4/ provides recommendations for reform of the regulatory framework to increase the value of Australian agriculture.

The Panel agrees that "reform is long overdue. Not only has the Panel identified many opportunities to improve the performance of Australia's regulatory system overall, but if we fail to do so, the critically important social licence to continue to use pesticides and veterinary medicines will be at risk. Community attitudes, especially in urban Australia, to farmers' agricultural chemical use are becoming steadily more demanding. Human health and safety, animal health and welfare, environmental protection, and transparent public processes need to be, & be seen to be, taken very seriously."

From the Executive Summary: "The Panel has conducted a comprehensive, first principles review of the current regulatory system for pesticides and veterinary medicines in Australia. The Panel considers the key priority of the future regulatory system is protecting the health and safety of people, animals, plants, and ecosystems while also supporting pest and disease management in Australia through increased access to safe and effective pesticides and veterinary medicines.

In order to create a nationally consistent and contemporary regulatory system for Pesticides and Veterinary Medicines in Australia, and give effect to the first principles review, the Panel is recommending the following:

a/ A national regulatory identity to deliver **harmonised and consistent control-of-use** regulation (see Chapter 2).

b/ Increased protection for the health and safety of people, plants, animals, and the environment (see Chapter 3).

c/ Responsible and considered use of pesticides and veterinary medicines (see Chapter 4).

d/ Innovative approaches to improve access to safe and effective products (see Chapter 5).

e/ Streamlining access to safe and effective pesticide and veterinary medicine products (see Chapter 5).

f/ An adaptable and resilient regulatory system in the face of unexpected change (see Chapter 6).

g/ An adaptable and resilient regulatory system in the face of unexpected change (see Chapter 6).

h/ Improved transparency and equity by modernising cost recovery (see Chapter 7).

In Chapter 8 they list 58 Recommendations.

From: https://www.agriculture.gov.au/ag-farm-food/ag-vet-chemicals/better-regulation-of-ag-vet-chemicals/independent-review-agvet-chemical-regulatory-framework

• AW&E: Improving Access to Ag & Vet Chemicals

14 July 2021: (AW&E – Federal Dept of Agriculture, Water and Environment). While a comprehensive review of the regulatory framework (see the above information) is underway by the Federal Dept of Agriculture, there are important measures that need be considered in the interim, to improve safe user access to chemicals.

The Bill requires supporting delegated legislation to fully implement some of its measures.

Proposed regulations & order to improve access to agricultural and veterinary chemicals: Consultation Paper (33 page docx)

The Department is consulting on **5 proposed measures**. There are 2 measures which support the Agricultural and Veterinary Chemicals Legislation Amendment (Australian Pesticides and Veterinary Medicines Authority Board and Other Improvements) Bill 2019. In brief: **a/** extensions to certain data protection periods (that support periods of market exclusivity); **b/** enable the use of new, simpler regulatory processes for chemicals of low regulatory concern.

The **remaining 3 measures** propose: **c/** change the definition of 'minor use' to implement an agreed approach by Australia's agricultural ministers to improve the harmonisation of off-label access to agvet chemicals; **d/** provide for the APVMA to develop a standard (if necessary) setting out the allowed differences between a constituent in a chemical product and what is recorded for the constituent in the Register;
e/ exclude a limited range of enzyme products from regulation as agvet chemicals.

Closes: 27 Aug 2021

+ two Exposure Drafts legislation amendments are available.

From: https://haveyoursay.awe.gov.au/agvet-reform

• APVMA: Ag Ingredients of Biological Origin & BICON

26 July 2021: The updated requirements for Agricultural Chemical products containing imported ingredients of biological origin requires Applicants to attach a copy of the relevant Dept of Agriculture, Water & the Environment (DAWE) import permit, or a copy of the completed Application Form.

The APVMA requirement to provide a copy of a DAWE import permit or completed application may also be satisfied by providing one of the following:

- A screenshot of an import permit application.
- A screenshot stating that an import permit is not required.
- Written confirmation that the applicant intends to obtain an import permit prior to importing the product into Australia.

BICON Import Item Search:
https://bicon.agriculture.gov.au/BiconWeb4.0

From: https://apvma.gov.au/node/88721

Editor: Be very careful how you decide in BICON and at least have a second person independently check & discuss results.

• APVMA: Fluazaindolizine– New Ag Active

14 July 2021: An application for the approval of a new active constituent, Fluazaindolizine, a selective contact Nematicide.

Common Name: Fluazaindolizine; IUPAC Name: 8-Chloro-N-[(2-Chloro-5-Methoxyphenyl)Sulfonyl]-6-(Trifluoromethyl) Imidazo[1,2-a]Pyridine-2-Carboxamide; CAS No: 1254304-22-7; Formula: $C_{16}H_{10}Cl_2F_3N_3O_4S$; MW: 468.2; Chemical Family: Sulfonamide; Mode of Action: Fluazaindolizine is a selective contact Nematicide for the control of plant parasitic nematodes. It acts only on plant parasitic Nematodes, and is not active against insect pests, plant pathogens or weeds.

The APVMA has considered the toxicological aspects of Fluazaindolizine, and concluded that there are no toxicological concerns to the approval of this active constituent. The Scheduling Delegate has made a final decision to include Fluazaindolizine in Schedule **6** of the SUSMP, with an implementation date of 1 Feb 2021.

From: Ag&Vet Special Gazette, 14 July 2021 p5-6 (pdf | docx)

From: https://apvma.gov.au/node/88126

Editor: There is a discrepancy of Scheduling between a Product containing 500 g/L in the Ag& Vet Gazette, 13 July 2021 on p15 where SUSMP Schedule **5** is listed (docx).

• NZ Fumigants requiring a Controlled Substance Licence

June 2021 WorkSafe NZ Fact Sheet: In order to possess any of the fumigants listed in this Fact Sheet, a person in NZ must hold a Controlled Substance Licence (CSL).

Active Ingredients in the Fumigants:
1,3-Dichloropropene; 1,3-Dichloropropene and Chloropicrin; Chloropicrin; Hydrocyanic Acid;
Methyl Bromide; Aluminium Phosphide;
Magnesium Phosphide; Methyl Iodide and Chloropicrin

From: www.worksafe.govt.nz/topic-and-industry/hazardous-substances/certification-authorisation-approvals-and-licensing/certification-of-people/controlled-substances-licences

• EPA NZ: Glyphosate: Info Call Closes 24 Sep 2021

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.

16 Aug 2021: EPA NZ has extended its call for information on the herbicide Glyphosate by four weeks, to 24 Sept 2021.

"While we have had a good response from the public, we want to make sure importers, retailers, professional users and industry groups have had enough time to collate information and provide meaningful data. We have already received one request from a major industry group for an extension."

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

And: www.epa.govt.nz/news-and-alerts/latest-news/epa-extends-glyphosate-call-for-information/ (extends to 24 Sept)

• ECHA: Glyphosate Regulators begin Renewal Review

15 June 2021: ECHA and the European Food Safety Authority (EFSA) have received a draft assessment of Glyphosate carried out by four EU Member States and will now begin to consider the findings. Glyphosate – the most widely used herbicide in the world – is currently authorised for use in the EU until December 2022.

ECHA and EFSA will now organise parallel Consultations on the Draft Report. These will be open to the public and launched in the first week of September this year.

Glyphosate currently has a harmonised classification as causing Serious Eye Damage and as Toxic to Aquatic Life with Long-Lasting Effects, prior to and following the assessment by ECHA in 2017. No classification for Germ Cell Mutagenicity, Carcinogenicity or Reproductive Toxicity was warranted. The current proposal from the four Member States does not foresee a change to the existing classification.

Once ECHA has adopted its opinion on the classification of glyphosate, EFSA will finalise its peer review and publish its conclusions (expected in late 2022).

From: https://echa.europa.eu/sv/-/glyphosate-eu-regulators-begin-review-of-renewal-assessments

• EPA USA: Sulfuryl Fluoride Re-Entry Mitigation

25 May 2021: Sulfuryl Fluoride Draft Interim Re-Entry Mitigation Measures, for residential use fumigations.

https://downloads.regulations.gov/EPA-HQ-OPP-2009-0136-0105/content.pdf (14 May 2021, 49 page pdf))

This EPA USA proposal to address human health incidents related to Sulfuryl Fluoride and the recommendations of the Office of Inspector General's (OIG) 2016 Report, "Additional Measures Can Be Taken to Prevent Deaths and Serious Injuries From Residential Fumigations" (No. 17-P-0053 & the Full Report (12 Dec 2016, 31 page pdf)). The scope of this mitigation is focused on the use of Sulfuryl Fluoride as a structural fumigant in residential use sites.

From: www.regulations.gov/document/EPA-HQ-OPP-2009-0136-0105

Editor: Sulfuryl Fluoride fumigation occurs in Australia.
See https://portal.apvma.gov.au/pubcris for 2 AU products

Dangerous Goods

• NTC: AU & NZ Emergency Response Guide Book 2021

The Australian and New Zealand Emergency Response Guide Book (ANZ-ERG). ANZ-ERG2021 (aligned to CANUTEC 2020) is expected to be published in September 2021.

The AERG is based on the CANUTEC Emergency Response Guide who have published an updated 2020 guidebook. In 2021, use of the AERG is also extended to New Zealand.

Download the Pre-Order form, complete and save it, and then send it back to DKirk@ntc.gov.au to pre-order your copies.

For questions, call Debra Kirk on (03) 9236 5086.

Cost per unit for pre-orders is $10+GST +Postage & Handling.

Ensure you submit your pre-orders by 31 August, 2021.

After then copies will be available at the Canprint retail price.

Pre-Order: www.ntc.gov.au/sites/default/files/assets/files/2021-07-20_ANZ-ERG2021_pre-order-form-FINAL1.pdf

Note: Electronic copies of the ANZ-ERG will be **free to download** from the NTC website, once the final document has been Approved by the Competent Authorities Panel

From: www.ntc.gov.au/codes-and-guidelines/australian-dangerous-goods-code

• 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)

• Eurotunnel's Dangerous Goods Guide 2021

Vehicles can carry Dangerous Goods in accordance with Eurotunnel's policy (Conditions of Carriage) at no extra cost.
www.eurotunnelfreight.com/uk/conditions-of-carriage/#adr

The carriage of Dangerous Goods must also comply with Eurotunnel's own regulations as described on their website, which are more stringent than those in ADR, to reflect the specific safety characteristics of the Channel Tunnel infrastructure. The carrier is responsible for ensuring that the goods being transported comply with these regulations

Eurotunnel's Dangerous Goods Guide 2021 (57 page pdf)
www.eurotunnelfreight.com/uploadedfiles/xnt/adr_2021_uk.pdf

From: www.eurotunnelfreight.com/uk/safety-and-security/dangerous-goods/

Alerted by AIDGC What's Happening June 2021

• Vic Review: Dangerous Goods Act 1985 & Regs

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

38 Public Submissions are now available as pdfs to download, which were submitted by the 30 Nov 2020

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).

From: https://engage.vic.gov.au/independent-review-dangerous-goods-act-1985-and-regulations

Editor: It is useful to read the Public Submissions to understand the various perspectives on the issues raised.

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

• EPA NSW: Dangerous Goods Signage Breach

12 Aug 2021: EPA NSW has fined Dangerous Goods transport company Days Logistics $4000 for not appropriately supervising one of its drivers to ensure safe and lawful transportation of Dangerous Goods. In addition, the driver was fined $400 for displaying false and misleading signage.

In Dec 2020 a member of the public observed a petrol tanker not carrying the proper warnings in the afternoon peak and notified the EPA NSW.

The tanker was carrying petrol at the time, but was instead displaying the words "Combustible Liquid", indicating it was not carrying Dangerous Goods.

From: www.epa.nsw.gov.au/news/media-releases/2021/epamedia210812-epa-fines-dangerous-goods-transporter-for-signage-breach

• Remaking Regul'ns for the NSW Explosives Industry

July 2021: The NSW Government is remaking the NSW Explosives Regulation 2013. The primary objective of the proposed Regulation is to provide legislative & administrative detail to support the operation of this NSW Act. They have 3 Options listed for achieving this objective.

NSW proposes to update the regulatory framework & introduce changes intended to enhance safety including:

– classifying desensitised explosives as explosive precursors

– new obligations for employers to be informed of suspended or cancelled security clearances and licences

– security clearance exemptions for NSW police officers

– clarifying storage requirements for firearms licence holders

– expanding the prohibition of certain loads of explosives being transported in NSW road tunnels.

The proposed changes are described in detail in the:

Regulatory Impact Statement (39 page pdf)

Draft Explosives Regulation 2021 (52 page pdf)

Feedback closes Sunday 22 Aug 2021.

From: www.haveyoursay.nsw.gov.au/explosives

• Vic Dangerous Goods (Explosives) Interim Regs 2021

16 June 2021: Statutory Rule number 56/2021. The Interim Regulations will expire on 21 June 2022, on the day which is 12 months after the first day on which any provision of the Interim Regulations come into operation.

Authorised version: 21-056sra
https://content.legislation.vic.gov.au/sites/default/files/2021-06/21-056sra%20authorised.pdf (9 page pdf)

The Vic Dangerous Goods (Explosives) Regulations 2011 (Expiring Regulations) expired on 21 June 2021. There was insufficient time to complete a RIS and remake the Explosive Regulations before they would sunset. The Interim Regulations ensure the continued regulation of the explosives industry and the risks of such catastrophic harms occurring are minimised while an independent review of the Dangerous Goods Act 1985 & associated Regs (Review) is considered.

From: www.legislation.vic.gov.au/as-made/statutory-rules/dangerous-goods-explosives-interim-regulations-2021

• SWA: Major Hazard Facility Operator Guides Survey

21 July 2021: Safe Work Australia is updating the SWA Guide Materials for Major Hazard Facilities (MHFs) and are seeking your views and feedback to help them improve these Guides. These 9 MHF Guides provide information to help MHF operators comply with MHF Regulations.

Please Note that this survey is **only** for the purposes of improving the current Guidance material.

The Survey is for: all MHF Operators &/or staff who have used any of the 9 MHF Guides to provide feedback to us. This also includes anyone who has been looking at the Guides for information ahead of notifying their regulator about potentially becoming an MHF.

Editor: And it may interest those managing Dangerous Goods.

If you wish to provide feedback for more than one Guide, you will need to submit the survey multiple times (1 for each guide).

- Developing Safety Case Outline
- Preparation of a Safety Case
- Demonstrating Adequacy of Safety Management and Control Measures
- Safety Management System
- Safety Assessment
- Notification and Determination
- Emergency Plans
- Information, Training and Instruction for Workers and Information for Visitors
- Providing Information to the Community

MHF Operator Survey for Review and Improvement of MHF Guides.pdf *(14 page pdf)*

From: https://engage.swa.gov.au/mhf-operator-survey?tool=survey_tool#tool_tab

• Worksafe Vic Safety Alert: Refilling Gas Cylinders

15 July 2021: WorkSafe Vic issued a **Safety Alert** about the **Hazards** associated with **refilling Liquid Petroleum Gas (LPG) cylinders**.

There have been two recent incidents involving the refilling of LPG cylinders (gas cylinders), from LPG dispensers, such as those LPG cylinders used in forklifts and barbeques.

Whilst only minor injuries were sustained in both incidents, they highlight the potential danger associated with filling gas cylinders from a LPG dispenser.

Filling of a portable gas cylinder at a service station vehicle LPG dispensing bowser is dangerous and prohibited. There is a risk of fire and explosion when gas cylinders are over-filled or when potential ignition sources such as static electricity, are not controlled.

From:
www.worksafe.vic.gov.au/safety-alerts/refilling-gas-cylinders

• WA DMIRS: New, Safer Gas Cylinder Connection

7 July 2021: Cylinders with LCC27 valves are available now and are compatible with appliances that use the current Type 21 POL appliance connectors.

From 1 Oct 2021, only gas cylinders with LCC27 valves will be available for sale or exchange. Owners of cylinders with Type 21 POL valves can continue using them until they are empty or reach their retesting date.

Also from 1 Oct 2021, appliances with the new LCC27 connection will be available for sale, but this fitting will not be mandatory until April 2022 for equipment used with leisure-size LPG cylinders. An appliance with an LCC27 connection is only compatible with a cylinder fitted with an LCC27 valve.

The new, built-in seal will help to avoid incidents such as a barbecue explosion in Tapping involving a gas leak from a missing O-ring, which may have been left in an old cylinder during an exchange.

From: www.commerce.wa.gov.au/announcements/get-set-new-safer-gas-cylinder-connection

• Spontaneous Combustion & Underground Coal Mining

March 2021: NSW Technical Reference Guide: Development of a Spontaneous Combustion Principal Hazard Management Plan for Underground Coal Mining Operations

NSW TRG - Development of a Spontaneous Combustion Principal Hazard Management Plan for Underground Coal Mining Operations [96 page pdf]

This Guide supersedes MDG 1006 Spontaneous Combustion Management Guideline and MDG 1006-TR Technical Reference for Spontaneous Combustion Management Guideline.

Spontaneous combustion describes the process of self-heating of coal by oxidation. After exposure by mining, coal undergoes a continuous exothermic Oxidation reaction when exposed to air.

A hazard exists when, in confined areas, the rate of heat accumulation due to Oxidation exceeds the rate of cooling by ventilation or environment (figure 1). The coal can then increase in temperature until combustion takes place leading to the emission of toxic and explosive gases together with propagation to open fire. The self-heating will then become a potential ignition source for an explosion if exposed to a flammable mixture of gas.

From: www.resourcesregulator.nsw.gov.au/safety-and-health/publications/technical-reference-guides

• IBC Unit Failure caused NZ Napier Port chemical spill

17 June 2021: A HAZMAT incident at the NZ Port of Napier was caused by the failure of a pallet tank unit, which held the substance, located inside (a transport) container.

Fire and Emergency New Zealand Hawke's Bay Assistant Area Commander Glen Varcoe said they found two damaged Intermediate bulk containers (also referred to as pallet tank units) carrying 1000 litres each of Styrene Monomer.

They had to unload the (transport) container, which held 18 units to access the two damaged ones, and clean and make the area safe once again.

Seven appliances, and about 30 firefighters were called to the scene throughout the day.

From: https://cdn.hbapp.co.nz/news/news/failure-of-pallet-tank-unit-revealed-as-cause-of-napier-port-chemical-spill

Alerted by AIDGC What's Happening June 2021

• FRV: Campbellfield Plastics Recycling Factory Fire

14 Aug 2021 6.20am: More than 30 FRV firefighters responded to a fire at a plastic recycling factory in Campbellfield. Upon arrival, crews found a stack of recycling materials in a waste compactor was well alight.

The fire was approximately 30 square metres in size, with flames five metres high. Crews successfully stopped the fire from spreading from the compactor, bringing the fire under control at 6.40am.

From: www.frv.vic.gov.au/crews-attack-fire-campbellfield-recycling-factory

• CFA: Be Aware of Therapeutic Wheat Bag Fire Risk

28 July 2021: The potential fire risks involved with heating and using therapeutic wheat packs.

Upon arriving on scene at a 2-storey home in Aspendale, breathing apparatus crews entered the smoke-filled house and located the wheat bag inside the microwave.

The wheat bag was quickly extinguished, & the fire was safely contained to within the microwave. Positive pressure ventilation was used to clear smoke from the 2-storey home.

Chief Officer Jason Heffernan said: "Wheat bags are a popular choice for keeping people warm, but they have been linked to some fires and burns." "The wheat bag was more than a year old and was being heated for a long duration." "Constant use can result in the reduction of the moisture content of the wheat, causing it to overheat and result in a fire or burns." The CFA "urge people to follow the manufacturer's instructions and not to overheat them." The smoke also did not reach the nearest smoke alarm in the home, so the CFA encouraged the homeowner to improve their smoke alarm placement by installing them in recommended locations."

The warning follows multiple interstate house-fire fatalities caused by wheat bags in recent years.

From:
https://news.cfa.vic.gov.au/be-aware-of-wheat-bag-fire-risk

• Firefighters battle Tesla Battery Fire near Geelong

CFA Fri 30 Jul 2021 at 2:36pm, updated at 6:43pm: CFA crews battled a Tesla battery fire at Moorabool, near Geelong. The fire started during testing of the Tesla battery set up on Friday morning at Geelong-Ballan Road and Atkinsons Road in Moorabool.

From: www.abc.net.au/news/2021-07-30/tesla-battery-fire-moorabool-geelong/100337488

Sat 31 July 2021: EPA Vic deployed air monitors to the Tesla Battery fire at Moorabool, near Geelong, after a request to attend by the Country Fire Authority Incident Controller.

From: www.epa.vic.gov.au/about-epa/news-media-and-updates/news-and-updates/epa-deploys-air-monitors-to-moorabool-fire

CFA Vic Update at 09.30am on 2 August, 2021: The fire had subsided significantly but was not yet under control. Crews had remained on scene overnight and continued thermal temperature checks to see how much heat remained internally behind the doors.

From: *https://news.cfa.vic.gov.au/firefighters-battle-large-battery-fire-near-geelong*

• UK's Giant Battery 'farms': Fears of Explosions

Explosions "that can reach temperatures of 660C" – "with one expert calling them 'potential bombs'".

Daily Mail UK, 11 July 2021: Facilities contain huge batteries storing electricity for the National Grid – a new form of crop for farmers scrambling to cash in on the 'green' energy revolution

- New Report from leading physicists says vast batteries amount to electrical bombs with force of many hundreds of tons of TNT

- Wade Allison, emeritus professor of physics at Oxford University: 'It's like a potential bomb. When batteries catch fire, you can't just squirt water on them'

- MoS has identified nearly 400 battery sites, from Newquay to the Scottish Highlands, which are operational or developing

https://www.dailymail.co.uk/news/article-9775467/UKs-battery-farms-spark-fears-explosions.html

Alerted by: AIDGC What's Happening July 2021

• NCEC Webinars – Hazmat Incident Management

Hazmat incidents are low frequency but high risk. When responding to such incidents, responders often get limited time to make life or death decisions. Through our liaison with first responders, we know that there can be a lack of a structured logical approach to implement at such incidents, which combined with limited training and exercising opportunities mean that responders can struggle to deal with hazmat incidents, especially when compared to other more common incident types.

The subject matter experts at the NCEC Hazmat Academy, most of them ex-first responders themselves, have developed a structured 'eight phase approach to incident scene management'. This approach is formed to dispel the myth that hazmat is a dark art and to simplify response to an incident involving hazardous materials, bringing it to a successful conclusion. These eight phases cover everything from pre-planning for a hazmat incident and tactical planning, the implementation of a tactical plan, dealing with priority rescues with limited resources, through to closing it down and post incident considerations covering crew welfare, the importance of debriefing, and sharing the lessons learnt.

Webinar Series: You only have to register once for this Free Series, and the NCEC Hazmat Academy will send you a reminder before every webinar. This virtual series is completely free to attend and they welcome as many participants from your organisation as you would like.

Before each phase they will do a recap of the phase before, however, previous phases are all available to view at:

https://the-ncec.com/en/resources/eight-phase-approach-to-incident-scene-management

It is recommended to watching the previous phases, if you haven't already, to ensure you can fully follow the next phase.

Tues,	3 Aug 2021 7:00pm - 8:00pm AU AEST	(video)
Tues,	7 Sept 2021 7:00pm - 8:00pm AU AEST	(webinar)
Tues,	5 Oct 2021 8:00pm - 9:00pm AU AEDT	(webinar)
Tues,	2 Nov 2021 9:00pm - 10:00pm AU AEDT	(webinar)

https://register.gotowebinar.com/register/6305713894521084939?source=JOIFF&campaignkw=webinar Free

Alerted by the AIDGC What's Happening 30 June 2021

Environmental Notes on Chemicals

• NSW Plastics Action Plan – 4 Outcomes Needed

15 June 2021: The NSW Plastics Action Plan sets out the first six actions to achieve four long term outcomes to better manage plastics and reduce the impact they have on the environment.

These actions address each point in the lifecycle of plastics - from production and consumption through to disposal, recovery and recycling.

Outcome 1: Reduced Plastic Waste Generation

Outcome 2: Make the Most of our Plastic Resources

Outcome 3: Reduced Plastic Leakage

Outcome 4: Improved Understanding of the Future of Plastics

From: www.epa.nsw.gov.au/news/news/2021/nsw-waste-strategy-and-plastics-plan-announced

From: www.dpie.nsw.gov.au/our-work/environment-energy-and-science/plastics-action-plan

13 June 2021:
DPIE NSW: $356 million to tackle Plastics and Waste

Small businesses will be supported to transition to new products before the phase-outs come into effect. Exemptions will also be available for members of the community who rely on particular single-use plastics for disability or health needs.

A NSW Statewide education campaign will be rolled out to provide households with clear information on how to get onboard with the new waste programs, and learn how to properly dispose of their food and organic waste.

From: www.dpie.nsw.gov.au/news-and-events/articles/2021/$356-million-to-tackle-plastics-and-waste

• Hobart: Bans Some Single-Use Plastic Food Packaging

1 July 2021: Hobart City now has a by-law that bans certain single-use plastic food packaging, which will be enforceable from 1 July 2021. The By-Law is designed to reduce plastic litter and waste going to landfill.

Single-Use Plastics By-Law (9 page pdf)

Single-Use Plastics By-Law Info Sheet 2021 (2 page pdf)

Not allowed: Plastic cutlery; Sauce sachets (e.g. tomato, soy, tartare); Plastic takeaway food containers and lids; Takeaway plastic straws; Plastic lined noodle boxes; Plastic lined coffee cups; Plastic lids on takeaway cups; Plastic sandwich wedges.

From: www.hobartcity.com.au/Business/Food-and-beverage-businesses/Single-use-plastics-by-law-information

• Qld: Supply of Some Single-Use Plastic Items Banned

From 1 Sept 2021: Supply of single-use plastic straws, stirrers, plates, bowls, cutlery and expanded polystyrene takeaway food containers & cups will be banned in Qld.

Single-Use Plastic Items Ban Fact Sheet (2 page pdf)
Single-use plastic items not included in the ban are also listed.

Single-Use Plastic Items Ban A3 Poster (1 page A3 pdf)

Those with disability or healthcare needs can still access them.

From: www.qld.gov.au/environment/pollution/management/waste/recovery/reduction/plastic-pollution/single-use-plastic-products-ban/about

• Western Australia's Plan for Single-Use Plastics

June 2021: The single-use nature of many plastics applications contributes to a **"wasteful, take-make-dispose economy"**.

Feedback on the Let's not draw the short straw – reduce single-use plastics issues paper (published in April 2019), indicated there is strong community support for action to reduce the impacts of single-use plastics.

The WA Plan for Plastics will be delivered over the short-term (end of 2021) and medium-term (by the end of 2022, and will be complemented by voluntary approaches.

Many single-use plastic or disposable items (to be banned by the end of 2021) (and are listed on the website below; and include Helium Balloon Releases).

Medium-term bans (to be introduced by the end of 2022) (also have the plastic items listed on the website below).

From: Implementing Stage 1 of WA's Plan for Plastics - Stakeholder information paper (July 2021, 15 page pdf)

From: www.wa.gov.au/service/environment/business-and-community-assistance/western-australias-plan-plastics

• UNEP: Turning the Tide on Marine Plastic Pollution

12 July 2021: More countries are joining the *Clean Seas* campaign to fight against marine litter & plastic pollution. *Over 60 countries* - both coastal & landlocked - have signed up to this global movement with ambitious pledges & commitments.

Many have pledged to reduce or eradicate Single-Use Plastics from their societies through stronger legislation and regulation. Others have committed to invest more in national recycling facilities and promote action plans to prevent harm to the coastal and marine environment.

The next phase of Clean Seas is expanding on the *Source-To-Sea Approach* focusing on the root cause of marine plastic, which mainly comes from the land-based sources and works its way to the sea through lakes, rivers, and waterways.

From: https://www.unep.org/news-and-stories/story/how-countries-are-turning-tide-marine-plastic-pollution

• ECHA Podcast: PFAS Chemicals Discussion

Interview with Bjorn Hansen, ECHA's Executive Director.

Audio Podcast: How is the EU making sure PFAS chemicals don't stick around? Where exactly are PFAS used, what are the concerns and what is the EU doing about them?

Podcast Link: https://echa.europa.eu/documents/10162/6941603/140420_pfas_interview_bjorn_hansen_podcast.mp3/8e924c82-cfd4-a682-5310-3c10eb50ce2a?t=1586875589868 (20 min)

From: https://echa.europa.eu/hot-topics/perfluoroalkyl-chemicals-pfas

• ECHA Draft Restriction: PFHxA, Salts & Related

9 June 2021: ECHA RAC & SEAC Draft Opinion proposing restrictions on: **Undecafluorohexanoic Acid (PFHxA)**, its Salts & related substances.

Consultation from 7 July to **7 Sept 2021**

ECHA RAC & SEAC Draft Opinion (112 page pdf)

ECHA RAC & SEAC Draft Opinion Info Note (14 page pdf)

Prepared by: ECHA Committee for Risk Assessment (RAC) and the Committee for Socio-economic Analysis (SEAC)

From: https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e18323a25d

• CSIRO: Carbon Dioxide CO_2 Utilisation Roadmap

13 Aug 2021: CCU technologies capture CO2 from the waste streams of industrial processes, or directly from the atmosphere, and convert it into useful new products, ranging from synthetic fuels to food and beverages, chemicals, and building materials.

There are a range of industries that are difficult to de-Carbonise with renewable technologies (replacement) alone. These industries often rely on fossil fuels as a building block for thousands of everyday Carbon-based products such as plastics, aviation fuel and chemicals. Others have Carbon Dioxide (CO_2) emissions inherent in their processes, such as when making steel and cement.

To reduce emissions from these industries we need to consider every method and tool available, one such tool is Carbon Capture and **Utilisation** (CC**U**).

Executive Summary (16 page pdf)

Main Report PDF (6 MB) (126 page pdf)

From: www.csiro.au/en/news/News-releases/2021/New-CSIRO-Roadmap-highlights-opportunity-for-Australia-to-lead-in-carbon-capture-and-utilisation

And: www.csiro.au/en/work-with-us/services/consultancy-strategic-advice-services/CSIRO-futures/Futures-reports/CO2-Utilisation-Roadmap

Editor: This about building the technology to chemically convert CO_2 into organic and inorganic compounds.

Not by the luck of injecting it underground in the hope it re-mineralises as a Carbonate.

• EPA Vic: Waste Tracker since 1 July 2021

Waste Tracker is a new system to track Reportable Priority Waste. This system replaces waste transport certificates.

Waste Tracker will allow EPA Vic 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.

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

Editor: From discussions with technical colleagues there is significant work needed to get Dangerous Goods wastes managed appropriately using Waste Tracker.

• EPA Vic: Guides Updated in June to Aug 2021

1967.2: Waste Code Transition to Environment Protection Vic Regulations 2021 (22 page pdf, 11 June 2021)

1968.1: Guide to Classifying Industrial Waste (33 page pdf, 12 Aug 2021)

1819.1: Agriculture - Guide to Preventing Harm to People and the Environment (42 page pdf, 6 July 2021)

1820.1: Construction - Guide to Preventing Harm to People and the Environment (37 page pdf, 6 July 2021)

1822.1: Manufacturing - Guide to Preventing Harm to People and the Environment (39 page pdf, 6 July 2021)

1823.1: Mining and Quarrying - Guide to Preventing Harm to People and the Environment (44 page pdf, 6 July 2021)

1824.1: Retail - Guide to Preventing Harm to People and the Environment (38 page pdf, 6 July 2021)

1825.1: Waste and Recycling - Guide to Preventing Harm to People and the Environment (42 page pdf, 6 July 2021)

1990.1: Managing Industrial Waste – Your Duties as a Waste Producer (38 page pdf, 9 July 2021)

1991: Responding to Harm caused by Pollution (17 page pdf, 10 June 2021)

2010: Potentially Contaminated Land – A Guide for Business (25 page pdf, 12 July 2021)

From: www.epa.vic.gov.au/about-epa/publications

• EPA Vic Draft: New Air Quality Guidance

7 June 2021: EPA Vic's draft "Guideline for Assessing and Minimising Air Pollution in Victoria", is to help businesses to understand, assess and minimise the risk from air emissions.

The new Guideline (to be published by late 2021) will provide:

- a framework for assessing risks to the environment and human health from air emissions
- new air quality assessment criteria which replaces the design criteria in the State Environment Protect Policy for Air Quality Management (SEPP AQM)
- guidance on how to minimise air emissions and manage any remaining risks.

Draft Guideline for Consultation - Publication 1961:
https://engage.vic.gov.au/download_file/view/47387/5679
(103 page pdf)

It is a technical Guideline for air quality practitioners and specialists with a role managing pollution discharges to air.

Feedback Closed: 19 July 2021

From: https://engage.vic.gov.au/new-environmental-laws/guideline-assessing-and-minimising-air-pollution-victoria

And: www.epa.vic.gov.au/for-business/new-laws-and-your-business/new-air-quality-guidance

• EPA Vic: Lemon Springs Illegal Waste Clean Up

28 June 2021: Approximately 200 tonnes of (chemical) waste now been removed and taken to appropriately licensed disposal sites.

More groundwater wells were installed in June as part of the extensive monitoring program. Monitoring to date has not found any contamination.

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

19 Aug 2021: Drone Aerial Video. The video provides aerial vision of the excavation of the site. Shot by drones, it's the first time EPA Vic has been able to release vision of the site and clearly shows the scale of the clean up challenge.

https://youtu.be/c-XGQmn1IjE (2 min 25 sec)

The EPA Vic estimate 3000–9200 m^3 of solid and liquid waste have been buried on the property.

The site remediation works are continuing to progress well, with a second excavation site nearing completion. More than 400 tonnes of waste has been removed from the site to EPA Vic Licensed Facilities.

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

Video from: www.epa.vic.gov.au/for-community/incidents/illegal-dump-site-south-of-kaniva

• EPA Vic: Campbellfield MRI e-Waste Facility Fire

16 July 2021: EPA Vic has laid more charges over Campbellfield MRI e-waste facility fire in August 2020

EPA Vic has laid 24 additional charges over the 2020 fire and e-waste stockpiling breaches at a premises in Sydney Rd Campbellfield.

The EPA Vic alleges that they caused pollution of the atmosphere and the waters of Merlynston Creek and Foden Reserve as a result of a fire on 9 August 2020.

Also that they contravened the requirement to 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-more-charges-over-campbellfield-mri-e-waste-facility-fire

• UNEP: X-Press Pearl Shipping Disaster

22 July 2021: Inside the X-Press Pearl Shipping Disaster gripping Sri Lanka: Oil, Acid, Plastic toxic spill

The fuel oil leaking from the X-Press Pearl, a Singapore-flagged cargo ship that caught fire and sank off Sri Lanka's western coast in early June 2021; is visible in satellite images from just off Sri Lanka's coast: a thin grey film that snakes three kilometres out to sea before disappearing into the waves.

The slick is a visceral reminder of what observers say is a slow-motion environmental disaster – one of the worst in the country's history – and of the mammoth effort that will be needed to clean it up.

UNEP experts are advising Sri Lanka's government on how to contain the toxic fallout from the X-Press Pearl, which was carrying 81 containers of dangerous goods when it sank in June, according to its owner, X-Press Feeders. The ship's cargo included 25 tonnes of nitric acid, 348 tonnes of oil and, according to independent estimates, up to 75 billion small plastic pellets known as nurdles that has created a pollution crisis—one that could plague Sri Lanka for years.

From: www.unep.org/news-and-stories/story/oil-acid-plastic-inside-shipping-disaster-gripping-sri-lanka

• SMH: Woodside Hits out at Rig Clean-Up Levy

18 July 2021: Woodside has criticised a levy slapped on all offshore oil and gas producers to recoup costs of cleaning up a rig formerly owned by the company, widening the rift between the Federal Government and industry over the decommissioning process.

Ownership of the now defunct Northern Endeavour production vessel, permanently moored 550 kilometres offshore from Darwin in the Timor Sea, went to the Commonwealth in 2019.

Northern Endeavour's new owner, Northern Oil and Gas Australia (NOGA), entered liquidation after the industry regulator shut down production in Feb 2020 owing to unacceptable risks of worker deaths on the rusting vessel.

Federal Resources Minister Keith Pitt has said taxpayers would not foot the clean-up bill, and he imposed a levy on the entire industry of 48¢ a barrel, payable from 1 July 2021.

It is expected to cost industry about $367 million a year and the Northern Endeavour clean-up, which is out for tender, has been estimated to cost up to $1 billion.

From: www.smh.com.au/politics/federal/woodside-hits-out-at-rig-clean-up-levy-as-industry-rift-with-government-widens-20210715-p58a20.html

• CEFIC: Circular Economy & William McDonough

13 July 2021: American architect William McDonough and German chemist Michael Braungart made a detailed case for the circular economy in a book they co-authored called Cradle to Cradle: Remaking The Way We Make Things, published in 2002. The book has since spawned the California-based Cradle to Cradle Products Innovation Institute that certifies products across five attributes – material health, circularity, renewable energy, water stewardship and social fairness.

As the cost of raw materials rises, the business case for re-using resources is becoming stronger. The main point of Cradle to Cradle is that "our raw materials are still here," McDonough explains. "To circulate [a material] again properly is like doubling the size of the economy, in terms of the material flowing through it, but you don't have to get it from original sources—they have become re-sources."

From: https://cefic.org/media-corner/newsroom/what-goes-around-comes-around/

• CEFIC: A Clean Hydrogen Economy is Coming

28 June 2021: The EU Chemicals Industry is a frontrunner in the clean Hydrogen economy. The consumption of clean Hydrogen in the EU Chemical Industry (excluding Ammonia and energy use) is expected to be around 270,000 tonnes/year by 2026, the European Commission estimates.

This is more than 50% of the current Hydrogen consumption in the EU chemicals industry. Together with the Ammonia producers, the chemical sector is projected to be one of the EU industrial champions in the use of clean Hydrogen. Other sectors which will be big consumers of clean Hydrogen include refining, production of electricity-based fuels and the steel sector.

European Commission Clean Hydrogen Alliance.
At: https://ec.europa.eu/growth/industry/policy/european-clean-hydrogen-alliance_en

From: https://cefic.org/media-corner/newsroom/the-eu-chemicals-industry-is-a-frontrunner-in-the-clean-hydrogen-economy/

• Sustainability Whitepaper: Ammonia / H_2 as Marine Fuel

Ammonia (NH_3) is identified as a zero-carbon fuel that can enter the global market relatively quickly and help meet the GHG reduction target for 2050 set by the IMO. Ammonia offers ship owners and operators a zero-carbon tank-to-wake emissions profile, regardless of the source of the fuel.

From: https://absinfo.eagle.org/acton/media/16130/sustainability-whitepaper-ammonia-as-marine-fuel (Oct 2020, 28page pdf)

Hydrogen (liquefied LH_2 , or gaseous H_2) was identified as a low- to zero-carbon fuel that can help meet the IMO GHG reduction target for 2050. Hydrogen offers ship owners and operators a low-carbon and low-emission fuel option for potential use in internal combustion engines and fuel cells.

From: https://absinfo.eagle.org/acton/media/16130/hydrogen-as-marine-fuel-whitepaper (June 2001, 36 page pdf)

Editor: To access these documents you need to supply details.

• Hydrogen-Fired Gas Turbines vs. Lithium-Ion Storage

14 July 2021: According to a new study from the Massachusetts Institute of Technology, hydrogen-fired gas plants will compete with lithium-ion storage for seasonal storage and their competitiveness will strictly depend on the heat rate of the gas power plants they may replace.

Scientists at the Massachusetts Institute of Technology (MIT) have conducted analysis to assess the potential competition between Hydrogen-fired gas plants and large scale Lithium-Ion storage in the role of replacing gas-fired thermal power plants in the United States, and have found that Lithium-Ion batteries may be the most efficient solution in terms of costs, although Hydrogen may represent a viable alternative in certain cases.

From: www.pv-magazine.com/2021/07/14/hydrogen-fired-gas-turbines-vs-lithium-ion-storage/

Alerted by AIDGC What's Happening July 2021

• C&EN: Is Ammonia the Fuel of the Future?

8 March 2021: Today's crisis is climate change. This time, ammonia could come to the rescue by capturing, storing, and shipping hydrogen for use in emission-free fuel cells and turbines. Efforts are also underway to combust ammonia directly in power plants and ship engines.

The Four Ammonias

The Ammonia industry has informally adopted a colour scheme to describe the carbon intensity of the different methods for making ammonia. The system also applies to hydrogen.

Grey: Also called brown Ammonia, this is conventional Ammonia that has been made the same way for 100 years. The Haber-Bosch process, responsible for nearly all of the world's 180 million t of annual ammonia production, reacts Hydrogen and atmospheric Nitrogen. The Hydrogen often comes from the steam reformation of Methane, a process that emits CO2.

Blue: Blue Ammonia is conventional Ammonia for which by-product CO2 has been captured and stored, reducing climate impact compared with grey Ammonia. Many fertilizer makers have embarked on such projects in recent years. Blue Ammonia is controversial and in need of industry standards. Using CO2 for enhanced oil recovery, for example, isn't as environmentally beneficial as injecting it into the ground permanently.

Green: Green ammonia is made with hydrogen that comes from water electrolysis powered by alternative energy. Projects abound, though most are on a modest scale of tens of thousands of tons, an order of magnitude smaller than a typical ammonia plant. A massive project in Saudi Arabia, however, aims to make more than 1 million metric tons of ammonia per year.

Turquoise: This process uses pyrolysis to convert methane into pure carbon and hydrogen, which is reacted with nitrogen to make ammonia. The industry thinks of turquoise ammonia as somewhere between green and blue. A prominent project is Monolith Materials' carbon black plant in Nebraska.

https://cen.acs.org/business/petrochemicals/ammonia-fuel-future/99/i8

C&EN Weekly Newsletter Chemistry Matters 8 Mar 2021

Alerted by the AIDGC What's Happening 30 June 2021

• EPA WA: Rare Earths Processing Facility Proposal

9 June 2021: Lynas Kalgoorlie Pty Ltd, (part of Lynas Rare Earths Ltd) proposes to develop a new Rare Earths Processing Facility at Yilkari, near the town of Kalgoorlie.

The proposed facility will process Rare Earth Concentrate produced at the Mt Weld Mine near Laverton to produce a Rare Earth Carbonate for export. *Comment closed 7 July 2021*

From: https://consultation.epa.wa.gov.au/open-for-submissions/lynas-kal-rare-earths-per/

Supporting information part 1.pdf (500 page pdf)

Supporting information part 2.pdf (575 page pdf)

And: www.epa.wa.gov.au/proposals/lynas-kalgoorlie-rare-earths-processing-facility

• Degradation of Synthetic Polyesters Biological Toolbox

2 July 2021: Microorganisms, like bacteria and fungi, are becoming an emerging resource for the development of eco-sustainable plastic degradation and recycling processes. In this study, the rumen content from cattle (Bos Taurus) was investigated regarding synthetic Polyester hydrolyzing enzymes based on the fact that the diet of ruminants may contain natural plant Polyesters.

Previous studies from our Group in (Vienna, Austria) and others have demonstrated the potential of enzymes for the hydrolysis of Poly(Ethylene Terephthalate) (PET), the most important synthetic Polyester used in numerous applications including textiles and packaging.

The rumen microbial community has demonstrated the ability to degrade three different synthetic polyesters (PET, PBAT, and PEF) as demonstrated by quantification of solubilized molecules and SEM analysis of surface erosion. In nature, Polyester-Hydrolyzing activity of rumen microbes may be involved in the digestion of polyesters, such as Cutin present in the diet of ruminants. Among the bacteria, fungi and archaea identified in this study by microbial community analysis as two of the most abundant species have been described to produce enzymes potentially capable of Polyester hydrolysis.

From:
www.frontiersin.org/articles/10.3389/fbioe.2021.684459/full

Standards & Codes

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

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

ISO/TR 22293:2021. Evaluation of methods for assessing the release of nanomaterials from commercial, nanomaterial-containing polymer composites. Published: 13 July 2021. 70 pages. Hardcopy $335.45. pdf $436.07 (3 users).

DIN 19693:2021-07. Devices for water treatment - In-situ generation of biocides - Active chlorine generated from sodium chloride by electrolysis (German language). Published: 1 July 2021. 32 pages. Hardcopy $200.41. pdf $149.15 (1 user).

DIN CEN/TS 17627:2021-07. Plastics - Recycled plastics - Determination of solid contaminants content; German version CEN/TS 17627:2021 (German language). Published: 1 July 2021. 19 pages. Hardcopy $137.84. pdf $102.64 (1 user).

• 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 (at 31 July 2021)

The 31 July 2021 Spreadsheet includes:

Safety in Laboratories (Part 1, Part 3, Part 5); Road tank vehicles for dangerous goods (Part 4, Part 5; Supplement to Explosive Atmospheres Part 10.1.

Selection and Use of Emergency Procedure Guides for the transport of dangerous goods – plus a range of EPGs are being updated (e.g. Hydrofluoric Acid; Corrosive Substances; Polymeric Beads, Expandable; Division 4.1 Substances – Flammable Solids; Division 4.2 Substances - Substances liable to Spontaneous Combustion; Division 4.3 Substances – Substances Dangerous When Wet; Class 5 Substances - Oxidizing Agents; Part 5.1.005 Hydrogen peroxide (various); Class 5 substances - Organic Peroxides, & Temperature Controlled; Sodium Cyanide, Potassium Cyanide; Toluene Diisocyanate (TDI); Cyanides, inorganic; Hydrochloric Acid (& Solution); Hypochlorite Solution; Vehicle Fire; Liquefied Petroleum Gas (LP Gas); Ethylene Oxide or Ethylene Oxide with Nitrogen; Oxygen; Chlorine; Non-Flammable, Compressed Gas; Aerosols; Compressed and Liquefied Gases - Mixed Load of Gases in Cylinders; Formaldehyde Solution, Flammable; Petrol (as Cargo); Flammable Liquids and Flammable Liquids of a Lesser Hazard; Class 2 Substances - Flammable, Compressed Gas).

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 ISO 22453:2021 Exchange of information on rare earth elements in industrial wastes and end-of-life cycled products. Pub: 21 June 2021, 16 pages, Hardcopy NZ$267.73 (+postage); pdf NZ$267.73

BS ISO 22608:2021 Protective clothing. Protection against liquid chemicals. Measurement of repellency, retention, and penetration of liquid pesticide formulations through protective clothing materials. Pub: 6 July 2021, 22 pages, Hardcopy NZ$267.73 (+postage); pdf NZ$267.73

BS EN ISO 19918:2017+A1:2021 Protective clothing. Protection against chemicals. Measurement of cumulative permeation of chemicals with low vapour pressure through materials. Pub: 7 July 2021, 26 pages, Hardcopy NZ$371.63 (+postage); pdf NZ$371.63

ISO 19749:2021 Nanotechnologies — Measurements of particle size and shape distributions by scanning electron microscopy. Pub: 5 July 2021, 71 pages, Hardcopy NZ$280.01 (+postage); pdf NZ$280.01

BS ISO 19749:2021 Nanotechnologies. Measurements of particle size and shape distributions by scanning electron microscopy. Pub: 19 July 2021, 80 pages, Hardcopy NZ$559.44 (+postage); pdf NZ$559.44

ISO 23517:2021 Plastics - Soil biodegradable plastic materials for mulch films for use in agriculture and horticulture - Requirements and test methods regarding biodegradation, ecotoxicity and control of constituents. Pub: 23 July 2021, 25 pages, Hardcopy NZ$185.62 (+postage); pdf NZ$185.62.

ISO 1043-4:2021 Plastics - Symbols and Abbreviated Terms - Part 4: Flame Retardants. Provides uniform symbols for Flame Retardants added to plastics materials. Pub: 27 July 2021, 5pages, Hardcopy NZ$59.78 (+postage); pdf NZ$59.78.

ISO/TS 23034:2021 Nanotechnologies — Method to estimate the in-vitro cellular uptake of carbon nanomaterials (from liquid dispersions) using optical absorption. This is a simple method to screen carbon nanomaterials uptake. Pub: 5 Aug 2021, 25 pages, Hardcopy NZ$185.62 (+postage); pdf NZ$185.62.

NZS 8409:2021 Management of Agrichemicals. Objective of this Standard is to provide practical and specific guidance on the safe, responsible and effective management of agrichemicals, including plant protection products (such as herbicides, insecticides, fungicides), veterinary medicines, fumigants used in rural situations and agricultural use. Pub: 17 Aug 2021, 246 pages, Hardcopy NZ$150.00 (+postage); pdf NZ$135.00.

PAS 510:2021(BSI) Plastic pellets, flakes and powders. Handling and management throughout the supply chain to prevent their leakage to the environment – Specification. This PAS builds on the groundwork laid by Operation Clean Sweep® by creating a standardized and consistent approach to risk management and containment of pellets. In order to prevent loss to the environment across the supply chain. Pub: 31 July 2021, 30 pages, Hardcopy NZ$-Free (+postage); pdf NZ$Free (you will need to create a Stds NZ Account)

Download a copy of the NZ Stds July 2021 Work Program: https://www.standards.govt.nz/assets/documents/work-programme/Work-Programme-2021-07.pdf (7 page pdf)

e.g. NZS 8409:2004 Management of Agrichemicals; Public Health & Safety Sector, C'tee: P8409 Drafting Stage; Expected Public'n: 30 Aug 2021; By: Standards New Zealand

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/NFPA-News

New Projects and Draft Documents:
Fire Protection of Cannabis Growing and Processing Facilities

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

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

• Effects of Pharmaceuticals in Aquatic Environments

25 Aug 2021, 2.30-4.30pm AU EST: EPA Vic in presenting a Seminar in their Environmental Science Series to learn about Effects of Pharmaceuticals in Aquatic Environments.

The Seminar is to help us learn how science is increasing our understanding on what pharmaceuticals are doing to our aquatic environments, and what our increased consumption of them means for the future.

Free to attend, but you will need to **Register before**.
You will then be sent an email to use to log into the Seminar.

From: www.eventbrite.com.au/e/effects-of-pharmaceuticals-in-aquatic-environments-tickets-164444543055?aff=epawebsite
Also: www.epa.vic.gov.au/for-community/get-involved/events/environmental-science-series-effects-of-pharmaceuticals-in-aquatic-environments

• ACTRA: Advances in Risk Assessment - Virtual

25-27 Aug 2021: Advances in Risk Assessment: Petroleum Toxicology and Neurotoxicology. 13th ACTRA Annual Scientific Meeting (Thurs & Fr); & Continuing Education Day (Wed 25th).

Due to the ongoing coronavirus situation: Now fully Virtual. Conference delegates will also receive on-demand access to all conference content and resources after the event.

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

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

• Dangerous Goods Operations & Haz. Materials 2021

25-27 Aug 2021: (**Virtual**, Aust): Dangerous Goods & Haz Substances Event focusing on operational excellence through technical analysis, operational insights and safety training.

Cost per Delegate: AU$1574 (*Note: Consultants etc pay more*)

From: www.marcusevans-conferences-australian.com/marcusevans-conferences-event-details.asp?EventID=26483&SectorID=42#.YQ9xTaquapp

• CHCN Discuss/Chat Combined Meeting 22 Sept 21

Chemical Hazard Communication Network Discuss/Chat meeting, **22** or **23 Sept 2021,** will (hopefully) be a combined Physical Meeting and Zoom Meeting between 5.45 pm to initially meet up & then run between 6.00pm and 8.00pm and tidy up by 8.15pm, at a Community Centre Meeting Room in the City of Port Philip (to Covid Rules) (probably Middle Park).

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 my 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.

• NCEC Webinars – Hazmat Incident Management

Sept / Oct / Nov 2021: The subject matter experts at the NCEC Hazmat Academy, most of them ex-first responders themselves, have developed a structured 'eight phase approach to incident scene management'.

Before the next phase they will do a recap of the phase before, however, previous phases are all available to view at:

https://the-ncec.com/en/resources/eight-phase-approach-to-incident-scene-management

It is recommended to watching the previous phases, if you haven't already, to ensure you can fully follow the next phase.

Tues, 7 Sept 2021 7:00pm - 8:00pm AU AEST

Tues, 5 Oct 2021 8:00pm - 9:00pm AU AEDT

Tues, 2 Nov 2021 9:00pm - 10:00pm AU AEDT

https://register.gotowebinar.com/register/6305713894521084939?source=JOIFF&campaignkw=webinar (Free)

• ECHA: Safer Chemicals Conference 2021

6 Oct 2021 (10am EU EST to 5.30pm EU EST): Join the ECHA free online conference for latest insights and updates, supporting companies on the path to sustainability.

Meet ECHA at interactive sessions, network with peers & visit the virtual exhibition for best practice and advice.

Free Online Conference: The platform fits 2500 participants.

From: https://echa.europa.eu/sv/-/safer-chemicals-conference

Register: https://hopin.com/events/echa-safer-chemicals-conference-2021?code=uH3ZTkaaj7WKORZWTCUzZag2y

Editor: I assume that sessions will be available to viewed after.

• AIDGC Conference 25th Feb 22 West Ryde & Webinar

To be at West Ryde (Sydney) Location & a Webinar

Also a **Battery Hazards Workshop on Thurs 24th Feb 2022**.

Details and cost will become available on the AIDGC website links below. The least expensive option is to become an AIDGC member and include the Conference. The previous Conference location is no longer available due to Covid-19.

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

• DGAG Discuss/Chat Combined Meeting 17 Nov 21

Dangerous Goods Advisory Group Discuss/Chat meeting, **Wed 17th Nov 2021** will (hopefully) 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 a Community Centre Meeting Room in the City of Port Philip ***OR*** at another central venue (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.

• RACI: GHS 7 Advanced Classification, Later 2021

Due to Covid-19 Lockdowns, this event has been delayed until Later in 2021, as attendees currently have other priorities.

To attend you need to have done **Activity 1 or equivalent.**

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

Activity 2: Advanced Classification according to the GHS and using Classifications for preparing SDSs and Labels.

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 (for Activity 1: SDS "Basics" Training

https://raci.org.au/RACI/Web/Event_Display.aspx?EventKey=HSD1219 (for Activity 2: GHS 7 Advanced Classification)

• AIOH: 2021 Scientific (Face-to-Face) Conference

27 Nov – 1 Dec 2021: Conference **Theme** is **"Challenge for Change"** which was selected due to the nature of 2020/21, which communicates, transforming Challenges into positive Change Opportunities.

Keynote Speaker: Dr Norman Swan Mbchb, Frcp, Dch, Md (Hon Causa). Multi award-winning, health and medical broadcaster and communicator.

Registration Brochure: https://online.fliphtml5.com/wrehk/lqcv/ *(18 webpage document, then print as 150% landscape pdf)*

Conference Mon-Wed. 3 Dinners. Cost: $1900 Non-member. $2475 Late (from 1 Oct 21) Non-member

From: www.aioh.org.au/events-public/2021-conference

• 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 (Melb, 14 Sept 2021)

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 AICIS, 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. May 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 20th August 2021

Description of Supply
Please start my subscription to Hazmat & Environment Notes from the **June-July-August 2021 Newsletter**.

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