

Hazardous Chemicals	2	•WA Info Sheet: Storage & Handling of Hydrogen	12
•ECHA: Registry of Restriction Intentions to 10 Dec	2	•IATA 2022 Lithium Battery Guidance Document	13
•ECHA Current Consultation Calls for Comment	2	•DOT USA: Lithium Battery Guide for Shippers	13
•GB Mandatory (Chemical Hazard) Classifications	2	•ES Vic: Big Battery Fire & Cooling System Leak	13
•WorkSafe NZ: Methyl Bromide Exposure Investigation	2	•Warehouse & Aluminium Plant Fire: Kurri Kurri NSW	13
•DPI NSW: Prevent Battery Lead Poisoning in Cattle	2		
•Canadian Chemicals Management Plan Website	3		
Chemical Management	3	Environmental Notes on Chemicals	14
•ECHA: Plastic Waste Chemical Recycling - REACH	3	•Progress of IChEMS in 2022	14
•ECHA: Assessments of Groups of Chemicals	3	•EPA NSW: Single Use Plastics End is Near	14
•SWA: Respirable Crystalline Silica from Engineered Stone	3	•AWE: Export Ban on Whole Baled Waste Tyres	14
•WorkSafe Vic: Engineered Stone Business Licence	3	•Env NZ: Stewardship of Tyres and Large Batteries	14
•SWA: Exposure Standards Database - missing Notes added	3	•Battery Recycling when EV Batteries Die: Issues	15
•DMIRS WA: WHS Act and Regulations due in 2022	4	•Electric Cars & Home Li Batteries Waste Problem	15
•WA WHS Laws Videos and Webinars	4	•AU B-cycle Battery recycling Stewardship Scheme	15
•EPA NZ: Hazardous Substances Update Oct 2021	4	•ECHA: Chemical Recycling & REACH requirements	15
•EPA USA: Predicting How Organic Chemicals Transform	4	•ECHA: Nanomaterials in Waste Streams	15
•WHO: Global Chemicals & Health Network Newsletter	4	•EPA Vic: Bradbury Site Clean-Up Completed	16
•WHO Webinars: Chemical Risk Assessment Training Design	5	•EPA NSW: PFAS Firefighting Foam Reg Guidance	16
•FM Global Data Sheets Updated Feb 20 to Nov 21	5	•ECHA: Further Restrictions of PFAS Supported	16
•CSB: Investigations & Incidents Aug 21- Oct 21	5	•EPA USA: PFAS in Pesticide Packaging	16
•USA OSHA Quick Takes e-News: Oct-Dec 2021	5	•EPA USA: Chemicals Proposed for Toxics Release Inven.	16
AICIS (Industrial/Cosmetic Chemicals)	5	•EPA USA: Natural Gas Processing Facilities & TRI	16
•AICIS: Regulatory Notices 1 Nov – 10 Dec	5	•Hydrogen Blending proposed in Gas Transmission	16
•AICIS: Inventory Notices 21 Oct – 10 Dec	6	•OECD Chemicals Perspective on Designing	17
•AICIS: News and Updates 22 Oct – 10 Dec	6	•BRS: Unsound Management of Chemicals & Wastes	17
•AICIS Rules Amendments & Regulatory Changes	6	•CEFIC: EU Chemical Industry Transition Pathway Needed	17
•AICIS: Changes to Categorising Chemical Introductions	7	•EPA Vic: VIVA Fined for a BTEX Chemical Spill	17
Scheduled Poisons & TGA Issues	7	Standards & Codes	17
•TGA: Cosmetic Products & Therapeutic Goods	7	•AU & DIN Standards – https://infostore.saiglobal.com/	17
•TGA Decisions: Cosmetic & Fragrance Ingredients	7	•AU & BSI Draft Standards Open for Comment	17
•SUSMP: Public Submissions on Lead (in Paint)	8	•BS & ISO Standards via NZ Standards	18
•Scheduling Delegate's Interim Decisions	8	•NZ Draft Standards	18
•Vic: Precursor Supply) Regulations 2021	8	•NFPA Codes, Reports, News	18
Food Chemical Issues	9	Seminars, Conferences	18
•FSANZ: A1218 β Galactosidase from	9	•DGAG Discuss/Chat Combined Meeting 16 Feb 22	18
•FSANZ: A1238 Serine Endopeptidase Enzyme	9	•AIDGC Conference 25 th Feb 22 West Ryde (Sydney)	18
•FSANZ: A1244 Chymosin from GM Trichoderma Reesei	9	•CHCS: Basic Toxicology - Live On-Line Training	19
•FSANZ: A1231 Maltogenic alpha-Amylase from GM	9	•CHCS: Advanced Toxicology-Live On-Line Training	19
•FSANZ: A1245 - Alpha Glucosidase from GM	9	•CHCN Discuss/Chat Combined Meeting 16 Mar 21	19
•EFSA: Phthalates: Draft Opinion & Exposure Protocol	9	•RACI Congress: Chemistry – Catalysing Solutions	19
Agricultural Chemicals	9	•Chemical Management Online Accredited Course	19
•AWE: More Efficient AgVet Chemical Regulator	9	•AIOH: Scientific (Face-to-Face) Conference	19
•APVMA: Ag Actives & Products Manufacturing Approval	10	•R4Risk Online Training / Webinars / Presentations	19
•APVMA: Review of Anticoagulant Rodenticides	10	•iChemE Training	19
•WA Commerce: Working with Pesticides, Overview	10	•Various Chemical Management Courses	19
•EPA USA: Glyphosate – Assessing Risks from Uses	10		
•ECHA: Glyphosate Consultations - 400+ Submissions	11		
•EPA NZ: Hazardous Substances Update Nov 2021	11		
•EPA NZ: GHS 7 Classification: Products Updated	11		
•OECD: Unmanned Aerial Spray Systems in Agriculture	11		
•NSW: Agsafe's AgVet Chemicals ChemClear Program	11		
Dangerous Goods	11		
•Draft ADG Code Edition of 7.8 of the ADG Code	11		
•NTC: AU & NZ Emergency Response Guide Book 2021	12		
•WorkSafe Vic: Code of Practice S & H of D. Goods	12		
•CAP Decisions Register Updated	12		
•National Major Hazard Facilities Forum Presentations	12		
•WorkSafe Vic: Major Hazards Matters Newsletter	12		
•WorkSafe NZ: Above Ground Fuel Storage on Farms	12		

A Happy Christmas & New Year to everyone

• Hazmat & Environment Notes are prepared by:

Jeff Simpson Chemical Management & Regulatory
 Consultant, Editor & Publisher

My approach is to provide a short, succinct note on each hazardous chemical issue, sufficient to allow you to make a decision of whether it is relevant to you.

If you need more information:

Contact details / Website details / etc are provided.

I encourage all readers to network and make comment on Draft Regulations, Codes, Standards and Guidance.

Print

ISSN: 1441-5534

Hazardous Chemicals

• ECHA: Registry of Restriction Intentions to 10 Dec

Creosote CAS 8001-58-9 Intention; Restricting placing on the market & reuse of treated articles containing Creosote. [Details](#)

2,4-Dinitrotoluene CAS 121-14-2 Opinion development; Restriction on the placing on the market or use of 2,4-Dinitrotoluene in articles for supply to the general public or to professional workers in concentrations >0.1% w/w. [Details](#)

4,4'-Isopropylidenediphenol CAS 80-05-7 Intention; A) Restricting the use as an additive and the content in articles (0.02% w/w). B) Restricting content of residues (unreacted monomer) in articles – also for imported goods (0.02% w/w). C) Restricting the use of mixtures with content of 0.02% w/w for industrial and professional uses. D) Introducing release rates for BPA from articles during service life. [Details](#)

Medium-Chain Chlorinated Paraffins (MCCP) EC: 799-971-8; CAS No.s: 85535-85-9; 198840-65-2; 1372804-76-6; EC only 950-299-5; Intention; Restricting the manufacture, use or placing on the market of MCCP. [Details](#)

Calcium Cyanamide CAS 156-62-7; Opinions adopted; Annex XV restriction determining whether the use of Calcium Cyanamide as a fertiliser poses an unacceptable risk to the environment. [Details](#)

N,N-Dimethylformamide CAS 68-12-2; Commission Decided; Risk reduction for the general worker population; [Details](#)

From: <https://echa.europa.eu/registry-of-restriction-intentions>

• ECHA Current Consultation Calls for Comment

Bisphenol A & Structurally Related Bisphenols

22 Oct 2022: Call for Comment by 22 Dec 2021.

4,4'-Isopropylidenediphenol (Bisphenol A) and structurally related Bisphenols of similar concern for the Environment.

Germany intends to submit an Annex XV restriction dossier on 8 April 2022.

Ten Annex XIV Phthalates

12 Dec 2021: Call for Comment by 26 Jan 2022.

Call for evidence on ECHA's Report investigating whether to initiate a Restriction. All then ten Phthalates have similar functions (i.e., additives to polymeric materials) and have similar concern as demonstrated by their harmonised classification for Reproductive Toxicity, Category 1B.

From: <https://echa.europa.eu/calls-for-comments-and-evidence/-/substance-rev/67501/term>

And: <https://echa.europa.eu/calls-for-comments-and-evidence>

• GB Mandatory (Chemical Hazard) Classifications

Updating the Great Britain (GB) Mandatory Classification and Labelling List (GB MCL List) is similar to how EU harmonised classification and labelling is updated, but there are differences. The list can be updated by revising an existing classification or by entering a new classification of a substance. There are seven Stages.

The Public Consultation Stage lasts for 8 weeks (to gather information on: a/ the scientific and technical aspects of proposed classifications; b/ the policy and socio-economic aspects of such a proposal), and the responses are collated and assessed. A [summary of responses to the public consultation \(.xlsx\)](#) (the 111 chemicals added into the spreadsheet (as at 2 Dec 2021) date from May 2021 to Nov 2021) which is published on the UK HSE website after the

original proposer has had the opportunity to consider and comment on them.

Note: The UK HSE only conducts public consultations on GB CLP Regulation proposals for new or revised mandatory classifications. As the EU CLH proposals have already been through the public consultation process under ECHA, there is no GB public consultation.

From: www.hse.gov.uk/chemical-classification/gb-mcl-list.htm

Also see the *GB MCL Overview at:*

www.hse.gov.uk/chemical-classification/classification/index.htm with links to their web pages to help explain the GB laws on classification, legal requirements, guidance and advice.

The [GB MCL List is provided as an .xlsx spreadsheet](#) which gives information on the classification and hazard labelling of the substance and is legally binding in GB. IF you are classifying a substance that appears in the GB MCL List, then you must use the mandatory classification and labelling that appears in the GB MCL List. The GB MCL List is amended annually to keep the entries up to date with scientific and technical developments.

To be kept alerted have the HSE's [GB CLP e-Bulletin](#) emailed.

Editor: As at 2 Dec 2021 there are 4317 chemicals included on the GB MCL list. It is another set of classifications to consider.

Editor: Some of the GB MCL classifications are not in agreement with the ECHA RAC opinion classifications.

• WorkSafe NZ: Methyl Bromide Exposure Investigation

9 Dec 2021: Failure to prevent workers being exposed to Methyl Bromide: A business was fined \$250,000 after a WorkSafe New Zealand investigation.

The investigation began after workers at Flick Anticimex Limited, a pest control fumigation service, suffered acute Methyl Bromide poisoning as a result of ongoing exposure to the hazardous substance (through poor work practices).

From: www.worksafe.govt.nz/about-us/news-and-media/medi/

• DPI NSW: Prevent Battery Lead Poisoning in Cattle

19 Oct 2021: NSW Dept of Primary Industries (DPI NSW) has alerted Livestock Producers across NSW to the risks for cattle from old batteries lying around their properties, following reports that 280 cattle have been exposed to Lead toxins in the last three months with 17 cattle deaths since July 2021.

"All recent cases reported involved young cattle and old car batteries which could have been avoided by removing batteries from paddocks before cattle had access," Dr Bolin, DPI NSW veterinarian, said.

"Old battery casings can be brittle and break up, giving (inquisitive) cattle access to the Lead. One broken battery potentially contains enough Lead to kill a dozen or more cattle, while other potential sources include Lead-based paint and waste oil," she said.

Often the first sign of Lead poisoning is dead cattle. Some cattle may have no signs, while signs of acute Lead toxicity include staggering, muscle twitching, teeth grinding and blindness.

Livestock exposed to Lead must be assessed by a veterinarian to ensure they are safe for human consumption, restricting Lead-affected animals from slaughter.

From:

www.dpi.nsw.gov.au/about-us/media-centre/releases/2021/act-now-to-prevent-lead-poisoning-in-cattle

• Canadian Chemicals Management Plan Website

Screening Assessments & Evaluations (some entries)

From 5 Nov 2021:

[A proposed Approach for a Subset of Organic and Inorganic Substances \(9 off\) Prioritized Under the Chemicals Management Plan](#) was published. [2021-11-05] [Approach for a Subset of Organic and Inorganic Substances Prioritized Under the Chemicals Management Plan](#) (which lists the 9 substances)

(Carbon Monoxide; Dichloroacetic Acid; Trichloroacetic Acid; Paraffin waxes & Hydrocarbon waxes, chloro, chlorosulfonated; Paraffin waxes & Hydrocarbon waxes, chloro, sulfonated, ammonium salts; 1,3,5-Triazine, hexahydro-1,3,5-trinitro-; Vitamin D3; Ziram; Coal Coke)

[The Draft Screening Assessment for the Flame Retardants Group](#) was published for a 60-day public comment period ending on 5 January 2022. [2021-11-06]

[The Draft Screening Assessment for Phenol, Methylstyrenated](#) was published for a 60-day public comment period ending on 5 January 2022. [2021-11-06]

The mandatory notice with respect to bisphenol A (BPA) and BPA structural analogues and functional alternatives (BPA SAFAs) was published under section 71 of the Canadian Environmental Protection Act, 1999 to collect information from Canadian manufacturers, importers and users of BPA and BPA SAFAs. The deadline to report is 16 March 2022. [2021-11-13]

Dec 2021 (to the 10th)

[The Draft Screening Assessment for Acids and Bases Group](#) was published for a 60-day public comment period ending on 2 February 2022. [2021-12-04]

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

Chemical Management

• ECHA: Plastic Waste Chemical Recycling - REACH

11 Nov 2021: Chemical Recycling of Plastic Waste currently covers different technologies with varying potential for contributing to a circular economy, a new report finds. Following REACH registration requirements for recycled materials and finding ways to eliminate substances of concern from plastic waste streams are key to achieving non-toxic recycling.

From: <https://echa.europa.eu/-/check-the-safer-chemicals-conference-material>

• ECHA: Assessments of Groups of Chemicals

7 Dec 2021: The first Assessments cover over 450 substances in 19 Groups. For 18 of these Groups, regulatory risk management measures or further data are needed. ECHA and Member States have been assessing the regulatory needs of Groups of Substances in an effort to **speed up regulatory action on chemicals of concern**, protecting people and the environment, and avoiding regrettable substitution. Check if your substances have been assessed.

Among the first published Assessments are four Groups of Phthalates and Phthalate like substances that were assessed as a Group due to their potential Reprotoxic, Endocrine Disrupting, or Persistent, Bioaccumulative & Toxic properties.

Safer Chemicals Podcast (18m 30s) (access from web page)

Most Groups need to have Sub-Groups for classification.

So far, ECHA has assessed the regulatory needs of around 120 groups, covering more than 3000 substances. All of these

assessments will be gradually published on ECHA's website in the [Public Activities Coordination Tool \(PACT\)](#).

From: www.echa.europa.eu/-/first-assessments-of-regulatory-needs-for-groups-of-chemicals-published

• SWA: Respirable Crystalline Silica from Engineered Stone

26 Oct 2021: New Model Code of Practice for Respirable Crystalline Silica from Engineered Stone (58 page [pdf](#) | [docx](#)), provides practical information on how to manage the health and safety risks.

"Silicosis is a serious lung disease that can be fatal. All workers have the right to a healthy and safe working environment and no workplace death or injury is acceptable"; "Not all hazards in the workplace are visible. Silica dust from engineered stone can be invisible to the naked eye but can cause serious lung disease", said Safe Work Australia Chief Executive Officer Michelle Baxter.

The Code covers: 1/ who has health and safety duties in relation to working with engineered stone; 2/ how to identify, manage and control the risks of working with engineered stone; 3/ the workplace exposure standard for respirable crystalline silica; 4/ health monitoring; 5/ air monitoring, and 6/ clean-up and disposal of silica dust maintenance, refurbishment or removal of engineered stone.

Amount of Crystalline Silica: Marble 2%; Limestone 2%; Slate 20-40%; Shale 22%; Granite 20-45% (typically 30%); Natural Sandstone 70-95%; Engineered Stone up to 97%.

From: www.safeworkaustralia.gov.au/media-centre/news/new-model-code-practice-respirable-crystalline-silica-engineered-stone

And: www.safeworkaustralia.gov.au/doc/model-code-practice-managing-risks-respirable-crystalline-silica-engineered-stone-workplace

• WorkSafe Vic: Engineered Stone Business Licence

15 Nov 2021: Businesses (in Victoria) working with engineered stone require a Licence by 15 Nov 2022 under new regulations to help protect workers from exposure to deadly Silica Dust.

From May 2022, the Vic Occ. Health & Safety Amendment (Crystalline Silica) Regulations 2021 also introduce new duties for businesses across a range of industries that work with other materials containing silica – including quarrying, construction and tunnelling.

The Vic Regulations will also extend the ban, first made in 2019, on uncontrolled dry-cutting, grinding and polishing of engineered stone, and prohibit the use of compressed air for cleaning and untreated water to suppress dust.

Engineered stone is commonly used for kitchen and bathroom benchtops. When it is cut, ground or polished workers may be exposed to respirable silica dust, which can cause deadly lung and respiratory diseases – including Silicosis.

Changes to protect Victorians working with Crystalline Silica: Information about the Vic Occ. Health & Safety Amendment (Crystalline Silica) Regulations 2021.

See: www.worksafe.vic.gov.au/changes-protect-victorians-working-crystalline-silica

From: www.worksafe.vic.gov.au/news/2021-11/licence-scheme-protect-engineered-stone-workers

• SWA: Exposure Standards Database - missing Notes added

11 Nov 2021: In last two editions of Hazmat & Environment Notes I alerted SWA to missing Skin Sensitisation and Skin Absorption Notes. This was corrected on the 11th Nov 2021.

However, **when you access the [Exposures Standards web database](#) there is no alert to the legal document and no**

alert that the missing Notations now having been added (for those who didn't know about the missing Notations).

e.g. "The HCIS Exposure Standards web database was missing Notes regarding Skin Absorption and Skin Sensitisation that were re-added on the 11th November 2021".

HCIS also has the Workplace Exposure Standards (WES) listed in their legal document [Workplace Exposure Standards for Airborne Contaminants](#) (42 page 16 Dec 2019 documents), but this is not referred to when you used the web ES database.

Another Issue: A classification colleague has alerted a further discrepancy to Safe Work Australia: e.g. Glycerin mist CAS 56-81-5 has Note (a) in the Standard Name in both the legal ES document and the web ES database.

Note (a) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.

Other Exposure Standards found with the same Note (a) in the Standard Name are: Cellulose (paper fibre); Pentaerythritol; Starch; Stearates; and Sucrose.

As these are organic compounds, Note (a) does not apply, as Asbestos and Crystalline Silica are not present as an impurity.

• DMIRS WA: WHS Act and Regulations due in 2022

Nov 2021: Overview documents provide Information on the new WA WHS Laws coming into effect in 2022.

[WA Work Health and Safety Act 2020](#) (Nov 2020, 307p pdf)

[Overview of the WA WHS Act](#) (48p pdf).

Some of the differences include: **1/** Major Hazard Facilities and Dangerous Goods Storage and Handling will continue to be regulated separately under the Dangerous Goods Safety Act 2004; **2/** Petroleum and geothermal energy operations are included in the WA WHS Act, supported by a dedicated set of regulations. **3/** The system of Workplace Entry Permits provided under the Industrial Relations Act 1979 will continue to operate in relation to WHS matters.

[Overview of the WA WHS General Regulations](#) (32 p pdf).

Some sections of the Model WA WHS Regulations were tailored for Western Australia following extensive consultation. Where possible, the new Laws align with the Chapter and Part numbers of the Model WHS Regulations, with the term 'Not used' replacing any clauses that do not apply in Western Australia.

From: www.dmirs.wa.gov.au/safety-regulation/work-health-and-safety-laws/introduction-whs-laws/introduction-whs-laws/whs-act

• WA WHS Laws Videos and Webinars

Nov 2021: There are 10 videos and 9 webinars

e.g. Video: [Work Health and Safety laws- WHS General Regulations Chapters 6-11](#): An overview of the WHS regulations which cover construction, hazardous chemicals and asbestos.

e.g. Webinar: [Work Health and Safety \(General\) Regulations 2021](#): Presented by Bill Mitchell, General Manager WHS Legislation Project and Andrew Cotgreave, Senior Policy Officer, Legislation Project. The video provides an overview of the regulations which will apply to most workplaces in WA.

WHS Videos From:

www.dmirs.wa.gov.au/safety-regulation/work-health-and-safety-laws/whs-publications-and-resources/whs-publications-and-1

WHS Webinars From:

www.dmirs.wa.gov.au/safety-regulation/work-health-and-safety-laws/whs-publications-and-resources/whs-publications-and-0

• EPA NZ: Hazardous Substances Update Oct 2021

Oct 2021:

Shaping NZ's Emissions Reduction Plan: The NZ Ministry for the Environment was consulting (until 24 Nov 2021) on a plan to set the direction for climate action over the next 15 years. This included proposals to reduce emissions from Fluorinated Gases, focusing on Hydrofluorocarbons (HFCs). importers & exporters of refrigerants, may be interested in these specific proposals.

Find the Nov 2021 Issue in the "Agricultural Notes".

From: www.epa.govt.nz/news-and-alerts/newsletters/hazardous-substances-update/ Select Issue

• EPA USA: Predicting How Organic Chemicals Transform

18 Oct 2021: EPA USA Researchers have Developed a Tool to better Assess and Predict how Organic Chemicals Transform in Different Environments.

The [Chemical Transformation Simulator](#) (CTS), a web-based screening tool predicts how Organic Chemicals will transform in environmental and biological systems.

CTS is important because it focuses on how chemicals interact and transform in different natural environments. For example, most Organic Chemicals change when they react with water, heat, microbes, and other environmental conditions. Organic chemicals can also metabolize into new molecules when they are ingested by humans or other animals.

CTS organizes Organic Chemicals, or most substances that contain Carbon-Hydrogen Bonds, into collections of Transformation Pathways. Transformation Pathways occur when chemicals change in composition due to changes in environmental conditions, such as changes in light exposure or the introduction of new substances.

Interpreting the results requires some knowledge of physicochemical properties and how Organic Chemicals transform in different environments. Various audiences can use the tool's three different workflows for different needs. For instance, chemical exposure and risk assessors can use CTS to support alternative assessment activities for manufactured chemicals. Scientists can also use the tool to address data gaps associated with chemical registration and assessment and help interpret field and laboratory studies.

Three Workflows have been implemented in CTS:

[Chemical Speciation Workflow](#)

[Physicochemical Properties Workflow](#)

[Transformation Products Workflow](#)

From: www.epa.gov/sciencematters/epa-researchers-develop-tool-predicts-how-organic-chemicals-transform-different

And: <https://qed.epa.gov/cts/>

• WHO: Global Chemicals & Health Network Newsletter

25 Oct 2021: The WHO Newsletter of the Global Chemicals and Health Network is to enhance the outreach and engagement with links to existing subregional, regional and international networks, to implement the WHO Road Map and to strengthen the engagement in the sound management of chemicals. [2nd Newsletter \(Oct 2021\)](#) (4 page pdf)

e.g. It reports on the July 2021 "Berlin Forum on Chemicals and Sustainability: Ambition and action towards 2030".

From: www.who.int/news/item/25-10-2021-the-second-newsletter-of-the-global-chemicals-and-health-network

• WHO Webinars: Chemical Risk Assessment Training Design

29 Nov 2021: Webinars on how to design a training in Chemical Risk Assessment

The aim of the webinar series is to support new trainers in designing trainings in chemical risk assessment and to share experience between new and more experienced trainers. Each webinar will focus on specific aspects of designing trainings and include presentations and interactive discussions in breakout rooms where participants apply the knowledge on their own planned training. After each webinar participants can continue to apply the knowledge from the webinar on their own planned training and receive feedback from other participants in the Community of Trainers (CoT) Web Platform.

The principles of training design are applicable for all types of trainings, from 1-day to 1-year long trainings; face-to-face and virtual web-based trainings; trainings covering any topic within the broad field of chemical risk assessment and trainings for different target groups.

The second webinar is on Tuesday 1 Feb 2022 and will discuss how to identify the content that will be covered in the training and select suitable teaching and learning activities that will be used, e.g. lectures, assignments, group activities, practical tasks. We will also discuss different forms of teaching & learning material, e.g. web-based material and case studies.

The third webinar is on Tuesday 29 March 2022 and will discuss how to choose a suitable format for the training, e.g. length of training; face-to-face or virtual web-based training. We will also discuss how to assess the participants' learning, e.g. peer assessment, feedback, exams. Finally we will discuss how to collect participants' evaluation of training and use it for developing the training further.

[Information on the Series of Webinars](#) (2 page pdf)

The Webinars (on AU Eastern Summer Time, will be from 12 midnight to 2am), will be in the Zoom platform, with Break Out Rooms reporting back from their discussions.

Information on how to attend: email ipcsmail@who.int

From: www.who.int/news/item/29-11-2021-the-who-chemical-risk-assessment-network-community-of-trainers--webinars-on-how-to-design-a-training-in-chemical-risk-assessment

• FM Global Data Sheets Updated Feb 20 to Nov 21

Chemical related Loss Prevention Data Sheets Updated from Feb 2020 to Nov 2021

[Fire-Retardant Treated Wood](#) April 2020

[Mining and Mineral Processing](#) July 2020

[Storage of Aerosol Products](#) Feb 2020

[Ignitable Liquid Operations](#) April 2020

[High-Temperature Molten Materials](#) July 2020

[Chemical Reactors and Reactions](#) July 2020

[Dust Collectors and Collection Systems](#) July 2020

[Preventn & Mitigatn of Combustible Dust Explosn & Fire](#) July 20

[Organic Peroxides and Oxidizing Materials](#) July 2020

[Outdoor Ignitable Liquid Storage Tanks](#) Oct 2020

[Fuel-Grade Ethanol](#) Oct 2020

[Carbon Black](#) Oct 2020

[Titanium Dioxide](#) Oct 2020

[Chlor-Alkali](#) Oct 2020

[Sulfuric Acid](#) Oct 2020

[Ammonia and Ammonia Derivatives](#) Oct 2020

[Halocarbon and Inert Gas \(Clean Agent\) Fire Extinguishing Systems](#) July 2021

[Foam Extinguishing Systems](#) April 2021

[DC Battery Systems](#) April 2021

[Chemical Recovery Boilers](#) April 2021

[Industrial Exhaust Systems](#) Oct 2021

[Ammonium Nitrate and Mixed Fertilizers Containing Ammonium Nitrate](#) Jan 2021

[Hydrogen](#) April 2021

[Hydraulic Fluids](#) Jan 2021

[Chemical Process Industries](#) Jan 2021

[Pre-Incident and Emergency Response Planning](#) Oct 2021

[Continuous Digesters and Related Process Vessels](#) July 2021

[Batch Digesters and Related Process Vessels](#) July 2021

From: www.fmglobal.com/research-and-resources/fm-global-data-sheets

• CSB: Investigations & Incidents Aug 21- Oct 21

From: www.csb.gov/

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

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

21 Oct 2021: CSB Released [FY 2021 Impact Report](#) (8 page pdf). Highlights include the closure of three investigations as well as a record level of recommendations closures and status changes. In particular, the CSB issued 20 new safety recommendations in FY 2021, in comparison to zero during FY 2020. In FY 2021, the CSB agency closed three investigations: Aghorn, AB Specialty Silicones and Evergreen Packaging. (See Completed Investigations above).

• USA OSHA Quick Takes e-News: Oct-Dec 2021

1 Nov 2021: 1/ Hazardous Substance Initiative: OSHA USA launched an initiative to protect workers in the Midwest from [occupational exposure to Hazardous Substances \(20 Oct 2021\)](#) (webpage) e.g. Asbestos, Formaldehyde & Cadmium.

16 Nov 2021: 1/ Toxic Substance Violations: An Aircraft Parts manufacturer faces penalties for failing to protect workers from [exposure to Hexavalent Chromium and Cadmium](#).

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

AICIS (Industrial/Cosmetic Chemicals)

• AICIS: Regulatory Notices 1 Nov – 10 Dec

1 Nov 2021: Commercial Evaluation Authorisation – Graphene, as a component of industrial coatings (until 4 July 2025)

1 Nov 2021: 2 Fragrance chemical Assessment statements

1 Nov 2021: Chemical Public Reports: 4 STD; 1 LTD; 1 PLC

22 Nov 2021: Evaluation Notice for DBDPE or Deca Bromo Diphenyl Ethane, about Environmental Risks. CAS 84852-53-9; Recommendation to cancel the Assessment Certificate 9258.

[EVA00072 Evaluation Statement 18 Nov 2021](#) (9 page pdf)

25 Nov 2021: AICIS Compliance issued a 60 Penalty Unit infringement notice of \$13,320 to a business operating in Sydney, after an investigation, supported by the Australian Border Force and the Federal Dept of Home Affairs.

The business unlawfully imported industrial chemicals without being registered with AICIS. AICIS Compliance believes the business intended to supply the chemicals to the Mining Industry. A consignment of these chemicals were seized and

are scheduled to be destroyed. The Importer has since registered with AICIS.

7 Dec 2021: [Regulatory Changes from 10 Dec 2021](#) follow amendments to the General and Transitional Rules. Some changes have already occurred and started on 23 Nov 2021.

See the Detailed Note following the AICIS News & Updates.

• AICIS: Inventory Notices 21 Oct – 10 Dec

21 Oct 2021: [Chemicals added to the Inventory 5 years after issue of Assessment Certificate](#). CAS No.s: 2695594-85-3; 12036-32-7; 1801603-90-6; 61070-30-2; 127646-43-9.

8 Nov 2021: [Correction of Chemical Names](#)

Editor: 85 updates. I have highlighted names that are now narrower in scope, e.g. Cobalt lithium oxide (CoLiO₂); Benzenesulfonic acid, dodecyl-, sodium salt (1:1); L-Glutamic acid, N-(1-oxooctadecyl)-, sodium salt (1:1); Papaya, ext.; Marjoram, sweet, extr. Residues;

16 Nov 2021: [Chemical added to the Inventory following issue of Assessment Certificate](#). CAS No.: 1001354-72-8.

24 Nov 2021: [Variation of Inventory listing following revocation of CBI Approval](#). CAS No.s: 1025071-45-7; 2723407-25-6.

24 Nov 2021: [Update of deleted CAS number](#). Deleted CAS No.: 913060-20-5 and varied as CAS No.: 59268-12-1.

29 Nov 2021: [Update of deleted CAS details](#) (for consistency with the new Chemical Abstracts Service No. & name). Deleted CAS No. 1035211-50-7 & varied as CAS No. 1023309-93-4.

6 Dec 2021: [Correction of chemical names](#). AICIS updated (on 22&23 Nov 21) the names of the identified chemicals in the Australian Inventory of Industrial Chemicals to the Chemical Abstracts Service Name.

There are 26 chemicals with CAS No.s: 59-43-8; 1308-31-2; 14806-72-5; 15630-89-4; 29126-51-0; 33939-64-9; 51981-21-6; 58891-19-3; 68910-26-9; 84259-22-3; 103241-65-2; 110138-55-1; 111850-23-8; 116889-78-2; 116912-36-8; 122384-83-2; 126544-46-5; 144538-83-0; 152827-98-0; 159317-31-4; 171171-76-9; 374929-02-9; 385764-96-5; 690229-09-5; 913697-95-7; 1263179-58-3

• AICIS: News and Updates 22 Oct – 10 Dec

22 Oct 2021: [Draft Evaluations Open for Comments](#) by the 17 Dec 2021.

1H-Imidazole, 1-Ethenyl- (N-Vinyl Imidazole)

1H-Imidazole, 1-Methyl-

2,5-Cyclohexadiene-1,4-dione (p-Benzoquinone)

3-Cyclohexene-1-Methanol, 2,4,6-Trimethyl- (Isocyclogeraniol)

Acetylpropionyl and Diacetyl

Benzenepropanol

Bronopol and Bronidox

Butylated Hydroxyanisole and related antioxidants

C7-C12 linear alpha-beta unsaturated aldehydes

Chemicals not considered for in depth evaluation – Not commercially active in Australia

Chemicals that are unlikely to require further regulation to manage risks to environment

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

Chlorocresol and Chloroxyleneol

Isomers of Octahydro Tetramethyl Naphthalenyl Ethanone

Lactic Acid Isomers

Lead Soaps

Linear Alkylbenzene Sulfonates

Maleic Acid

Maleic Acid Esters (medium to long chain)

Maleic acid salts

Mercaptobenzimidazoles and their Zinc Salts

Phenol, 2,4-Dichloro-

Terpenes and Terpenoids, Sinspine

Toluenesulfonamides

22 Oct 2021: [Call for Information \(Oct 2021\): Low Concern Chemicals that may not need further health risk management controls](#), by the 17 Dec 2021.

[Download the Draft Evaluation Statement](#). (13 page pdf).

About 130 chemicals (of low regulatory concern) are listed, by the 17 Dec 2021.

22 Oct 2021: [Call for information \(Oct 2021\): chemicals with no known commercial use in Australia](#), by 17 Dec 2021.

[Download the Draft Evaluation Statement](#). (34 page pdf).

About 800 chemicals (with no known commercial use in AU) are listed, by the 17 Dec 2021.

Editor: It is important to check through this list of CAS No.s as these chemicals may be removed from the AICIS at some stage.

22 Oct 2021: [Evaluations Notice for pentaBDE](#). CAS No. 32534-81-9 Pentabromodiphenyl Ether (PentaBDE).

Evaluation Outcomes:

Recommendations to remove a chemical from the Inventory;
Recommendation to regulatory body (environment).

[EVA00019 - Evaluation Statement - 18 Oct 2021](#) (12 page pdf)

22 Oct 2021: [Call for information \(Oct 2021\): Low Concern Chemicals that may not need further environmental risk management controls](#), by 17 Dec 2021.

[Draft Evaluation Statement](#) (35 page pdf) About 300 chemicals.

11 Nov 2021: [Removing an Inventory listing following evaluation](#). Pentabromodiphenyl Ether; CAS No.: 32534-81-9.

The AICIS Executive Director will remove Pentabromodiphenyl Ether from the Australian Inventory of Industrial Chemicals (Inventory) on 10 Dec 2021.

23 Nov 2021: [Rules Amendments and regulatory changes from 23 Nov 2021](#). See separate Detailed Note. E.g. Record-keeping for listed introductions is now 40 working days.

26 Nov 2021: [Version 1.3 of the Categorisation Guide released](#)

AICIS recently announced [some Regulatory Changes](#) due to the amendment of the Industrial Chemicals (General) Rules 2019, or General Rules. As a result, AICIS have updated the '[Guide to Categorising your Chemical Importation and Manufacture](#)' (Categorisation Guide). *Separate Detailed Note*.

The changes that AICIS have made are in the version history on the cover page of the [Categorisation Guide](#) (webpage).

• AICIS Rules Amendments & Regulatory Changes

23 Nov & 10 Dec 2021: AICIS made some changes to the '[Guide to categorising your chemical importation and manufacture](#)' and other pages on our website to reflect amendments that were made to the General and Transitional Rules. In general, the changes are one of the following:

- clarify existing requirements or obligations
- change requirements or obligations
- add new requirements or obligations
- expand options available to introducers to make it easier to meet obligations

Changes that caught the Editor's Attention:

Requirements for chemicals introduced at the nanoscale

Record-keeping for listed introductions (doubled to 40 days, to provide a "Written Undertaking"

Record-keeping for 'specified classes of introduction' now have the option to hold a Written Undertaking from the person who knows the information.

Introducers must keep both of the following: a/ Records to prove that the volume introduced in a registration year did not exceed the volume stated in their pre-introduction report; & b/ records to prove that the volume introduced in a registration year did not exceed the assessed volume in the Overseas Assessment or Evaluation

The introduction of a chemical with an end use in Air Fresheners is No Longer a 'designated kind of release into the environment'. This change clarifies the original intent of this requirement.

A new rule was added so that when a chemical that is issued an Assessment Certificate under the transitional legislation gets added to the Inventory, the Conditions of that Certificate will also be added to the chemical's Inventory Listing.

From 10 Dec 2021:

An Extra Requirement will be added for Pre-Introduction Reports that requires Introducers to report whether their chemical is at the Nanoscale. This applies to introductions of chemicals only used for Research and Development.

Introducers will need to declare that they have permission to use an International Assessment Report from the Report's Owner.

Record-Keeping for 'Designated Kind of Release into the Environment' introductions will be updated to:

- include the words 'if practicable'
- add a new record-keeping obligation about the quantity of the chemical released into the environment

From: www.industrialchemicals.gov.au/news-and-notice/regulatory-changes-10-december-2021

And: www.industrialchemicals.gov.au/news-and-notice/rules-amendments-and-regulatory-changes-23-november-2021

• AICIS: Changes to Categorising Chemical Introductions

23 Nov 2021: Guide to Categorising your Chemical Importation and Manufacture (web pages). All industrial chemical importers and manufacturers must Categorise their chemical introduction. This Step-By-Step Guide takes you through the process of Categorisation.

23 Nov 2021 Version History Changes:

Step 1: added words shown in **bold text**:

'...cannot be categorised as an exempted or reported introduction **unless it is both of the following**:

- **the industrial chemicals are to be introduced solely for use in research or analysis**
- **the total volume of the industrial chemicals you introduce in a registration year does not exceed 100 kg'**

Step 2: clearer explanation of the nanoscale criteria for research and development and chemicals resulting from non-functionalised surface treatment of listed chemicals; removed 'Tylosin, (2R,3R)-2,3-dihydroxybutanedioate (1:1)' with CAS number 74610-55-2 from the comparable chemicals table and improved the instructions on how to use the table.

Step 3: clearer explanation of the nanoscale criteria for research and development.

Step 5.3: added statement to clarify that a chemical with an end use in an air freshener is not a 'designated kind or release into the environment'

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

Scheduled Poisons & TGA Issues

• TGA: Cosmetic Products & Therapeutic Goods

18 Nov 2021: To help you determine if a product is a Cosmetic Product or a Therapeutic Good, and then which regulatory scheme applies. You may think a product is a Cosmetic Product (under AICIS), but it could be regulated as a Therapeutic Good (under TGA) based on the following factors:

- 1/** the primary use; **2/** the ingredients; **3/** the claims made; **4/** overall presentation and context; and **5/** regulatory controls.

[AICIS](#) regulates (cosmetic) ingredients, not products.

Product labelling and safety for Cosmetics is regulated by the [Australian Competition and Consumer Commission](#) (ACCC).

The Therapeutic Goods Administration (TGA) regulates medicines and products that are marketed for therapeutic use under the [Therapeutic Goods Act 1989](#) (the Act).

The TGA includes (therapeutic use) products such as:

- a/ Skin-Whitening Creams; b/ some Sunscreens; c/ Medical Devices; d/ Over the Counter Medication; e/ Biological Products; and f/ Cosmetics for Oral Consumption.

Where-as: a Cosmetic Product is typically designed for use on external body parts including the mouth and teeth. Typically, these change the appearance or odour, cleanse, condition, maintain or protect the body. They affect appearance rather than the substance of skin.

An example of a product (Caro White) that is an illegal Therapeutic Good (is given), because it contains >2% Hydroquinone which means it is a Schedule 4 Poison that can only be supplied with a prescription. The TGA released a [Safety Alert](#) (on the 8 Sept 2021), on Caro White and Carotone branded products that pose a risk to your health.

From: www.tga.gov.au/advertising-when-cosmetics-are-regulated-therapeutic-goods

Also see: www.industrialchemicals.gov.au/cosmetics-and-soap/cosmetics-and-therapeutics

The NHMRC has "Factsheet: Cosmetics and Therapeutics" www.nhmrc.gov.au/sites/default/files/documents/attachments/Factsheet-Cosmetics-and-therapeutics.pdf (3 page pdf)

Alerted by a Colleague.

• TGA Decisions: Cosmetic & Fragrance Ingredients

9 Nov 2021: In response to the TGA's Review of Chemical Scheduling in relation to Cosmetic and Fragrance Ingredients, an Update on the TGA's progress to date and anticipated timeframes for implementing the outstanding decisions and actions are provided on the website below.

e.g. Intermediate Term Projects:

Updated application form and application guidance to lift quality of applications. Estimated Completed by: Jan 2022

Develop a searchable electronic Poisons Std database to record Scheduling Decisions. Estimated Completed: Mar 2022

Consider including all CAS names and numbers and other synonyms in Poisons Standard (as part of the searchable electronic Poisons Std database). Estimated by: Mar 2022

Increase use of Subject Matter Expertise Advisors. Estimated Completed by: Mar 2022

Updated Handbook Guidance Content. e.g. estimating acute risk when in dilute preparations. Estimated by: June 2022

Develop more explicit Definitions and/or Guidance of derivatives. Estimated Completed by: June 2022

e.g. Longer Term Projects:

Working Group to consider (and explore mechanisms) to improve Scheduling of Fragrances / Essential Oils. Sept 2022

Improve the mechanism for Scheduling cosmetic and fragrance substances through the use of overseas standards or decisions. E.g. Adopting the EU Cosmetic Regulations Annexes II and III. Estimated Completed by: Dec 2022

Background: The consultation paper '[Review of Chemical Scheduling in relation to Cosmetic and Fragrance Ingredients](#)' (pdf) was distributed as a Targeted Consultation on 14 March 2019 and [Outcomes of the Review](#) (pdf) were published in July 2019. The [Summary of the Decisions and Actions](#) to be undertaken in response to these outcomes was published on TGA's website on 9 Oct 2019.

From: www.tga.gov.au/implementation-decisions-and-actions-following-review-chemical-scheduling-relation-cosmetic-and-fragrance-ingredients

• SUSMP: Public Submissions on Lead (in Paint)

17 Nov 2021: Comment that covered Item 4.1 was from Aust. Paint Manufacturers Feder'n; Chemistry Australia; The Lead Education & Abatement Design Group and Accord Australasia also covered Item 4.1 & also Item 4.4.

There was no comment listed for Items 4.2 & 4.3

Chemical Substances for which public comment was sought:

Item 4.1 - Lead (in Paint) *

Item 4.2 - Cyflumetofen

Item 4.3 - Isocycloseram

Item 4.4 - 1,4-Benzenediamine, 2-(Methoxymethyl)-

* *Editor:* The Lead in Paint is in Anti-Fouling and Anti-Corrosive Paints due the Lead impurity in the Copper and Zinc metal used. Lead is NOT an added formulation ingredient.

From: https://consultations.tga.gov.au/tga/march_2021_interim/
And: https://consultations.tga.gov.au/tga/march_2021_interim/consultation/published_select_respondent

• Scheduling Delegate's Interim Decisions

3 Dec 2021 from ACCS June 2021:

Schedule 10 & Schedule 7: 2-AMINO-5-METHYLPHENOL: The proposed Sched. 10 entry would capture cosmetic use of the substance, while all other uses would fall under Sched. 7.

2-Amino-5-Methylphenol is an ingredient in hair dye products. There are currently no restrictions on the use of this substance in Australia.

Schedule 6 – New Entry: 6-METHOXY-N2-METHYL-2,3-PYRIDINEDIAMINE except when used in oxidative or non-oxidative hair dyes at a concentration of 1.0% or less when the immediate container and primary pack are labelled:

Schedule 5 – Delete Entry

LEAD COMPOUNDS in preparations for use as hair cosmetics

From: www.tga.gov.au/scheduling-decision-interim/notice-interim-decisions-proposed-amendments-poisons-standard-accs-31-june-2021 and

Notice of Interim Decisions on Proposed Amendments to the Poisons Standard – ACCS meeting, June 2021 (pdf | docx)

3 Dec 2021 from ACMS-ACCS June 2021:

3.1 Interim Decision re: Ethanol & Isopropanol in Hand Sanitisers:

An Interim Decision Not to Amend the scheduling for Ethanol and Isopropanol in hand sanitisers in the current Poisons Standard. (As there were insufficient data provided to support changes to the current scheduling of either substance.) These substances do Not present a moderate hazard from repeated use in hand sanitisers.

3.2 Interim Decision for Methanol in hand sanitisers:

Schedule 10 – New Entry: METHANOL in hand sanitisers containing >5% Methanol.

3.3 Interim Decision in relation to Eugenol

An Interim Decision Not to Amend the scheduling for Eugenol in the current Poisons Standard.

The current proposal sort to reduce the elicitation of contact dermatitis by introducing a requirement for Eugenol to be listed on the label of preparations intended for skin contact.

While there may be some benefits to adding new labelling requirements, these require clarification and the Delegate agreed with the Committee's advice that further consultation with affected stakeholders is necessary before further progressing such a proposal.

From: www.tga.gov.au/scheduling-decision-interim/notice-interim-decisions-proposed-amendments-poisons-standard-joint-acms-accs-28-june-2021 and

Notice of Interim Decisions on proposed Amend'ts to Poisons Std – Joint ACMS-ACCS meeting, June 2021 (pdf | docx)

Schedule 10: Substances of such Danger to Health as to Warrant Prohibition of Sale, Supply and Use

• Vic: Precursor Supply) Regulations 2021

24 Oct 2021: Drugs, Poisons and Controlled Substances (Precursor Supply) Regulations 2021 (pdf | docx)

Victoria's Precursor Control System aims to prevent the use of Precursor Chemicals and equipment in the production of illicit drugs.

The precursor control system requires suppliers to:
1/ obtain an End User Declaration (EUD) from a buyer at the point of sale, before supplying any precursor item;
2/ keep relevant supply and storage records;
3/ make records available to police for inspection on request.

These obligations only apply to suppliers of precursor chemicals in their pure form. They do not apply when precursor chemicals are present in mixtures with other chemicals.

Regulatory Impact Statement (13 July 2021):
https://engage.vic.gov.au/download_file/51462/5960 (35p pdf)

To circumvent the existing regulatory framework, producers of illicit synthetic drugs have utilised alternative chemicals that are not prescribed as drug precursors. These substances, called pre-precursors, can be transformed into Amphetamine-Type Stimulants (ATS) precursors relatively easily. Alternatively, illicit drug producers may use chemicals not covered by the regulations to avoid EUD requirements and produce new ATS.

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

And: www.legislation.vic.gov.au/as-made/statutory-rules/drugs-poisons-and-controlled-substances-precursor-supply-regulations-2021

Editor: There are Additions (36) & Deletions (2) of chemicals for Schedule 1. Phenylalanine has been removed from Schedule 2. Additions & Deletions of Apparatus for Schedule 3.

Food Chemical Issues

• FSANZ: A1218 β Galactosidase from *Bacillus Subtilis* (Enzyme)

21 Oct 2021: The Application seeks approval for a " β -Galactosidase (EC 3.2.1.23)" enzyme derived from a genetically modified organism for use as a processing aid in the production of Lactose Reduced dairy product food applications.

In all the proposed food applications, the β Galactosidase will be used as a Processing Aid, where the enzyme is either not present in the final food, or present in insignificant quantities and having no function or technical effect in the final food.

Approval Report - 12 August 2021 (17 page [pdf](#) | [docx](#))

Safety Assessment (16 page [pdf](#) | [docx](#))

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

• FSANZ: A1238 Serine Endopeptidase Enzyme from *GM Trichoderma Reesei*

15 Nov 2021: The Application seeks approval to permit Serine Endopeptidase sourced from a genetically modified strain of *Trichoderma Reesei* containing the Serine Endopeptidase Gene from *Malbranchea Cinnamomea*, as a Processing Aid in the manufacture of vegetable and animal Protein Hydrolysates.

Executive Summary (4 page [pdf](#))

The Serine Endopeptidase enzyme acts as a biocatalyst: with the help of the enzyme, a certain substrate is converted into a certain reaction product.

From: www.foodstandards.gov.au/code/changes/circulars/Pages/Notification%20Circular%20178-21.aspx

• FSANZ: A1244 Chymosin from *GM Trichoderma Reesei* as a Processing Aid (Enzyme)

15 Nov 2021: The Application seeks approval to amend the Australian New Zealand Food Standards Code for approval of a new processing aid, a chymosin enzyme derived from a genetically modified strain of *Trichoderma reesei*, for use in the manufacture of certain dairy foods.

Executive Summary (1 page [pdf](#))

In the food applications Chymosin enzyme performs the technological function of clotting milk by highly specific cleavage activity of a single bond in κ -chain of Casein.

From: www.foodstandards.gov.au/code/applications/Pages/A1244---Chymosin-from-GM-Trichoderma-reesei-as-a-processing-aid-%28enzyme%29-.aspx

• FSANZ: A1231 Maltogenic alpha-Amylase from *GM Escherichia Coli* as a Processing Aid (Enzyme)

30 Nov 2021: The Application seeks to approve the use of Maltogenic Alpha Amylase, sourced from *GM Escherichia Coli*, as a Processing Aid in baking, brewing and starch processing.

Application (56 page [pdf](#))

Safety Assessment (15 page [pdf](#) | [docx](#))

Maltogenic alpha Amylase catalyses the hydrolysis of (1 \rightarrow 4)-alpha-D-Glucosidic linkages in Polysaccharides such as starch and primarily remove successive alpha-Maltose residues from the non-reducing ends of the Hexose chains.

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

• FSANZ: A1245 - Alpha Glucosidase from *GM Trichoderma Reesei* as a PA enzyme

10 Dec 2021: This Application seeks to extend the use of Danisco New Zealand Ltd.'s alpha-Glucosidase Enzyme, previously assessed in Application A1169, for use as a Processing Aid in brewing. [Executive Summary](#) (1 page pdf)

From: www.foodstandards.gov.au/code/applications/Pages/A1245-Alpha-Glucosidase-from-GM-Trichoderma-reesei-as-a-PA-enzyme.aspx

• EFSA: Phthalates: Draft Opinion & Exposure Protocol

5 Nov 2021: EFSA has launched Consultations on its *Draft Opinion (PC0097)* on the identification and prioritisation for risk assessment of Plasticisers Used in Food Contact Materials and on its *Draft Protocol (PC0098)* for the exposure assessment of those substances that are prioritised.

<https://connect.efsa.europa.eu/RM/s/publicconsultation2/a011v0000E7o6u/PC0097> (webpage with a Zip File)

<https://connect.efsa.europa.eu/RM/s/publicconsultation2/a011v0000E7pEA/PC0098> (webpage with a 32 page pdf File)

Consultation Closes: 16 Dec 2021

From: www.efsa.europa.eu/en/news/phthalates-draft-opinion-and-exposure-protocol-open-public-consultation

Agricultural Chemicals

• AWE: More Efficient AgVet Chemical Regulator

2 Dec 2021: New laws passed in Parliament will improve the efficiency of the APVMA and speed up the process to access chemical products.

This Bill aims to streamline regulation for the APVMA, encourage the registration of more minor uses and strengthen protections to the community – all while improving governance.

There will be a new APVMA Board established to guarantee the performance and accountability of the APVMA.

It will also: enable simpler regulatory processes for chemicals of low regulatory concern; provide for extensions to limitation periods and protection periods as an incentive for chemical companies to register certain new uses of chemical products; and; will put in place additional penalties and information requirements aimed at improving the integrity of the system for users and the community.

From: <https://minister.awe.gov.au/littleproud/media-releases/agricultural-veterinary-chemicals-legislation-amendment-bill-2019>

APVMA: 9 Dec 2021: The APVMA has informed that the [Agricultural and Veterinary Chemicals Legislation Amendment \(Australian Pesticides and Veterinary Medicines Authority Board and Other Improvements\) Bill 2019](#) (Improvements Bill) passed through Parliament on 1 Dec 2021.

The Improvements Bill includes measures to:

- establish a governance board for the Australian Pesticides and Veterinary Medicines Authority (APVMA)
- allow for prescribed approvals and registrations for chemicals of low regulatory concern
- provide for extensions to limitation periods and protection periods as an incentive for chemical companies to register certain new uses of chemical products
- allow for computerised decision-making by the APVMA
- simplify industry reporting requirements for annual returns.

A List of Measures & the Expected Implementation Date [are available](#) on the APVMA website: <https://apvma.gov.au/node/94871>

From: <https://apvma.gov.au/node/94876>

• APVMA: Ag Actives & Products Manufacturing Approval

29 Oct 2021: A new Condition of Approval or Registration for Agricultural Chemical Active Constituents and Products has been introduced and commenced on 29 October 2021.

The requires that Agricultural Products and Active Constituents for use in agricultural products must not be supplied if the manufacture of the active constituent or product contravenes, or fails to comply with, any *Manufacturing Law* of the country, or part of the country, in which it is manufactured.

The intention of this Condition is to give the APVMA the authority to respond appropriately should it establish (for example through an Overseas Official Determination) that a Registered Agricultural Chemical Product (or Approved Active Constituent for such a Product) is not compliant with a Licencing requirement in the Country of Manufacture (however described, for example Manufacturing Permits, Certificates or Authorisations).

Previous AgVet chemicals legislation did not require any evidence to show that AgVet chemicals (Active Constituents or Chemical Products) were legally manufactured in the country of manufacture. This meant, where a company had imported AgVet chemicals into Australia for the purposes of Australian Approval (of an Active Constituent) or Registration (of a Chemical Product), the APVMA had no ability to check if the manufacture was compliant with any manufacturing licence authorisation requirement in the country of the manufacture.

The Office of Best Practice Regulation (OBPR) was consulted in the preparation of the Order (ID 44022); which advised a Regulation Impact Statement was not required as the measures in the Order are unlikely to have more than a minor regulatory impact.

Order F2021L01044 (8 page [pdf](#) or [docx](#)) & latest Replacement Explanatory Statement (8 page [pdf](#) or [docx](#)) are downloadable from: www.legislation.gov.au/Details/F2021L01044

The Order defines *Manufacturing Law* to be, in relation to a country, or part of a country, a law that provides for the Licensing (however described) of the manufacture of agricultural chemical products or active constituents for agricultural chemical products.

From: <https://apvma.gov.au/node/93031>

Editor 1: This raises the complex issue of how this might be achieved and maintained, as the scope of "*Manufacturing Law*" may be much larger than their example of: Manufacturing Permits, Certificates or Authorisations. E.g. Environment Protection Licensing Laws for Manufacturing.

Editor 2: Up until Oct 2021, Agricultural Active Constituents once on the PubCRIS database, had just stayed there with no alerting advice from the APVMA about what was expected to be done to maintain an Active Constituent Approval entry.

How is the PubCRIS database kept up to date so that it is clear that each Active Constituent Approval is still current and able to be imported, even though the Approval Holder business has reported 0kg imported for many years (e.g. 10+) in their Annual Return?

More than one business may be sourcing the specific Active Constituent (as the O'seas Manufacturer would know there is an Approval for the specific Active Constituent). These other businesses would assume the Active Constituent Approval is maintained by the original Approval Holder.

To make a Request for a Voluntary Cancellation at the Request of the Holder, download the 2 page [docx form](#) & then email the completed form to: ChemicalReview@apvma.gov.au.

For help, you may need to email: Enquiries@apvma.gov.au

The List of Voluntary Cancellations at the Request of the Holder is at: <https://apvma.gov.au/node/69446>.

There were 4 Active Constituents cancelled in Nov 2021.

• APVMA: Review of Anticoagulant Rodenticides

2 Nov 2021: The APVMA published a [Notice of reconsideration](#) (see pages 24-27 of the APVMA Gazette No. 22 ([pdf](#) | [docx](#))) to commence a review of [Anticoagulant Rodenticides](#), a class of product typically used for the control of rats and mice in and around buildings.

The APVMA Reconsideration, will include first generation (Warfarin, Coumatetralyl and Diphacinone) and second generation (Brodifacoum, Bromadiolone, Difenacoum, Difethialone and Flocoumafen) anticoagulant rodenticides, allowing the APVMA to reassess the potential risks associated with the use of these products and consider whether labels carry adequate instructions to protect the health and safety of people, animals, and the environment.

The [First Stage](#) of the Review seeks public comment on the matters being considered and work plan. Submissions close 2 Feb 2022. Anticoagulant Rodenticide products under Review may continue to be used in accordance with the APVMA-Approved Label Directions for the duration of the review unless suspended or cancelled.

From: <https://apvma.gov.au/node/93286>

• WA Commerce: Working with Pesticides, Overview

15 Nov 2021: Fact Sheet Web Pages Overview Information

[Do you need to use pesticides?](#)

[Before you apply pesticides.](#) [Preparing and mixing chemicals.](#)

[Cleaning Up.](#)

[Record keeping.](#)

[Further information.](#) (APVMA & WA Dept web pages)

From: www.commerce.wa.gov.au/publications/working-pesticides-overview

• EPA USA: Glyphosate – Assessing Risks from Uses

Nov 2021: EPA USA released the final Biological Evaluation (BE) Assessing Risks to listed species from Labeled Uses of Glyphosate. The BE is available as webpages, xlsx & docx files

[Final Glyphosate Executive Summary](#) as a 6 page [docx](#) file

Two extracts from the Executive Summary:

The major transport routes off the treated area for Glyphosate include runoff and spray drift. Glyphosate has a high solubility, low octanol-water partitioning coefficient, low vapor pressure, and low Henry's Law Constant. These data suggest that glyphosate has a low potential for volatilization and bioaccumulation. It is assumed that the Glyphosate salts dissociate rapidly to form Glyphosate Acid and the counter ion. The main routes of dissipation are microbial degradation under aerobic conditions, and runoff. Glyphosate is expected to reach surface water primarily through spray drift; however, transport in runoff may also occur primarily via sorption of Glyphosate-Metal Complexes to eroded soil. The highest concentrations of Glyphosate in surface water are in urban environments and in the vicinity of local use areas.

Additional details on the fate of Glyphosate are provided in Chapter 3 of the Biological Evaluation.

Technical glyphosate is practically non-toxic to terrestrial and aquatic animals on an acute exposure basis. Toxicity studies, particularly acute aquatic toxicity studies, show that while some formulated products are less toxic than glyphosate active ingredient alone, others can be up to 2 orders of magnitude more toxic. Formulated glyphosate is moderately to highly toxic to fish, highly to very highly toxic to aquatic invertebrates,

moderately toxic to mammals, and slightly toxic to birds on an acute exposure basis. In both terrestrial and aquatic animals, technical and formulated glyphosate demonstrate a variety of growth and reproductive effects at a range of chronic exposure concentrations.

More details on the available toxicity data and incident reports are provided in Chapter 2.

From: www.epa.gov/endangered-species/final-national-level-listed-species-biological-evaluation-glyphosate

• ECHA: Glyphosate Consultations - 400+ Submissions

2 Dec 2021: The parallel consultations on Glyphosate held by EFSA and ECHA closed on 22 Nov 2021.

All interested parties had access to the Scientific Evaluations prepared by the national competent authorities of Hungary, France, the Netherlands and Sweden, known collectively as the *Assessment Group on Glyphosate (AGG)*.

A total of 416 submissions were received through the two consultations from within and outside the EU, the majority to EFSA from Argentina (144) and France (125).

These Submissions – some carrying multiple comments – are publicly available on the EFSA & ECHA websites.

From: <https://echa.europa.eu/hot-topics/glyphosate>

• EPA NZ: Hazardous Substances Update Nov 2021

Hydrogen Cyanamide Orchard Spray Ingredient – Comment closes 20 Dec 2021

465 responses received on Glyphosate Call for Information
Over the coming months the EPA NZ will be reviewing and analysing the information that has been provided, and plan to publish a Summary Report in early 2022.

Ethanedinitrile (EDN) Fumigant: In Nov 2021 a Decision-making Committee hearing reconvened on an application to introduce EDN, an alternative for the pre-shipment fumigation of export logs. [Hearing Transcript App202804 – EDN \(Ethanedinitrile\)](#) 25 Nov 2021 (126 page pdf)

Two Fungicides: Hazard Classification Update Proposal: in line with changes recently made in the European Union and Australia (adverse health effects on the reproductive system), is **now open for Public Submissions**. The EPA NZ has initiated an Application for a Modified Reassessment of the fungicides, **Propiconazole** and **Tebuconazole**. (4 Nov 2021). Submissions close 16 Dec 2021

See: www.epa.govt.nz/news-and-alerts/latest-news/hazard-classification-update-underway-for-two-fungicides/

GHS 7 Updates (in NZ): The [EPA NZ have updated 71 individual Hazardous Substance Approvals](#) to apply the GHS 7 Hazard Classification system to these 71 Company Products. (See H&E Note following)

From: www.epa.govt.nz/news-and-alerts/newsletters/hazardous-substances-update/ *Select Issue*

• EPA NZ: GHS 7 Classification: Products Updated

12 Nov 2021: The EPA NZ has updated 71 individual Hazardous Substance Approvals for Company Products to apply the GHS 7 Classification system. These Company Products were reassessed between 1 Jan 20 & 30 April 21.

[Decision Document: to update the substance classifications of the approvals listed in Appendix 1](#) (22 page pdf)

The document includes a 5 page Appendix 2 Correlation Table: Pre-2021 HSNO Classification - Equivalent new Classification.

From: www.epa.govt.nz/public-consultations/decided/changing-hazard-classifications-to-ghs-7-consultation-3/

• OECD: Unmanned Aerial Spray Systems in Agriculture

3 Nov 2021: Managing the risks from the use of Drones for pesticide application.

Drones and Unmanned Aerial Spray Systems (UASS) could reduce workers' pesticide exposure and apply pesticides with more precision. This Report looks at the current information gaps with UASSs and how the risks could be viewed and addressed.

The use of UASS for pesticide applications has the potential to provide benefits such as the reduction of applicator exposure in comparison to backpack spraying, better quality applications in difficult to access scenarios (e.g. sloped vineyards), and the enablement of precise zone or spot application linked with UASS/UAV-based whole field scouting.

There are a number of challenges in part due to a lack of understanding of these technologies. These include Spray Drift, Operator Exposure, Operator Training, and Formulation Technology for drone-based applications.

Report: www.oecd.org/chemicalsafety/pesticides-biocides/literature-review-on-unmanned-aerial-spray-systems-in-agriculture.pdf (73 page pdf)

From: www.oecd.org/chemicalsafety/ & the Report.

And:

www.oecd.org/chemicalsafety/pesticides-biocides/managing-risks-from-the-use-of-drones-for-pesticide-applications.htm

• NSW: Agsafe's AgVet Chemicals ChemClear Program

Agsafe's ChemClear program is holding a statewide collection in NSW in **March 2022**. Agvet chemical users can now register their unwanted or obsolete AgVet chemicals for collection.

Registrations close on 28 January 2022. To Register your chemicals visit: www.chemclear.org.au/register-your-chemical

An appropriate quantity of storage stickers will be sent out by post, one month after your registration with ChemClear. These stickers will display your registration reference number and are provided for placement on the containers you have registered for disposal. These stickers will aid safe storage and identify the chemicals to your employees, auditors and others as being registered for disposal.

ChemClear will contact you directly to advise the location and date of the collection point in your local government area.

From:

www.chemclear.org.au/2021/10/13/a-chemclear-collection-is-on-the-way-for-new-south-wales-agvet-chemical-users/

Dangerous Goods

• Draft ADG Code Edition of 7.8 of the ADG Code

Is now available for public review (29 Oct 2021).

The Draft aligns with Revision 22 of the United Nations (UN) Model Regulations and incorporates changes adopted by the UN. The Draft also incorporates minor Australian specific changes.

An overview of these changes, including the reasoning behind them is detailed in the ADG 7.8 Explanatory Document.

<https://www.ntc.gov.au/sites/default/files/assets/files/ADG%207.8%20Explanatory%20Document%20-%20consultation%20October%202021.docx>

A more comprehensive list of the amendments can be found in accompanying document Overview of differences between 7.7 & 7.8.

<https://www.ntc.gov.au/sites/default/files/assets/files/Overview%20of%20difference%20between%207.7%20and%207.8%20-%20consultation%20October%202021.docx>

Please forward any comments on the draft to Debra Kirk, dkirk@ntc.gov.au.

Please provide your comments by **Monday 17 January 2021**.

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

• 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) was published in September 2021.

Order a printed Hard Copy from NTC Online Ordering: ANZERG2021 \$19.20 Shipping Fee for 2 copies in AU \$15.67

<https://ntc.infoservices.com.au/>

Note: Electronic copies of the ANZ-ERG are free to download from the NTC website, now it has been Approved by the Competent Authorities Panel

https://www.ntc.gov.au/sites/default/files/assets/files/D-21-0128224%20-%20JC003412_ANZ-ERG2021%20-%20WEB.pdf

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

• WorkSafe Vic: Code of Practice S & H of D. Goods

June 2021: This Code of Practice provides practical guidance on how to comply with your obligations under Victoria's Occupational Health & Safety Legislation for the **Safe Storage and Handling of Dangerous Goods**.

[Code of Practice S&H of D. Goods 2013 \(amdmnt\) \(76p pdf\)](#)

Note: The Dangerous Goods (Explosives) Interim Regulations 2021 (Interim Explosive Regulations) come into effect on 20 June 2021. The Interim Explosive Regulations will be in place for 12 months until 19 June 2022. The Vic Interim Explosive Regulations are largely based on and reflect, the Vic Dangerous Goods (Explosives) Regulations 2011, with limited modifications.

The Vic Dangerous Goods (Storage and Handling) Amendment (Notification) Regulations 2021 came into effect on 1 July 2021 (Notification Regulations). This S & H Code of Practice has not yet been updated to reference, or reflect any changes introduced by, the Vic Interim Explosive Regulations or Notification Regulations.

From: www.worksafe.vic.gov.au/resources/code-practice-storage-and-handling-dangerous-goods

• CAP Decisions Register Updated

Nov 2021: The Competent Authorities Panel - National Exemptions, Approvals & Determinations now includes all 2020 CAP 231 Decisions & CAP's 224 Decisions to 29 July 2021.

All 2020 & 2021 Applications (bar 1) were Applicant Specific.

Covering Road Tankers; Packaging; and 1 Limited Quantity Guidance Material w CAP logo (in 2020); and 1 Competency Evidence Requirement Exemption for Dangerous Goods Drivers Licence Renewals (in 2021).

Except: CA2020/231 Truck Industry Council developed Technical Guide for Hot Components design to support AS2809:2020

From:

www.infrastructure.gov.au/infrastructure-transport-vehicles/transport-strategy-policy/australia/dangerous/competent_authorities

Editor: With thanks to the new CAP Chairperson for organising this. Also there is interest to make all the CAP Decision reasons available to be directly downloaded, to improve accessibility.

• National Major Hazard Facilities Forum Presentations

WorkSafe Vic: 4th & 5th May 2021

11 Presentations are now available

9 Nov 2021: Recordings of 11 presentations from the National Major Hazard Facilities forum - 4 and 5 May 2021.

Regulating MHF's during a pandemic | lessons & opportunities

Enhancing process safety in challenging times

Effective management of critical controls

Acute Toxicity Criteria – Which one to Choose

False alarm, false assurance & whether we can tell the diff.

Industry Panel: 3 P's of KPI's – Practices, Pitfalls, Performance

Pike River Case Study

20 Years of Evolving Regulatory Practice

Panel – Process Safety Leadership and Managing Change During Times of Uncertainty

Redefining the Role of the Safety Professional

PIEMC – A Collaboration between NSW Petrochemical Industry members & FRNSW

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

• WorkSafe Vic: Major Hazards Matters Newsletter

Contains links to local AU MHF Information e.g. Forums/ Training/Regs; & links to MHF Incidents from around the World.

[17 Nov 2021 Edition:](#)

[24 Aug 2021 Edition:](#)

[17 June 2021 Edition:](#)

[21 April 2021 Edition:](#)

From: <https://comms.worksafe.vic.gov.au/major-hazards-archive>

• WorkSafe NZ: Above Ground Fuel Storage on Farms

Nov 2021: Guidelines to provide practical advice on ways to manage the health and safety risks associated with the Above Ground Storage of Fuel on Farms.

[Above Ground Fuel Storage on Farms](#) (50 page pdf)

[Appendix 3 CheckList for Safe Farm Fuel Storage](#) (3 page pdf)

These Guidelines describe the requirements for Petrol and Diesel. However, the requirements for Petrol generally also apply to other fuels such as E10, E85, Aviation Gasoline, Racing Gasoline and Kerosene.

From:

www.worksafe.govt.nz/topic-and-industry/agriculture/chemicals-and-fuels-on-farms/above-ground-fuel-storage-on-farms/

• WA Info Sheet: Storage & Handling of Hydrogen

Nov 2021: This WA DMIRS Information Sheet is provided to assist all persons who are proposing to store, handle or produce Hydrogen gas in Western Australia (WA), from a Dangerous Goods safety perspective.

Hydrogen is a highly flammable gas. It is vital that Hydrogen installations are correctly engineered, built, operated and maintained so that risk is minimised to people, property and environment.

A number of significant Hydrogen projects are proposed in Western Australia. Some of these include large-scale 'green' Hydrogen production through solar, wind and battery energy storage systems (BESS) to power Hydrogen electrolyzers. The

Hydrogen can then be stored in gas or liquid form. An extension of these projects is the production of Ammonia from 'green' Hydrogen.

Other projects include the effective conversion of natural gas and similar feedstock into Hydrogen and high quality graphite, and microgrid power stations using Hydrogen fuel cells. There are also proposals on the use of Metal Hydride Systems to run Hydrogen Fuel Cells for power generation.

From: www.dmp.wa.gov.au/Documents/Dangerous-Goods/DGS_IS_Hydrogen.pdf

Alerted by the AIDGC What's Happening newsletter.

Hydrogen Standards Release Summary – Nov 2021 (Standards Australia) covers:

AS 16110.1:2020, Hydrogen generators using fuel processing technologies, Part 1: Safety (ISO 16110-1:2007, MOD)

AS ISO 16110.2:2020, Hydrogen generators using fuel processing technologies, Part 2: Test methods for performance

AS ISO 14687:2020, Hydrogen fuel quality – Product Spec

AS 22734:2020, Hydrogen generators using water electrolysis: Industrial, comm'l, & residential applic'ns (ISO 22734:2019, MOD)

SA TS 19883:2020, Safety of pressure swing adsorption systems for hydrogen separation & purification (ISO/TS19883:2017, MOD)

AS ISO 16111:2020, Transportable gas storage devices – Hydrogen absorbed in reversible metal hydride

AS ISO 19881:2020 Gaseous hydrogen - Land vehicle fuel containers

AS 19880.3:2020, Gaseous hydrogen – Fuelling stations, Part 3: Valves (ISO 19880-3:2018, MOD)

SA TR 15916, Basic considerations for the safety of hydrogen system

AS 62282.3.100, Fuel cell technologies, Part 3.100: Stationary fuel cell power systems – Safety

AS 62282.3.300, Fuel cell technologies, Part 3.300: Stationary fuel cell power systems – Installation

AS 26142, Hydrogen detection apparatus – stationary applications

AS ISO 19880.8 & Amendment 1, Gaseous hydrogen — Fuelling stations, Part 8: Fuel quality control

AS ISO 19880.5, Gaseous hydrogen - Fuelling stations, Part 5: Dispenser hoses and hose assemblies

From: www.standards.org.au/getmedia/f5470b2d-3ca4-4928-ae1a-3b49b72bbb0f0/Hydrogen-standards-release-summary-November-2021.pdf.aspx

• IATA 2022 Lithium Battery Guidance Document

This [Transport of Lithium Metal and Lithium Ion Batteries Guidance Document](#) is based on the provisions set out in the 2021-2022 Edition of the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (Technical Instructions) and the 63rd Edition of the IATA Dangerous Goods Regulations (DGR).

The provisions of the DGR with respect to lithium batteries may also be found in the IATA lithium Battery Shipping Regulations (LBSR) 9th Edition. In addition to the content from the DGR, the LBSR also has additional classification flowcharts and detailed packing and documentation examples for lithium batteries.

www.iata.org/contentassets/05e6d8742b0047259bf3a700bc9d42b9/lithium-battery-guidance-document.pdf (27p pdf)

From: www.iata.org/en/programs/cargo/dgr/lithium-batteries/

• DOT USA: Lithium Battery Guide for Shippers

1 Oct 2021: USA Dept of Transport (DOT USA) Pipeline & Hazardous Materials Safety Administration.

This Compliance resource was prepared to assist Shippers to safely package Lithium Cells and Batteries for transport by all modes according to the latest (11 May 2020; HM-2150) regulatory requirements. This publication directs the reader to Scenario-Based Shipping Guides that outline the applicable requirements to ship packages of Lithium Cells and Batteries in various configurations.

[Lithium-Battery-Guide.pdf](#) (36 page pdf). A Compliance Tool for All Modes of Transportation. Revised Sept 2021

From: www.phmsa.dot.gov/training/hazmat/lithium-battery-guide-shippers

Alerted by the AIDGC What's Happening newsletter

• ES Vic: Big Battery Fire & Cooling System Leak

29 Sept 2021: Energy Safe Vic (ESV) has concluded the Victorian Big Battery (VBB) fire most likely resulted after a cooling system leak caused a short circuit in an electrical component in a Megapack.

After extensive enquiries, ESV found a Megapack cooling system leak caused a short circuit resulting in overheating that led to a fire in a nearby battery compartment, which consequently damaged two Megapacks.

There were further contributory factors with the Megapack in question being switched into an off-line service mode, resulting in the protection systems being inactive.

A 24-hour delay in connecting the batteries to the supervisory control and data acquisition (SCADA) system also meant there was no active monitoring of the Megapack alarms.

ESV has required the site's owners and operators to implement a number of additional safety measures. 5 measures are listed.

The Statement of Technical Findings is located on the [Electrical Incident & Technical Investigation Reports](#) web page.

https://esv.vic.gov.au/wp-content/uploads/2021/09/VBB_StatementOfFindings_FINAL_28Sep2021.pdf (30 July 2021 2 page pdf)

From: <https://esv.vic.gov.au/news/cooling-system-leak-led-to-victorian-big-battery-fire/>

• Warehouse & Aluminium Plant Fire: Kurri Kurri NSW

14 & 15 Nov 2021: The fire at the Weston Aluminium site started on Sunday morning and sent huge plumes of black smoke over the town throughout the day and well into the night.

Large quantities of bottled hand sanitiser, paint, rubber, plastics and aluminium dross were involved in the fire.

About 300 firefighters from Sydney, Newcastle, the Central Coast have worked in rotating shifts to battle the blaze.

The collapsed roof of the structure had made access for firefighters difficult. The site also contained hundreds of tonnes of what is known as Aluminium dross, a waste product from the production of Aluminium, that can become volatile & explode if it becomes wet (*Editor:* as Fire Rescue NSW understood, it can be reactive with water). The owner Mr Simonian said: "Dross itself, even if it gets wet, is not explosive, it gives off a bad smell of Methane, but it really doesn't [blow up], so there is no problem" (*Editor:* Methane does not have a smell on its own!)

The large quantities of hand sanitiser and paint were being stored at the site for incineration.

The Weston Aluminium plant processes Aluminium dross, but in recent years has also diversified into waste incineration, which now includes large volumes of medical waste; and the large quantities of hand sanitiser and paint were being stored at the site for incineration.

Mr Simonian said the plant was not responsible for any bad smells in the town. "We have an extensive range of what we call bag houses, which are like vacuum cleaners, that clean the smoke." "We also douse it with lime for acids, and activated carbon for dioxins and we also have continuous monitoring."

"The fire had damaged large storage areas, but the site's furnaces had been unaffected and Mr Simonian hoped to have them running again within a matter of days."

From: www.abc.net.au/news/2021-11-15/residents-near-kurri-blaze-told-to-keep-windows-and-doors-closed/100621360

Alerted by the AIDGC What's Happening newsletter

Environmental Notes on Chemicals

• Progress of IChEMS in 2022

As at 10 Dec 2021: Progress of the Industrial Chemicals Environmental Management Standard (IChEMS) from 2022.

The IChEMS Register will be a single consistent source of information on how chemicals should be managed. Before chemicals are Scheduled, the IChEMS Register and decision-making principles must be made. An expert advisory committee must also be appointed. In Phase 2, the IChEMS Register will be incorporated into the laws of each jurisdiction.

This means environmental risks will be managed consistently across states and territories, in Commonwealth areas and at Australia's borders.

From 2022: 1/ Launch IChEMS Register and begin Chemical Scheduling; 2/ The IChEMS Register is adopted into Environmental Law across Australia; 3/ Ratify chemicals on the Stockholm Convention.

IChEMS will use AICIS risk assessments to categorise chemicals on the IChEMS register, based on their level of concern to the environment.

The IChEMS Register will be a searchable database (available online early in 2022) of publicly accessible Chemical Scheduling Decisions.

Each Scheduling Decision will include appropriate Risk Management Measures for the use, handling, storage and disposal of a chemical.

A cost recovery framework is being developed to recover IChEMS costs from Introducers of industrial chemicals who import or manufacture chemicals.

Fees will be determined after industry consultation in late 2021 and fee collection will coincide with the AICIS annual invoicing period.

To give industry time to prepare for the new arrangements, IChEMS fee collection will be delayed until 1 Sept 2022.

Ask to join the IChEMS emailing list:

ichems@environment.gov.au

From: www.awe.gov.au/environment/protection/chemicals-management/national-standard

Editor: I am not aware of any consultation on Fees in 2021.

• EPA NSW: Single Use Plastics End is Near

16 Nov 2021: The end is near for single use plastics, including bags, straws, cotton buds, plates, bowls and cutlery, after the Plastic Reduction and Circular Economy Act 2021 passed NSW Parliament today.

Plastic Packaging and Single-Use Plastics make up 60% of litter across NSW, with Single-Use Plastic bags to be phased out from June 2022. Lightweight bags made from

biodegradable, compostable, or bio-plastics will also be banned, including those made from Australian certified compostable plastic.

Single-Use Plastics Straws, Stirrers & Cutlery; & specified Single-Use Plastic Bowls (& biodegradable, compostable, or bio-plastics items), will be banned from 1 Nov 2022.

Also: The NSW Govt has established a legislative framework to tackle harmful and problematic plastics through the setting of Design Standards. The first Design Standard has been set for microbeads in cosmetic and personal care items, and will ensure microbeads are phased out from 1 Nov 2022.

From:

www.epa.nsw.gov.au/news/media-releases/2021/epamedia211116-fork-in-the-road-for-single-use-plastics

Also: www.dpie.nsw.gov.au/our-work/environment-energy-and-science/plastics-action-plan/phasing-out-single-use-plastics-in-nsw

• AWE: Export Ban on Whole Baled Waste Tyres

2 Nov 2021: From 1 Dec 2021, the export of waste tyres is banned except for: **1/** tyres that have been processed into crumbs, buffings, granules or shreds; **2/** tyres that have been processed into fuel; **3/** tyres exported for re-treading; **4/** tyres that will be re-used on vehicles overseas.

Exporters require a Licence and must meet strict criteria.

E.g. When tyres are exported for re-treading or reuse, suppliers must have evidence of a commercial relationship with an importer or with a verified re-treading facility.

Australia's waste export ban is world-leading with Australia the only country to have banned the export of unprocessed waste.

Unprocessed single polymer plastics are to be banned from 1 July 2022; and paper and cardboard banned from 1 July 2024.

Exporters wishing to apply for a Licence should go to <https://rawr.awe.gov.au/>

From: www.awe.gov.au/about/news/media-releases/exporters-encouraged-apply-for-licences-for-tyres

And: www.awe.gov.au/environment/protection/waste/exports/tyres

• Env NZ: Stewardship of Tyres and Large Batteries

4 Nov 2021: The NZ Ministry of Environment are seeking your feedback on proposed regulations for product stewardship of tyres and large batteries.

Every year around 6.5 million tyres are imported into New Zealand. When they reach their end of use, about two thirds go to landfill or are illegally dumped, which creates the risk of fire and toxic emissions.

The NZ Tyre Stewardship Scheme "Tyrewise" is designed as a push-pull model. Regulations will push end of life tyres away from landfill, stockpiling and illegal dumping. Incentive payments for reuse and recycling services will pull tyres to environmentally-sound disposal pathways.

In 2020, an estimated 1000 electric vehicle batteries reached their end of use. By 2030 that number could reach 84,000 each year. Mis-managed large batteries also pose risk of fire.

IF they end up in the landfill or the environment, toxins such as heavy metals are released.

The NZ Large Battery Stewardship Scheme is designed to keep large batteries in use for as long as possible including through second-life uses such as storage for electric charging stations and solar energy systems, and recycling of components at end of life.

[See the Consultation](#) which closes on **16 Dec 2021**.

[Read the Consultation document on Proposed product stewardship regulations: Tyres and large batteries](#) [56 page pdf]

[Read the Summary document on Proposed product stewardship regulations: Tyres and large batteries](#) [7 page pdf]

[YouTube Video](#) (3m14s)

From: <https://environment.govt.nz/news/have-your-say-on-regulations-for-product-stewardship-of-tyres-and-large-batteries/>

And: <https://consult.environment.govt.nz/waste/rps-tyres-and-large-batteries/>

• Battery Recycling when EV Batteries Die: Issues

23 Nov 2021: Will battery recycling be ready when all these new Electric Vehicle (EV) batteries die? Spent electric vehicle batteries are toxic. But recycling them is going to get better.

Selected Extracts from the Freethink webpage:

Researchers and innovators are scrambling to find an effective and eco-friendly technique to reduce a dead battery to its essential components to be used as building blocks for the next generation of batteries.

Those EV energy boxes contain valuable minerals such as cobalt and lithium, which are generally mined and processed outside of the United States. There, local communities suffer the consequences from the invasive mining process. It damages landscapes and creates toxic water pollution.

Lithium batteries in EVs are bigger and heavier than ordinary car batteries. They are complicated to disassemble because they are built up of hundreds of individual lithium-ion cells. They contain toxic metals such as copper and lead. And, if disassembled wrong, the batteries have a nasty habit of exploding.

Even though EV battery recycling is gaining traction, convincing carmakers to employ recycled components is proving difficult.

Yan Wang, a professor of mechanical engineering at Worcester Polytechnic Institute and his team recently published a study in the journal *Joule* showing that these recycled cathodes can be as good as new — they can even be better.

From: www.freethink.com/environment/battery-recycling

Alerted by the AIDGC What's Happening newsletter

• Electric Cars & Home Li Batteries Waste Problem

25 Oct 2021: Several product recalls are showing why a national plan for dealing with renewable energy waste may already be needed.

Battery manufacturer LG Energy Solutions (formally LG Chem) has [recalled a suite of household batteries after concerns they "may overheat and catch on fire"](#). It is understood more than 5000 units have been pulled.

Hyundai has also pulled the batteries from almost 1000 electric cars from the Australian market as part of a global recall, again amid [concerns that they may lead to an electrical short and "start a fire"](#).

Processing the Lithium-Ion batteries inside these products is a new and complicated task for the Australian recycling industry. They come with a fire risk, contain potentially toxic yet valuable minerals, and are hazardous to the environment if dumped inappropriately.

Projections are that this waste stream will soar in coming years, and there are currently no overarching rules on how companies, consumers or recyclers should manage it.

For extensive details go to the ABC News Article.

From: www.abc.net.au/news/2021-10-25/electric-car-solar-battery-storage-waste-recycling/100564234

• AU B-cycle Battery recycling Stewardship Scheme

In Australia, B-cycle is onboarding industry participants for a national public launch in **early 2022**.

You can become a B-cycle accredited Battery Steward if you import or sell batteries, or you're part of the battery collection and recycling network.

B-cycle is backed by a \$1 million Federal Government Grant & matching industry funding, given to the Battery Stewardship Council (BSC) to fast-track a circular economy for batteries.

Clear Accreditation helps consumers choose participating brands. Together with recycling rebates, this rewards industry for doing the right thing.

From: <https://bicycle.com.au/>

Alerted by the AIDGC What's Happening newsletter

• ECHA: Chemical Recycling & REACH requirements

11 Nov 2021: Chemical Recycling of Polymeric Materials (e.g. plastic, rubber) from waste, currently covers different technologies with varying potential for contributing to a Circular Economy. Following REACH Registration requirements for recycled materials and finding ways to eliminate Substances of Concern from plastic waste streams are key to achieving non-toxic recycling.

The Report commissioned by ECHA investigates the current knowledge on chemical recycling of polymeric materials such as plastics and rubber from waste.

- Regulatory issues in chemical recycling are currently not discussed in scientific papers. The Report recommends that the regulatory issues are studied on a case-by-case basis, separately for each type of chemical recycling technology.

- There is little knowledge about the abilities of different chemical recycling processes to eliminate substances of concern. Investigations at chemical recycling plants should be carried out.

- To ensure the circularity of plastics, the potential of specific technologies should be evaluated case-by-case to avoid false generalisations on the pros and cons of one technology for the whole field of chemical recycling.

- Implementation of Digital Technologies contribute to improving the traceability of substances of concern in recycling requires substantial efforts.

[ECHA Report \(Aug 2021\): Chemical Recycling of Polymeric Materials from Waste in the Circular Economy](#) (145 page pdf)

From: <https://echa.europa.eu/-/reach-requirements-need-to-be-considered-in-chemical-recycling>

• ECHA: Nanomaterials in Waste Streams

15 Nov 2021: A new ECHA European Union Observatory for Nanomaterials (EUON) Report shows that limited data is available on the amount of waste streams containing Nanomaterials in the EU. With the current data available, it is not possible to give an accurate estimate of the quantities of Nanomaterials in different waste streams.

However, generic mass flow models have been widely used to provide a general overview of the distribution of specific Nanomaterials in the environment.

The study also finds that existing research demonstrates that incineration and wastewater treatment are highly efficient at limiting emissions of some of the most commonly used Nanomaterials to the environment.

Since 2020, manufacturers and importers of Nanomaterials have been legally obligated to report when Nanomaterials (i.e. Nanoforms of chemical substances) are placed on the market

through their REACH Registrations. However, information on specific amounts of Nanomaterials manufactured or imported is not required under REACH, as the regulation requires manufacturers to report the total quantity of the chemical manufactured instead, including both the Nanomaterial Form of the chemical, as well as Non-Nanomaterial Forms.

EUON: [Study on the Product Lifecycles, Waste Recycling and the Circular Economy for Nanomaterials Report](#) [131 page pdf]

From: <https://echa.europa.eu/-/despite-limited-information-on-nano-waste-existing-data-is-valuable-for-waste-operators>

• EPA Vic: Bradbury Site Clean-Up Completed

6 Dec 2021: The clean-up of the former Bradbury Industrial Services site has been completed with nearly 6000 tonnes of waste removed by the EPA Vic and its Contractor.

The clean-up (started in April 2021) came after a major blaze gutted the chemical processing facility in 2019.

Time lapse camera [YouTube clip](#) (2m 25s) of the Clean-Up. (Editor: You can play it at a ¼ or ½ speed to help view it)

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

Also see: www.epa.vic.gov.au/for-community/current-projects-issues/bradbury-cleanup (30 Nov 2021)

• EPA NSW: PFAS Firefighting Foam Reg Guidance

1 Nov 2021: The NSW Protection of the Environment Operations (General) Regulation 2021 (the Regulation) includes measures to minimise and manage the risk of potential harm to the environment and human health from the use of firefighting foam containing PFAS.

[Identifying & Testing](#); [Storage](#); [Containment](#); [Disposal](#); [Decontamination of Fire Fighting Foam Infrastructure](#); [The future of PFAS Fire Fighting Foam use in NSW](#).

From: www.epa.nsw.gov.au/your-environment/contaminated-land/regulation-of-pfas-firefighting-foams/guidance

• ECHA: Further Restrictions of PFAS Supported

9 Dec 2021: The ECHA Committees for Risk Assessment and Socio-Economic Analysis (RAC) support Germany's proposal to restrict the use of undecafluorohexanoic acid (PFHxA) and related substances. The potential restriction is expected to reduce further environmental and human exposure to these chemicals resulting mainly from uses in food contact materials, textiles and fire-fighting foams (where it is not possible to minimise emissions through other means).

From: www.echa.europa.eu/-/scientific-committees-support-further-restrictions-of-pfas

• EPA USA: PFAS in Pesticide Packaging

29 Sept 2021: EPA USA released an internally validated method for detecting 28 PFAS compounds in oily matrices. The method is intended to help pesticide manufacturers, State Regulators, and other interested stakeholders test pesticide products formulated in oil, petroleum distillates, or mineral oils for PFAS.

In a shared interest to remove PFAS from the environment, if companies find PFAS in their product, EPA USA is requesting that companies engage in good product stewardship and notify the Agency.

Previously reported in Hazmat & Env Notes Jan-Feb-Mar 2021: On 5 March 2021, EPA USA released testing data showing PFAS contamination from the Fluorinated HDPE containers (used to store & transport a mosquito control pesticide product).

From: www.epa.gov/pesticides/pfas-packaging

And: www.epa.gov/pesticides/updates-epa-efforts-address-pfas-pesticide-packaging

• EPA USA: Chemicals Proposed for Toxics Release Inven.

18 Oct 2021: EPA USA is proposing to add 12 chemicals to the list of toxic chemicals subject to Toxics Release Inventory (TRI) Reporting requirements. The EPA USA believes that available data show these chemicals have moderately high to high human health toxicity &/or are highly toxic to aquatic life.

1/ Dibutyltin dichloride; 683-18-1; **2/** 1,3-Dichloro-2-propanol; 96-23-1; **3/** Formamide; 75-12-7; **4/** 1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta[g]-2-benzopyran; 1222-05-5; **5/** N-Hydroxyethylethylenediamine; 111-41-1; **6/** Nitrilotriacetic acid trisodium salt; 5064-31-3; **7/** p-(1,1,3,3-Tetramethylbutyl) phenol; 140-66-9; **8/** 1,2,3-Trichlorobenzene; 87-61-6; **9/** Triglycidyl isocyanurate; 2451-62-9; **10/** Tris(2-chloroethyl) phosphate; 115-96-8; **11/** Tris(1,3-dichloro-2-propyl) phosphate; 13674-87-8; **12/** Tris(dimethylphenol) phosphate; 25155-23-1.

Proposed Rule (web page) (Comment by 18 Dec 2021):

www.regulations.gov/document/EPA-HQ-TRI-2017-0434-0001

From:

www.epa.gov/toxics-release-inventory-tri-program/addition-certain-chemicals-toxics-release-inventory-proposed

• EPA USA: Natural Gas Processing Facilities & TRI

24 Nov 2021: The EPA USA has [added Natural Gas Processing Facilities](#) (12 page pdf) to the scope of industry sectors required to report to the EPA USA Toxics Release Inventory (TRI) Program.

Natural Gas Processing Facilities are stationary, surface facilities that receive gas from a gathering system that collects raw natural gas from off-site wells and prepares the gas for delivery to the Natural Gas Processing Facilities. These facilities process the gas to meet industrial or pipeline specifications and extract Heavier Liquid Hydrocarbons from the prepared field natural gas.

In processing natural gas and associated products, these Facilities deal with over 21 TRI-covered chemicals, including n-Hexane, Hydrogen Sulfide, Toluene, Benzene, Xylene, and Methanol.

From:

www.epa.gov/toxics-release-inventory-tri-program/addition-natural-gas-processing-facilities-toxics-release

• Hydrogen Blending proposed in Gas Transmission

6 Dec 2021: Australian energy infrastructure business, APA Group, announced a proposal to test Victoria's high pressure gas transmission system to safely blend Hydrogen as part of its Victorian Transmission System access arrangement submission to the Australian Energy Regulator (AER).

This study is to help identify which parts of the network are suitable for Hydrogen blends.

[Full Statement](#) (2 page pdf)

From:

www.apa.com.au/news/media-statements/2021/developing-australias-first-blueprint-for-state-wide-hydrogen-blending/

Editor: Before Victoria transitioned to Methane around 1970, Town (Coal) Gas, which was about 50% Hydrogen, was being distributed in gas mains. https://en.wikipedia.org/wiki/Coal_gas. When we changed, ALL our burners had to be replaced.

• OECD Chemicals Perspective on Designing with Sustainable Plastics – Goals, Considerations

7 Dec 2021: The OECD has released a new publication “A Chemicals Perspective on Designing with Sustainable Plastics - Goals, Considerations and Trade-offs” and four supporting Case Studies. The Case Studies were developed as concrete examples and included two in the plastic packaging sector ([biscuit wrappers](#) and [detergent bottles](#)) and two in the construction sector ([flooring](#) and [insulation](#) (80p pdf)).

<https://read.oecd.org/10.1787/f2ba8ff3-en?format=pdf> (76p)

“The development of plastic products does not systematically take sustainability, particularly from a chemicals perspective, into account. This report seeks to enable the creation of inherently sustainable plastic products by integrating sustainable chemistry thinking in the design process.”

From: www.oecd.org/chemicalsafety/a-chemicals-perspective-on-designing-with-sustainable-plastics-f2ba8ff3-en.htm

• BRS: Unsound Management of Chemicals & Wastes

BRS: Basel, Rotterdam and Stockholm Conventions

1 Nov 2021: Unsound Management of Chemicals and Wastes underpins Runaway Climate Change. Policymakers are urged to act in addressing ‘the elephant in the room’ – pollution arising from emissions from combustion, chemical production and non-circular waste management (which shows no signs of slowing).

Four main linkages should have been particularly pertinent to the COP-26 deliberations in Glasgow:

First, petrochemical and chemical industries, with strong links to the fossil fuels sector, continue to be significant contributors to global greenhouse gas (GHG) emissions.

Second, as we tackle issues of land degradation and food production as a result of climate change, adaption responses often leads to increasing use of chemical fertilizer, pesticides and plastics, to combat higher incidences of pest and disease outbreaks, as well as the need to create more micro-environments for agricultural production.

Third, climate change can lead to increased releases of hazardous chemicals into the environment.

Fourth, increased mobilization and volatilization of chemicals from materials storage & stockpiles occurs as temperatures rise.

The two recently published reports focussed on chemicals and wastes and climate change, and on chemicals and waste and biodiversity, exploring these key interlinkages further and providing a forward-looking investigation of opportunities for enhanced cooperation to better address these complex challenges. These landmark May 2021 Reports (pdfs) are available online: www.brsmeas.org/Implementation/Publication/Other/tabid/2645/language/en-US/Default.aspx

[Key Insights](#) (25p pdf) [Interlinkages](#) (79p pdf)

From: www.brsmeas.org/Implementation/MediaResources/PressReleases/ClimatechangeCOP26/tabid/8991/language/en-US/Default.aspx

• CEFIC: EU Chemical Industry Transition Pathway Needed

2 Dec 2021: Industry leaders made an urgent call to the European Commission to work together to develop an EU Chemical Industry Transition Pathway to sustain the massive investments required to meet the objectives of the EU Green Deal. The EU chemical industry supports the goals of the Chemicals Strategy for Sustainability (CSS).

European policymakers and EU Member State governments were invited to work with the EU Chemical Industry and turn the CSS into a genuine Growth and Innovation Strategy”.

According to this first study, as many as 12,000 substances could potentially be in the scope of the two upcoming legislative proposals alone – the changes to Classification, Packaging and Labelling Regulation (CLP) and the application of a Generic Risk Approach (GRA). The study found that these substances could cover up to 43% of the European chemical industry’s total turnover.

The companies consulted indicated that around one third of this most likely affected portfolio of 28% could potentially be substituted or reformulated.

[Economic Analysis of the Impacts of the Chemicals Strategy for Sustainability – Phase 1 \(Report\)](#) (18 Nov 2021, 167 page pdf)

From: <https://cefic.org/media-corner/newsroom/upcoming-eu-chemical-legislation-puts-europes-fourth-largest-manufacturing-industry-at-crucial-crossroads/>

• EPA Vic: VIVA Fined for a BTEX Chemical Spill

18 October 2021: EPA Vic, after a BTEX chemical spill breach, has issued VIVA Energy Refining Pty Ltd with a \$8261 fine.

The VIVA Energy Refining Pty Ltd heat exchanger leak into Corio Bay, Geelong, in April 2021 resulted in the discharge of BTEX (Benzene, Toluene, Ethylbenzene and Xylene) three times above the licenced limit into cooling water and into Corio Bay from the VIVA W5 Area North Outfall.

BTEX is harmful to fish and aquatic life, but no fish deaths have been observed from the spill.

From: www.epa.vic.gov.au/about-epa/news-media-and-updates/media-releases-and-news/viva-fined-for-chemical-spill

Standards & Codes

• AU & DIN Standards – <https://infostore.saiglobal.com/>

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

[DIN_CEN_ISO/TS_12025:2021-11](#). Nanomaterials - Quantification of nano-object release from powders by generation of aerosols (ISO/TS 12025:2021); German language version CEN ISO/TS 12025:2021. Published 1 Nov 2021, 48 page pdf, \$148.09.

[DIN EN ISO 16103:2021-12](#). Packaging - Transport packaging for dangerous goods - Recycled plastics material (ISO 16103:2005); German language version EN ISO 16103:2005. Published 1 Dec 2021, 14 page pdf, \$95.37.

[DIN ISO 16000-28:2021-11](#). Indoor air - Part 28: Determination of odour emissions from building products using test chambers (ISO 16000-28:2020). German language version. Published 1 Nov 2021, 46 page pdf, \$184.95.

• AU & BSI Draft Standards Open for Comment

[DR_AS/NZS_60079.29.1:2017_Amd_1:2021](#): Amendment 1 - Explosive atmospheres Part 29.1: Gas detectors - Performance requirements of detectors for flammable gases. Draft Published: 9 Nov 2021. Comment Closes 22 Dec 2021.

[BSI Draft 21/30414969 DC:2021](#): Textiles and textile products. Microplastics from textile sources - Part 1. Determination of material loss from fabrics during washing. Draft Published: 29 Oct 2021. 17 page pdf \$41.51. Comment Closes 22 Dec 2021.

Download the free AU AS Drafts from www.standards.org.au

Standards Australia updated its process in 2021 for downloading a Draft Standard. Visitors to *SAI Global Infostore* are no longer able to download the drafts (even though most are listed in the SAI Global search list (website as above)).

All drafts are now available directly from Standards Australia www.standards.org.au by searching on "Draft".

<https://standardscommunity.force.com/idppoc/s/login/> (where you need to sign in first) Then Select "Connect" for Drafts open for Public Comment. *Note:* Changed web address.

Current Projects are still listed as a spreadsheet around end of each month, but it is no longer obvious how to find this xls file.

https://www.standards.org.au/getmedia/874f5af4-b633-408f-ada3-b16c34960070/Current_Projects.aspx (30 Oct 2021)

Includes: AS 2809.4 Road tank vehicles for dangerous goods Part 4: Road tank vehicles for toxic, corrosive or ammonium nitrate emulsion, suspension or gel cargoes

AS 2809.5 Road tank vehicles for dangerous goods, Part 5: Road tank vehicles for bitumen and tar-based cargoes

AS 2809.1:2020 Amd 1 Road tank vehicles for dangerous goods, Part 1: General requirements for all road tank vehicles

AS 2809.2:2020 Amd 1 Road tank vehicles for dangerous goods, Part 2: Road tank vehicles for flammable liquids

AS 4452 The Storage and Handling of Toxic Substances

AS 4681 The Storage and Handling of Class 9 (Miscellaneous) Dangerous Goods and Articles

AS 4081 The Storage and Handling of liquid and liquefied Polyfunctional Isocyanates

AS 3833 The Storage and Handling of mixed classes of dangerous goods, in packages and intermediate bulk containers

AS 1894 Storage and Handling of non-flammable cryogenic and refrigerated liquids

AS 2931 Selection & Use of Emergency Procedure Guides for the Transport of Dangerous Goods + ~30 EPGs being updated

• BS & ISO Standards via NZ Standards

BS EN 14735:2021. Characterization of waste. Preparation of waste samples for ecotoxicity tests. Pub: 30 Nov 2021, 60p, Hardcopy NZ\$519.48 (+postage); pdf NZ\$519.48.

ISO/TS 23302:2021. Nanotechnologies — Requirements and recommendations for the identification of measurands that characterise nano-objects and materials that contain them. Pub: 30 Nov 2021, 68p, Hardcopy NZ\$280.01 (+postage); pdf NZ\$280.01.

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

• NZ Draft Standards

DR AS/NZS IEC 60079.10.1:2021* Explosive atmospheres, Part 10.1: Classification of areas - Explosive gas atmospheres. The objective of this document is to specify requirements for the classification of areas where flammable gas or vapour hazards may arise and may then be used as a basis to support the proper design, construction, operation and maintenance of equipment for use in hazardous areas.

* To read the info on this webpage you need to scroll down. Draft Published 8 Dec 2021: Comment Closes 19 Jan 2022

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

And: www.standards.govt.nz/develop-standards/standards-nz-work-programme/ Spreadsheet with expected publication dates

NZ Standards Work Program

Download a copy of the NZ Stds Oct 2021 Work Program:

From: www.standards.govt.nz/assets/documents/work-programme/standards-nz-work-programme.xlsx (131 projects)

e.g. HB5433 Transport of Dangerous Goods, expect 30 Nov 21

e.g. AS/NZS 60079.29.1:2017 Amd 1, Explosive Atmospheres - Part 29.1: Gas detectors - Performance requirements of Detectors for Flammable Gases, expected 29 Dec 2021

e.g. AS/NZS 1020 The Control of Undesirable Static Electricity, expected 30 Nov 2021

• 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

Apply for Technical Committee membership

www.nfpa.org/Codes-and-Standards/Standards-Development/Technical-Committees/Committees-seeking-members

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**.

Seminars, Conferences

• DGAG Discuss/Chat Combined Meeting 16 Feb 22

Dangerous Goods Advisory Group Discuss/Chat meeting, **Wed 16th Feb 2022** will (hopefully) be a combined Physical Meeting and Zoom Meeting between **5.45pm** to initially meet up and then run between 6.10pm and 8.10pm and tidy up by 8.25pm, 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.

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 meetings email issues list, please email Jeff.Simpson@haztech.com.au. You don't have to be in Melbourne, to be on this email list.

• AIDGC Conference 25th Feb 22 West Ryde (Sydney)

Ryde Eastwood Leagues Club (Sydney) & on-line is unlikely.

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

Go to: <https://aidgc.org.au/> for the [Program and Registration](#)

Presentations:

- 1/ Hazardous Chemicals Regulatory and Incident Update;
- 2/ ADG 7.8 Update and proposal for future alignment with RID;
- 3/ "Hazardous Area" & "Hazardous Atmosphere" implications in WHS Regulations;
- 4/ GHS Classification is causing review and changes to Dangerous Goods Transport Internationally;
- 5/ Outcomes from the Battery Workshop held 24 Feb;
- 6/ Changes in Standards for Storage and Handling of D.Goods;
- 7/ Hydrogen: what are the Technical / Safety issues and differences from Hydrocarbon Fuels.

• CHCS: Basic Toxicology - Live On-Line Training

28 Feb 2022 & 1 March 2022: Module 5, Basic Toxicology (5.115). This training is intended for those working within the chemical industry who need an introduction to the potential hazards of materials to humans and of the concepts of regulatory test methods leading to a classification regarding health effects. [Flyer](#) (2 page pdf)

CHCS Training Courses are only available to CHCS members and members of listed partner organisations. Cost £275 + VAT

From: <https://chcs.org.uk/event-4486410>

• CHCS: Advanced Toxicology-Live On-Line Training

7 Mar 2022 & 8 Mar 2022: Module 11, Advanced Toxicology (11.115). At the advanced level we will also learn the basics of human risk assessment such as how to derive a DNEL/DMEL. An advanced level of understanding in toxicology is required when it comes to understand the toxicological mechanisms leading to different toxicological end points. We also learn about the latest achievements in toxicological testing (in chemico, in vitro and in silico methods). [Flyer](#) (2 page pdf)

CHCS Training Courses are only available to CHCS members and members of listed partner organisations. Cost £275 + VAT

From: <https://chcs.org.uk/event-4486411>

• CHCN Discuss/Chat Combined Meeting 16 Mar 21

Chemical Hazard Communication Network Discuss/Chat meeting, **Wed 16 March 2022**, will (hopefully) be a combined Physical Meeting and Zoom Meeting between **5.45pm** to initially meet up & then run between 6.10pm and 8.10pm and tidy up by 8.25pm, 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.

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.

• RACI Congress: Chemistry – Catalysing Solutions to Global Challenges. 3-8 July 2022, Brisbane.

The theme is to engage members from all fields of chemistry in efforts to formulate genuine and sustainable solutions to our biggest global challenges including Alternative Energy Sources, Climate Change, Food Security & Antibiotic Resistance through presentations and discussions.

Registration: Non Member Early Bird (to 2 May 2022) \$1425

Program: (webpage) No program details as at 10 Dec 2021.

Plenary Speakers (7). [Symposium Scopes](#).

Congress Secretariat Contact:

Ph: +61 7 3848 2100 Em: raci2022@expertevents.com.au

From: www.raci2022.com/

• Chemical Management Online Accredited Course

An Online* ASQA# course in Chemicals Management is offered by ChemWatch (without needing to be their client).

Topics include: 1/ Chemical Safety Data Sheets (SDS);
2/ Chemical labelling; 3/ Chemical handling & use;
4/ Safe storage of hazardous chemicals;
5/ Personal protective equipment; 6/ Transport requirements;
7/ Management of chemical risks; 8/ Hazardous waste disposal;
9/ The basic principles of integrating chemicals management at the workplace

This Nationally recognised# Course in Chemicals Management is applicable to workplaces, such as manufacturing, engineering, chemical research, restoration/preservation and education (laboratories) and any other industry where hazardous chemicals are handled; where the trained person would then work under supervision.

Time frame for learners to complete the course is 6 months. The course is self-paced. Cost \$450. With **three Modules:**

- Chemicals management processes and assessment of risks
- Managing chemical risks and control measures
- Management of hazardous chemical waste

From: www.chemwatch.net/products/accredited-course-in-chemicals-management/ with **FAQs**.

* This course is run Online, through the Chemwatch Learning Management System (LMS).

Accredited by the **Australian Skills Quality Authority** under the National Vocational Education & Training Regulator Act 2011

Also See: <https://training.gov.au/Training/Details/10895NAT>

The ASQA webpage has more information about each unit

Editor: It is also relevant for businesses supplying / managing chemicals to understand chemical management issues.

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

Now 19th – 23rd March 2022: Conference **Theme** is “**Challenge for Change**” which was selected due to the nature of 2020/21, which communicates, transforming Challenges into positive Change Opportunities.

One of the 4 Keynote Speakers: Dr Norman Swan Mbcch, Frcp, Dch, Md (Hon Causa). Multi award-winning, health and medical broadcaster and communicator.

Registration Brochure:

<https://online.fliphtml5.com/wrehk/lqcv/#p=1>

(18 webpage document, then print as **150% landscape pdf**)

Conference Mon-Wed. 3 Dinners. Cost: \$2090 Non-member.

From: www.aioh.org.au/events/listing/?e=4132

• 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.

These Notes are published as an information service and without assuming a duty of care. It contains summary information only and should not be relied on as a substitute for professional advice. Readers should not act solely on the basis of the material contained in this newsletter.

Copying Hazmat & Environment Notes: Copying these Notes in a limited and local manner is allowed, or where a person or company is interested in becoming a subscriber, provided that the copies acknowledge "HAZMAT & ENVIRONMENT NOTES, prepared by Jeff Simpson, Haztech Environmental 03-9885-1269. Magazines must contact me.

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. Sept 22 or normally in the Subject of the Email in which you receive the Hazmat Notes pdf file.

Haztech Environmental ABN: 27 630 291 348	18 Laurel St Ashburton, VIC 3147	TAX INVOICE Date 10 th December 2021
Description of Supply		
Please start my subscription to Hazmat & Environment Notes from the		Oct-Nov-Dec 2021 Newsletter.
Subscription Costs for 5 bimonthly issues from Nov 2021 to Sept 2022 are: Circle the subscription type you want		
* Please Note: Due to the new AU complexities of extra charges when paid by Credit Card (CC), I have simplified to one amount & no charges.		
EMAILED to Australian destinations (Emailed as an Adobe Acrobat pdf file)	- \$100 (includes GST) (EFT, CC, Cheque)	+ Extra copy to the same group + \$50 (includes GST)
POSTED to Australian destinations	- \$112 (includes GST) (EFT, CC, Cheque)	+ Extra posted copy to the same group + \$56 (includes GST) + Extra emailed copy to the same group + \$50 (includes GST)
Note: The above prices include a 10% Australian Goods & Services Tax (GST) for the supply.		
International destinations	- \$96 emailed (Credit Card), (or \$108 [#] using Int'l EFT & a SwiftCode)	(with no AU GST added)
Each extra copy to the same group	+ \$48 emailed (CC or Int'l EFT using a SwiftCode)	(with no AU GST added)
# International EFT cost assumes you are using a SwiftCode, where there is a Bankcharge of \$12 taken from the Haztech Env'l account.		
(A 2 year length of subscription can also be accepted.)		
Enclosed is an EFT notification, credit card or cheque authorisation payable to "Haztech Environmental" for your subscription.		
Total Price Including GST (GST only applicable in Australia)	Payment Sent \$ _____	
Please keep a copy of this tax invoice for your records.		
Name Position		
Company Name		
Address		Post Code
Tel Nr Mob Nr Email 1		
Email 2 Email 3		
Address to: Jeff Simpson, Haztech Environmental, 18 Laurel St, Ashburton VIC 3147, Australia		10/12/2021notes-prnt

Credit Card Authorisation:

Please debit my VISA / MASTERCARD Account for: \$

(circle one)

Card Number: Expiry Date:/.....

Cardholder's Name: (as on card)

Signed: Date:

Electronic Funds Transfer or Cheque to: Haztech Environmental BSB 033106 Account 125988, Westpac, Ashburton Vic 3147

Date: Description:

Please email to advise your EFT to: Jeff.Simpson@haztech.com.au International EFT: use Westpac SWIFT code WPACAU2S