

<b>Hazardous Chemicals</b>	<b>2</b>	<b>Agricultural Chemicals</b>	<b>16</b>
• Ensuring the Safety of Chemical Mixtures	2	• APVMA Digital Strategy 2018-2022 & Armidale	16
• Many Chemicals Added / Updated on HCIS Database	2	• APVMA: Latest AgVet Chemicals - first in Aust.	17
• Silica (Resp. Fraction) CAS 7631-86-9 Cat.1A H350i	2	• FAISD Handbook 1/2018 to 31 March 2018	17
• NSW Video Safety Alert: Don't Cut Old Drums	3	• Risk Assessment Manual for Chemistry & Manufacture	17
• Exposure of Workers to Hydrogen Sulphide Gas	3	• Polihexanide: APVMA Regulatory Decisions	17
• Notification by MHFs, Existing & Proposed Facilities	3	• APVMA response to EU Neonicotinoid concerns	18
• AU: Plastic Microbeads Phase-Out by 1 July 2018	3	• APVMA Ag Active Constituent: 112 g/L Eugenol	18
• NZ EPA Plastic Microbeads Ban started 7 June 2018	3		
• NZ EPA & Neonicotinoids Science	4	<b>Dangerous Goods</b>	<b>18</b>
• NZ EPA: EDN Alternative to Fumigant Methyl Bromide	4	• CSB: Floods & Arkema Inc. Chemical Plant Fire	18
• ECHA Chemical Public Consultations Website	5	• CSB: Packaging Corp' of America Hot Work Explosion	19
<b>Chemical Management</b>	<b>5</b>	• CSB: MGPI Toxic Chemical Release	19
• Updated Vic Haz. Subs. Compliance Code: July 2018?	5	• Vic MFB: Incident Reports from the MFB	19
• NZ EPA: Haz. Substances Risk Assessment Guide	5	• Vic CFA: Incident Reports/News from the CFA	19
• NZ EPA Proposal to Increase NZ HSNO Fees	6	• WA: Serious Chemical Burns - \$47900 Penalty	19
• NZ EPA Hazardous Substances Update	6	• WA Flammable Liquid Fire: Worker Seriously Injured	19
• NZ Technical Bulletin: Ammonia Refrigeration	6	• Fireworks line-of-fire Incident: Injured Technician	20
• NZ EPA Board Chair: We're Doing Good	6	• WA: New Code for Close Proximity Fireworks	20
• EU: JRC ChemAgora Chemical Data Portal	7	• WA Dangerous Goods Documents & Publications	20
• EU: Two Searchable Nanomaterials Databases	7	• WA Incident: Gasket Rupture at Processing Facility	20
• EFSA: Endocrine Disruptors & Biocidal Product Criteria	7	• WA: Dangerous Goods Offences - \$14000 Fine	20
• ECHA Newsletter: Articles that got my Attention	7	• Dangerous, Hazardous & Harmful Cargoes Handbook	21
• EU JRC: Assessing Major Chemical Accident Risks	8	<b>Environmental Notes on Chemicals</b>	<b>21</b>
• FM Global Data Sheets (more): Reduce your Risk	8	• National Pollutant Inventory Data for 2016-17	21
• Perspectives on Risk by Warren Black & Panel	8	• NSW Govt: Release of \$47M to Support Recycling	21
• Please Support NTN with a Tax Deductible Donation	8	• Pollution Burden that Waste Incineration Creates	21
• USA OSHA Quick Takes e-News: Mar18-June18	9	• Health Dept: Expert Health Panel's Report on PFAS	22
<b>NICNAS (Industrial Chemicals)</b>	<b>9</b>	• PFAS Chemicals Health Effects 'Cannot Be Ruled Out'	22
• Draft Categorisation Guidelines (now pdf & docx)	9	• Melbourne Airport confirms toxic PFAS spread	22
• AICIS Reforms Case Studies: Categorising Guides	9	• NZ Govt Widens Foam Contamination Investigation	23
• General Rules & Categorisation Guidelines: Comment	10	• EPA Vic: Fact Sheet - Engaging Consultants	23
• NICNAS Chemical Gazettes	10	• EPA Vic: Guide - Assessing & Controlling Risk	23
• Rotterdam Convention Annex III proposed Additions	10	<b>Standards &amp; Codes</b>	<b>23</b>
• NICNAS Secondary Notification of Irgalube 232	11	• Standards – <a href="https://infostore.saiglobal.com/">https://infostore.saiglobal.com/</a>	23
• Amendments of the Inventory (AICS) – 2 Amdts	11	• Drafts – <a href="https://infostore.saiglobal.com/">https://infostore.saiglobal.com/</a>	23
• Addition of 12 Industrial Chemicals from the TNA	11	• NFPA News (Codes Newsletter)	24
• NICNAS Business Registration Numbers: Update	11	<b>Seminars, Conferences, Courses</b>	<b>24</b>
• Wrongly included CAS numbers to be Deleted	11	• Hazards Australasia 2018, Perth, 26-27 June 2018	24
• Proposal for Deletion of Wrongly Added Chemical	12	• Chemical Engineering for Non-Chem Engineers	24
<b>Scheduled Poisons</b>	<b>12</b>	• Environmental Toxicology & Health, 11-12 July 18	24
• The Poisons Standard (SUSMP No. 21) June 2018	12	• Green Chemistry & Green Engineering, 19-20 July	24
• New AHMAC Scheduling Policy Framework (SPF)	12	• DGAG Meeting, MFB Burnley, 1 Aug 2018, Melb	25
• New TGA Scheduling Handbook	13	• CHCN Meeting, Port Melbourne, 5 Sept 2018 Melb	25
• Scheduling Delegate's Final Substance Decisions	13	• AIDGC-Hazmat Conference, 20-21 Sept 2018, Sydney	25
• Scheduling Delegate's Interim Chemical Decisions	13	• ACTRA Forum: Particulates, 26-28 Sept 2018 WA	25
• Vinyl Acetate: Scheduling Delegate's Interim Decision	14	• Ecoforum & PFAS Summit, 2-4 Oct 2018, Sydney	25
• Public Submissions on Scheduling Matters	14	• Fundamentals of Process Safety, Oct 2018, Melb	25
• Invitation to Comment: Scheduling Amendments	14	• HAZOP Leadership & Mgmt, 30 Oct 2018, Perth	25
<b>Food Chemical Issues</b>	<b>14</b>	• AIOH 2018 Conference, 1-5 Dec 2018, Melbourne	25
• P1047: Review of Reg. Nutrient Ref. Values	14		
• A1136: Protein Glutaminase as a Processing Aid	14		
• A1146: Thermolysin (Protease) as a Processing Aid	15		
• A1161: Potassium Polyaspartate Food Additive	15		
• A1162: Triacylglycerol Lipase (Enzyme) Prepar'n	15		
• A1163: Food Irradiation Herbs & Spices Definition	15		
• P1046: L-Amino Acid Acetate in Food	15		
• FSANZ: Permission for L-Arginine Acetate in Food	15		
• FSANZ: Mandatory Labelling for Lupin starts soon	16		
• FSANZ Survey of Plasticisers in Australian Foods	16		

**Hazmat & Environment Notes are prepared by:**

Jeff Simpson

Hazardous Chemicals 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.

Screen

ISSN: 1441-5534

## Hazardous Chemicals

### • Ensuring the Safety of Chemical Mixtures

May 2018: EU Commission - JRC Science for Policy Brief.

Combined exposure to multiple chemicals can lead to health & environmental effects even if single substances in the mixture do not exceed safe levels.

The assessment and management of mixtures is only partly covered by current legislation, which focuses on single substances in isolated sectors.

Methodology to address mixture risks is available, yet many knowledge gaps need to be filled. In particular, real co-exposure patterns are mostly unknown.

The European Commission (EC) Joint Research Council (JRC) is performing research on new strategies to assess the combination effects of chemicals.

Specific challenges briefly discussed include: 1/ Combined exposure; 2/ Combined effects; 3/ Combined risks. Plus JRC activities on mixtures are also outlined.

[kjna29258enn.pdf](#) (2p pdf leaflet) ISBN 978-92-79-86747-7

From: <https://ec.europa.eu/jrc/en/publication/something-nothing-ensuring-safety-chemical-mixtures>

### • Many Chemicals Added / Updated on HCIS Database

Safe Work Australia, 9<sup>th</sup> May 2018: **755 chemicals have been added to the Hazardous Chemical Information System to update classification information available for manufacturers, importers, suppliers and end users.**

As well as the addition of 755 chemicals, there are amendments to more than 600 currently listed chemicals.

The Hazardous Chemical Information System provides information on chemicals that have been classified in accordance with Globally Harmonized System of Classification and Labelling of Chemicals

You can find details on the new and amended chemicals by using the advanced search feature to show chemicals revised this week at:

<http://hcis.safeworkaustralia.gov.au/HazardousChemical#> which shows 1384 entries for the 1 to 9 May 2018. Since then until the 11 June 2018 a further 181 entries have been made.

The update incorporates classification information published under the Inventory Multi-tiered Assessment and Prioritisation program run by the [National Industrial Chemicals Notification and Assessment Scheme](#).

For more information about working with chemicals visit the Safe Work Australia [Hazardous chemicals](#) web page.

From: [www.safeworkaustralia.gov.au/news-and-events/news/more-chemicals-added-database-ensure-worker-safety](http://www.safeworkaustralia.gov.au/news-and-events/news/more-chemicals-added-database-ensure-worker-safety)

*Editor:* It is essential that everyone rechecks their Australian Hazardous Chemicals classifications against these added and updated classifications. E.g. Carbon Black CAS 1333-86-4 has been added on the HCIS with STOT RE2 H373.

There are many changes for common industrial chemicals!

Some of these chemicals will be N.O.S. Dangerous Goods that may have changed to a higher danger Packing Group, which will affect your Transport, Storage classifications and MHF calculations.

### • Silica (Resp. Fraction) CAS 7631-86-9 Cat.1A H350i

*Editor's Note:* A new entry that really got the Editor's attention: Silica (Respirable Fraction) CAS 7631-86-9 has been classified as a GHS Category 1A H350i May cause cancer by inhalation and GHS Category 1 H372 Causes damage to organs through prolonged or repeated exposure if inhaled. It will also have the GHS08 Health Hazard pictogram (with the disintegrating torso). The H350i Hazard statement will apply where there is more than 0.1% respirable fraction.

The IMAP report on which this new entry is based is at:

[www.nicnas.gov.au/chemical-information/imap-assessments/imap-group-assessment-report?assessment\\_id=1120#cas-A\\_7631-86-9](http://www.nicnas.gov.au/chemical-information/imap-assessments/imap-group-assessment-report?assessment_id=1120#cas-A_7631-86-9)

Internationally (e.g. on the ECHA Registered Substance Database) CAS 7631-86-9 covers Amorphous Silica; Silica Gel; Colloidal Silica; etc and is grouped with the Crystalline Silica Free CAS No. 112926-00-8 for hazard classification, with no GHS Hazards. The NZ CCID doesn't have a GHS Hazards entry for Silica CAS 7631-86-9.

*Editor's Comment:* This newly published Carcinogen Category1A classification on the Safe Work Australia Hazardous Chemicals Information now explicitly informs everyone in the world that Australia now has a very different Hazard classification expected (but not mandated) to be used in Australia for all industrial chemicals manufactured in or imported into Australia (which can release fine dusts).

To make the hazard classification consistent with IMAP report information **I suggest that the HCIS entry be changed to:**

*Silica (Respirable Crystalline Silica Fraction) CAS 7631-86-9  
I have alerted Safe Work Australia to my suggestion.*

## • NSW Video Safety Alert: Don't Cut Old Drums

8 May 2018 SafeWork NSW: Video Alert 1 - Flammable substances can still be present in old drums. Even if they have been cleaned and rinsed, the introduction of an ignition source can create a disastrous explosion. Cutting old drums isn't worth the risk. Video 1: <https://youtu.be/ee2yr7pQ6ZA>

Video Alert 2 - Filmed under controlled conditions, the below video demonstrates the explosive power of igniting a drum containing flammable vapours. This drum is manually ignited to simulate what can happen when a used drum is cut or welded. Video 2: <https://youtu.be/Vx6bRxJX1os>

From: [www.safework.nsw.gov.au/news/safety-alert/dont-cut-old-drums](http://www.safework.nsw.gov.au/news/safety-alert/dont-cut-old-drums)

## • Exposure of Workers to Hydrogen Sulphide Gas

SafeWork NSW Alert: 12 June 2018: This Safety Alert webpage is for workplaces which may use, generate, store or handle Hydrogen Sulphide (H<sub>2</sub>S) gas. It will help them to identify sources of potential exposure and manage risks to health and safety. This is especially important for work in, on or near confined spaces such as tanks, pits, sumps, vessels as well as partially enclosed areas with poor ventilation. Hydrogen Sulphide can be produced unintentionally.

From: [www.safework.nsw.gov.au/news/safety-alert/exposure-of-workers-to-hydrogen-sulphide-gas](http://www.safework.nsw.gov.au/news/safety-alert/exposure-of-workers-to-hydrogen-sulphide-gas)

## • Notification by MHFs, Existing & Proposed Facilities

SafeWork NSW: Use this 11 page pdf form (updated in March 2018) to notify SafeWork NSW of changes to Major Hazard Facilities (MHFs) and existing facilities and proposed facilities; IF:

- the quantities present or likely to be present at the facility of any chemical listed in Schedule 15 of the WHS Regulation exceed 10% of the corresponding threshold quantity, or
- the result of the aggregation formula (as defined by clause 4 of Schedule 15 of the WHS Regulation) for the facility exceeds 0.1.

From: [www.safework.nsw.gov.au](http://www.safework.nsw.gov.au) & search on SW08897

## • AU: Plastic Microbeads Phase-Out by 1 July 2018

23 May 2018: The Australian Dept of the Environment and Energy is working with industry and state and territory governments to ensure a voluntary phase-out of microbeads from personal care and cosmetic products by 1 July 2018. The phase-out focusses on microbeads in rinse-off products, which would be reasonably capable of entering the marine environment through normal use.

[Assessment of the Sale of Microbeads in Personal Care and Cosmetic Products within the Australian Retail Market - Final Report](#) (20 March 2018, 16 page pdf)

Common Microbead Ingredients:

Polyethylene (PE); Polyethylene Terephthalate (PET); Nylon (PA); Polypropylene (PP); Polymethyl Methacrylate (PMMA)

From: [www.environment.gov.au/protection/national-waste-policy/plastics-and-packaging/plastic-microbeads](http://www.environment.gov.au/protection/national-waste-policy/plastics-and-packaging/plastic-microbeads)

## • NZ Plastic Microbeads Ban started 7 June 2018

30 May 2018: Some products containing plastic microbeads will be banned from sale from Thursday 7 June 2018, says Dr Fiona Thomson-Carter General Manager of the EPA's Hazardous Substances Group.

"The microbeads are found in some common household products like face and body scrubs or exfoliators, 'wash-off' products like glitter bubble bath, heavy-duty hand soaps and in some toothpastes.

"Plastic microbeads are not biodegradable, and at less than five mm in size, many end their life in the sea when they are washed down drains," says Fiona.

"Once in the sea they can absorb and leach toxins over time, and can potentially harm New Zealand's marine life. Once eaten by marine life, they can potentially become a part of the human food chain.

"Under the new rules many, but not all, products containing microbeads are banned."

Guidance: [www.epa.govt.nz/news-and-alerts/alerts/microbeads-ban-is-your-product-affected/](http://www.epa.govt.nz/news-and-alerts/alerts/microbeads-ban-is-your-product-affected/)

The products containing plastic microbeads which are banned:

1/ 'wash-off' face, hand and body cleansers, scrubs and exfoliators; 2/ toothpastes; 3/ glitter bubble bath; & 4/ abrasive cleaning products for the home, the car and for industrial cleaning (these are rare, if not absent, in New Zealand but are manufactured and sold overseas)

A range of products that are not banned are also listed.

E.g. microbeads, including glitter; or sold as a craft material.

For advice on Microbeads, contact the NZ EPA: ph: 0800 429 7827 (0800 HAZSUBS); email: [HSCCompliance@epa.govt.nz](mailto:HSCCompliance@epa.govt.nz) with Subject: Query About Microbeads

From: [www.epa.govt.nz/news-and-alerts/latest-news/plastic-microbeads-ban-kicks-in-on-7-june/](http://www.epa.govt.nz/news-and-alerts/latest-news/plastic-microbeads-ban-kicks-in-on-7-june/)

## • NZ EPA & Neonicotinoids Science

27 April 2018: When new information is released (on Neonicotinoids), the NZ EPA always takes a good look at the science, evaluating it to see if there's something we need to factor into our thinking here," says NZ EPA General Manager for Hazardous Substances and New Organisms Dr Fiona Thomson-Carter.

"When used incorrectly, neonicotinoids could potentially have negative impacts on pollinators," says Dr Thomson-Carter.

"The current New Zealand rules include not spraying insecticides in close proximity to bee hives or crops with budding or flowering plants where bees may gather and feed.

"The European Food Safety Authority (EFSA) recently published updated risk assessments of three neonicotinoids – Clothianidin, Imidacloprid and Thiamethoxam – which confirmed that many uses of these represent a risk to the three types of bees they assessed," says Dr Thomson-Carter.

The 27 April 2018 European Commission vote would effectively ban the open air use of Neonicotinoid insecticides. Seeds treated with these substances would be allowed to be used in permanent greenhouses, but only if the resulting crop stayed within a permanent greenhouse for its entire lifecycle.

From: [www.epa.govt.nz/news-and-alerts/latest-news/epa-watching-weekend-eu-vote-on-neonicotinoids-science/](http://www.epa.govt.nz/news-and-alerts/latest-news/epa-watching-weekend-eu-vote-on-neonicotinoids-science/)

## • EDN Alternative to Fumigant Methyl Bromide

NZ EPA March 2018: Draslovka, a Czech-based firm, has applied for approval to register and import Ethanedinitrile (EDN) into New Zealand as an alternative to the fumigant Methyl Bromide which is used for export logs and timber at New Zealand ports.

This Application (APP202804) is for the approval to import and use EDN containing 950g/kg Ethanedinitrile as a phytosanitary treatment of wood products (including logs) to control a wide range of insects, nematodes and fungi.

In Australia EDN is registered for use as a biosecurity treatment for the interstate movement of on logs. Soil fumigation application underway.

In Australia, EDN can ONLY be used with scrubbing (a recapture) technology as part of its label use after being assessed by the national regulatory body the APVMA. "Residual gas must be scrubbed for a minimum of 4 hours using a liquid scrubbing system at the completion of the fumigation period, followed by a further 24 hours of ventilation prior to clearance."

Whereas Methyl Bromide is an odourless gas, EDN has a characteristic Almond-like odour, which is pungent in lethal concentrations, thus making it easier to detect leakages.

EDN is neither an Ozone-Depleting compound nor a Greenhouse gas.

According to 2015 data, New Zealand is the world's fifth-highest user of Methyl Bromide. In 2010 the Environmental Protection Authority announced that by 2020 Methyl Bromide fumigations for logs must use recapture technology to reduce the amount discharged into the atmosphere.

Methyl Bromide use as a pre-plant soil fumigant has been phased out under the Montreal Protocol as Methyl Bromide is an Ozone depleting gas. The use of Methyl Bromide for quarantine and phytosanitary purposes is permitted under the protocol. Signatory nations are obliged to seek and introduce alternatives as and when they become available.

EDN does not decompose to HCN during simulated log fumigations. As EDN is volatile and has a high sorption rate, it is likely that EDN breakdowns to a number of compounds during and after fumigation (e.g., CO<sub>2</sub> and NH<sub>3</sub>). Some of these compounds, particularly Ammonia (NH<sub>3</sub>), have a very strong odour that port workers and bystanders will notice once EDN is used commercially.

Comment Closed 19 April 2018

[EDN appendices 27-2-2018.pdf \(219 page pdf 18 Mb\)](#)

[EDN Application form 27-2-2018.pdf \(56 page pdf 2.4 Mb\)](#)

There are 43 submissions. Ones that caught the Editor's attention are:

[Submission 126960 Tauranga Moana Fumigant Action Group.pdf \(4 page pdf\)](#)

[Submission 126977 Ministry for Primary Industries \(MPI\).Pdf \(7 Page Pdf\)](#)

[Submission 126978 The Soil and Health Association of New Zealand Inc.Pdf \(5 Page Pdf\)](#)

[Subm 126980 Bay of Plenty Regional Council.pdf \(10p pdf\)](#)

[Submission 126982 Stakeholders in Methyl Bromide Reduction Inc.pdf \(18 page pdf\)](#)

From: [www.epa.govt.nz/public-consultations/in-progress/new-fumigant-for-logs-and-timber/](http://www.epa.govt.nz/public-consultations/in-progress/new-fumigant-for-logs-and-timber/)

And: [www.epa.govt.nz/database-search/hsno-application-register/view/APP202804?accordion-anchor=Application%20documents](http://www.epa.govt.nz/database-search/hsno-application-register/view/APP202804?accordion-anchor=Application%20documents)

Editor: The ECHA Registered Substances Database classifies

Ethanedinitrile (Oxalonitrile) CAS 460-19-5 NC-CN as:

H220: Extremely flammable gas.

H280: Contains gas under pressure; may explode if heated.

H319: Causes serious eye irritation.

H330: Fatal if inhaled.

H335: May cause respiratory irritation.

H410: Very toxic to aquatic life with long lasting effects.

Dangerous Goods UN 1026 Div'n 2.3 / Sub Div'n 2.1

From: <https://echa.europa.eu/registration-dossier/-/registered-dossier/12319/2/1>

## • ECHA Chemical Public Consultations Website

### REACH: Calls for comments and evidence

e.g. Octamethylcyclotetrasiloxane CAS 556-67-2 (D4); Decamethylcyclopentasiloxane CAS 541-02-6 (D5);  
 Dodecamethylcyclohexasiloxane CAS 540-97-6 (D6); Use in consumer and professional products. [Details](#).

### CLP: Harmonised Classification and Labelling

e.g. p-Mentha-1,8-Diene; d-Limonene CAS 5989-27-5 [Details](#)

From: <https://echa.europa.eu/public-consultations>

## Chemical Management

### • Updated Vic Haz. Subs. Compliance Code: July 2018?

*Editor:* When public comment closed in 2017 on the new Victorian Hazardous Substances Compliance Code to take into account the GHS, the final Code was scheduled for release in November 2017. Victorian workplaces missed the release of Guidance on the GHS associated with the Work Health and Safety legislation in other States, and still have no practical guidance from Worksafe Victoria on this issue.

*Note:* Due to the difference in adoption and terminology in Victoria, businesses here have no current guide to Labelling and Safety Data Sheet preparation from Worksafe Victoria, apart from the previous guides which allowed the Safe Work Australia GHS Guidance to be used.

*I have been informed by July 2018 the updated Compliance Code: Hazardous Substances should finally be available:*

[www.worksafe.vic.gov.au/laws/compliance-codes-and-codes-of-practice](http://www.worksafe.vic.gov.au/laws/compliance-codes-and-codes-of-practice)

### • NZ EPA: Haz. Substances Risk Assessment Guide

31 May 2018: The NZ EPA risk assessment guide explains how we evaluate applications to import or manufacture new hazardous substances, and how we re-evaluate the risks and benefits of approved substances. The guide includes details about the models and parameters we use, and the sort of information we need for these evaluations.

The NZ EPA would like to know if this Guide makes our risk assessment approach and processes understandable, and whether it gives enough information to help applicants.

[Consultation Information \(5 page pdf\)](#)

For the NZ EPA to grant an Approval, the potential benefits must outweigh the risks<sup>1</sup>. Where risks are identified they may be managed by imposing controls such as how the substance is used, its maximum strength, who it is available to, and how it is labelled.

The NZ EPA is consulting on a proposed methodology for how it conducts the Risk Assessments for Applications for New Hazardous substances and the Reassessment of existing Hazardous Substance approvals. The proposed methodology sets out the approach the EPA currently takes when assessing Hazardous Substances.

The proposed NZ Guide methodology is divided into two documents. The first document is a high level summary document aimed at members of the public. The second document is divided into three parts. The 1<sup>st</sup> part contains the approach taken by the NZ EPA when considering the risks, costs and benefits of a substance. The 2<sup>nd</sup> part contains details of the models currently used by the NZ EPA to assess the risks of pesticides to human and public health. The 3<sup>rd</sup> part contains details of the models currently used by the NZ EPA to assess the risks to the environment from pesticides.

[Assessing the Risks of Hazardous Substances - Consultation draft \(5 page pdf\)](#). A high level summary of the assessment process for New Zealand's new Hazardous Substances

[Risk Assessment Methodology for Hazardous Substances - Consultation draft \(118 page pdf\)](#). How to assess the risk, cost and benefit of new Hazardous Substances for use in NZ.

Under the HSNO Act 1996, importers or manufacturers can assign their formulated product to an existing individual Hazardous Substance Approval or a Group Standard Approval. This means they don't have to go through the full Application Process. In this case, applicants must classify their product according to its hazards and show that these hazards match those of an existing Group Standard or Previously-Approved Substance.

They need to record their decision with justifications, even when they consider it to be non-hazardous, and supply this record to the appropriate regulators when requested.

The controls (or restrictions) assigned for the use of the new hazardous substance in New Zealand, must be the same as the group standard or existing approved substance the new substance is being matched to.

Submissions close at 5pm on Friday 6 July 2018.

From: [www.epa.govt.nz/public-consultations/open-consultations/request-for-feedback-on-our-risk-assessment-guide/](http://www.epa.govt.nz/public-consultations/open-consultations/request-for-feedback-on-our-risk-assessment-guide/)

*Editor:* It is interesting to see the difference between New Zealand and Australia for substances and formulations considered to be non-hazardous.

In my opinion the Chemical Name and CAS No. for non hazardous substances, and for substances in non-hazardous formulations should be provided to the NZ EPA by each introducer, so that addition of hazards or changes in hazards over time for these products can be tracked by the NZ EPA, even if industry misses these additions or changes occurring.

## • NZ EPA Proposal to Increase NZ HSNO Fees

[Proposal to Increase NZ EPA HSNO Fees](#). The [proposed changes](#) cover: a. The costs of processing applications for hazardous substances and new organisms services; b. A review on whether there is a need for import certificates for explosives and novelty fireworks. Chief Executive, Dr Allan Freeth said: "Under our existing approach applicants pay, on average, just over 10% of what it really costs us to manage an application from start to finish. That means that it falls to the taxpayer to pick up the rest. We don't think that's fair." "With that in mind, we are looking to develop a more realistic cost recovery approach that will see organisations who use our services pay a fairer share."

[Quick summary: HSNO fees are changing \(9 page pdf\)](#)

e.g. A Category C Hazardous Substance approval application is for a substance that is new to New Zealand. The application is publicly notified. The conclusion is that the benefit split between the applicant's private benefit, the industry benefit, and the public benefit is fairly even, respectively: 40%; 30%; 30%.

*Proposed Category C Fee* to be: \$25,000 (including \$1,000 lodgement) + \$5,000 per hearing + specialist report costs

e.g. The benefit weighting is more towards the applicant for rapid, category A, and category B Hazardous Substance approval applications. The conclusion is that the benefit split between the applicant's private benefit, the industry benefit, and the public benefit is respectively: 70%; 15%; 15%.

*Proposed Category A Fee* to be: \$5,000 (including \$1,000 lodgement). *Proposed Category B Fee* to be: \$10,000 (including \$1,000 lodgement) + \$5,000 per hearing

[HSNO fees are changing - consultation doc \(92 page pdf\)](#)

The proposals are for a possible two-step increase in fees. A two-step process recognises that some fees may have to increase significantly. We would prefer to smooth this increase. It is proposed that initial fee increases come into effect on 1 October 2018 and a possible second fees increase in 2021.

[HSNO Fees Cost Recovery Impact Statement \(20 page pdf\)](#)

Submissions closed 21 May 2018.

Alerted by: [April 2018 Hazardous Substances Update](#) from:  
[www.epa.govt.nz/news-and-alerts/newsletters/hazardous-substances-update/](http://www.epa.govt.nz/news-and-alerts/newsletters/hazardous-substances-update/)

From: [www.epa.govt.nz/news-and-alerts/latest-news/epa-costs-for-safeguarding-the-environment-set-to-change/](http://www.epa.govt.nz/news-and-alerts/latest-news/epa-costs-for-safeguarding-the-environment-set-to-change/)

## • NZ EPA Hazardous Substances Update

[May 2018: Are Your Crayons Safe?](#) In 2017, administration of the approval process that ensures children's graphics materials on sale within New Zealand are safe to use, transferred to the NZ EPA from the NZ Ministry for Health.

The Graphic Materials Group Standard sets out the rules and conditions for all graphics materials, and includes additional information for children's watercolours, crayons and finger paints. [Importers and manufacturers must provide evidence to the EPA to show their products are compliant.](#)

(per 96 B(2) (d) of the NZ Haz Subs & New Organisms Act)

An [updated 2018 version](#) of the Group Standard has been developed, reflecting the transfer in responsibility from the Ministry of Health to the EPA. In force since 28 May 2018.

[March 2018](#) 1/. NZ EPA Haz Subs Compliance Order: Nelson Airport where foams tested positive for PFOS. 2/ 3M Light Water fire-fighting foam reminder to all NZ industries that some (manufactured before 2002) contain PFOS (now banned).

From: [www.epa.govt.nz/news-and-alerts/newsletters/hazardous-substances-update/](http://www.epa.govt.nz/news-and-alerts/newsletters/hazardous-substances-update/)

## • NZ Technical Bulletin: Ammonia Refrigeration

21 May 2018: This Technical Bulletin is aimed at Persons Conducting a Business or Undertaking (PCBUs) who design, install, commission, own, operate or maintain Ammonia Refrigeration plant.

**Background:** The uncontrolled release of Ammonia from Refrigeration Plant is a critical work health and safety risk. It has the potential to cause death, a severe permanent disability or life shortening illnesses. Critical risks must be managed effectively to minimise the risk of harm to workers, emergency services and the public.

In the last year, approximately 20 Ammonia releases were notified to Work Safe New Zealand. Some workers were taken to hospital, some treated at the scene, and others were at risk but unharmed.

[Technical Bulletin: Ammonia Refrigeration](#) (May 18, 3p pdf)

From: <https://worksafe.govt.nz/about-us/news-and-media/technical-bulletin-ammonia-refrigeration/>

## • NZ EPA Board Chair: We're Doing Good

19 April 2018, Kerry Prendergast, EPA Board Chair

Presentation (as a 15 slide pdf). New Zealand's national environmental regulator is protecting our environment, enhancing our way of life and the economy.

Our early work included distributing thousands of award-winning Hazardous Substance Toolbox kits to businesses.

*Chemical Mapping:* There are chemical legacy issues across New Zealand, many with the potential to affect water quality. Mapping these risks will help manage them effectively.

*Modernisation:* We want to spend more time addressing the big threats, so we're streamlining our approach and developing efficient systems to manage lower-order work.

*Moving Fast on Threats:* Science moves fast, so we need to too. We've formed a dedicated Hazardous Substance Reassessments Team to make sure we can act quickly on new information.

*Understanding Outrage:* It's more than 'not in my backyard'. We are using ideas from studies into outrage, hazard and risk to shape our community engagement.

[www.epa.govt.nz/assets/Uploads/Documents/News-and-alerts/Allan-and-Kerry-stakeholder-presentations.pdf](http://www.epa.govt.nz/assets/Uploads/Documents/News-and-alerts/Allan-and-Kerry-stakeholder-presentations.pdf)

## • EU: JRC ChemAgora Chemical Data Portal

9 Feb 2018: ChemAgora, through an on-the-fly search, informs whether a chemical features in any of 17 external data sources or the OECD eChemPortal (featuring another 30 external sources), and provides clickable links leading to the third-party website pages containing the information.

The ChemAgora portal is recognised by the American Chemical Society (ACS) as highlighted in a recent ACS publication, "[Journal of Chemical Modelling and Information](#)" (30 Nov 2017).

EU Science Hub JRC's [ChemAgora Web Portal](#) or <http://chemagora.jrc.ec.europa.eu/chemagora/>

From: <https://ec.europa.eu/jrc/en/science-update/chemagora-portal-access-chemical-data>

## • EU: Two Searchable Nanomaterials Databases

12 June 2018: The European Union Observatory for Nanomaterials (EUON) features two searchable databases: NanoData, a knowledge base on nano science and technology and the eNanoMapper that helps you find safety information about nanomaterials.

- [European Union Observatory for Nanomaterials](#)
- [NanoData – nano technology knowledge base](#)
- [eNanoMapper – data and tools for risk assessment of nanomaterials](#)
- [NANoREG – common European approach to the regulatory testing of nanomaterials](#)

From: <https://echa.europa.eu/-/eu-nanomaterials-observatory-updated-with-two-searchable-databases>

## • Endocrine Disruptors & Biocidal Product Criteria

May 2018 ECHA Newsletter: The EU has decided on criteria for identifying whether a substance used in a biocidal product has an impact on our Endocrine System. The newsletter takes a deeper look at what [Endocrine Disruptors](#) are, why they should be regulated and what the new criteria mean for companies.

The final criteria were officially published in the [Official Journal](#) in Nov 2017 and will apply from **7 June 2018**. According to the criteria, a substance is considered to have endocrine-disrupting properties IF:

- it shows **an adverse effect in an intact organism or its offspring**, which changes the morphology, physiology, growth, development, reproduction or life span of the organism and impairs its functional capacity, its ability to compensate for stress or increases its susceptibility to other influences;
- it has the **potential to alter the functions of the endocrine system**; and
- there is a **biologically plausible link** between the adverse effect and the endocrine activity.

Conclusions on whether the criteria are met have to be drawn separately for humans and for non-target organisms.

The [European Food Safety Authority \(EFSA\)](#), with support from the [Joint Research Centre \(JRC\)](#), is developing a common guidance for the identification of Endocrine Disruptors in the context of the *Biocidal Products and the Plant Protection Products regulations*.

The draft guidance was subject to a public consultation from Dec 2017 to Jan 2018. More than 2000 comments were received. Since then, the document has undergone a further consultation with ECHA and EFSA's scientific bodies. The final guidance document is to be published in June 2018.

From: <https://newsletter.echa.europa.eu/home/-/newsletter/entry/endocrine-disruptors-explained>

## • ECHA Newsletter: Articles that got my Attention

**May 2018 Issue:**

[https://newsletter.echa.europa.eu/documents/6362380/23688447/newsletter\\_2018\\_issue\\_2\\_may\\_en.pdf](https://newsletter.echa.europa.eu/documents/6362380/23688447/newsletter_2018_issue_2_may_en.pdf)

1/ [CMRs in textiles - Member State's back Commission's restriction plan](#). The European Commission has proposed to limit the exposure to 33 chemicals that are carcinogenic, mutagenic or toxic for reproduction (CMR) by restricting their placing on the market in clothing, textiles and footwear.

2/ [Endocrine Disruptors explained](#). The EU has decided on criteria for identifying whether a substance used in a biocidal product has an impact on our Endocrine system. The criteria will apply from 7 June 2018. We take a deeper look at what [Endocrine Disruptors](#) are, why they should be regulated and what the new criteria mean for companies.

3/ [Swedish National Products Registry - more information on nanomaterials](#). The [Swedish Chemicals Agency \(Kemi\)](#) has set up a mandatory reporting scheme to obtain information on the quantities and types of nanomaterials used in Sweden.

From: <https://newsletter.echa.europa.eu/home/-/newsletter/>

## • EU: Assessing Major Chemical Accident Risks - Handbook of Scenarios

Handbook of Scenarios for Assessing Major Chemical Accident Risks (pub: 2017) ISBN 978-92-79-66670-4 (pdf).

This Report presents the collective work of the European Working Group on Land-Use Planning and discusses the activities towards more consistent land-use planning decisions through more understandable risk assessment approaches and data.

The availability of common reference (chemical accident) scenarios allows the possibility for all Authorities to consider the full range of possible outcomes when assessing risks associated with a major hazard site. Although it does not in any way ensure that Authorities will arrive at similar risk figures or planning decisions, it gives a common framework in which the rules of science and logic can be applied. The use of common reference (chemical accident) scenarios can, in particular, give citizens more confidence that authorities are ensuring that all necessary measures are being taken to reduce the impacts from serious chemical accidents.

[http://publications.jrc.ec.europa.eu/repository/bitstream/JRC106029/jrc106029\\_online.pdf](http://publications.jrc.ec.europa.eu/repository/bitstream/JRC106029/jrc106029_online.pdf) (116 page pdf)

From: <https://ec.europa.eu/jrc/en/publication/handbook-scenarios-assessing-major-chemical-accident-risks>

## • FM Global Data Sheets (more): Reduce your Risk

To reduce risk at your existing facilities—as well as those under construction—it's important to have proven Engineering Guidelines. The FM Global Property Loss Prevention Data Sheets are provided free of charge through [www.fmglobaldatasheets.com](http://www.fmglobaldatasheets.com).

*Editor:* Some more FM Global Data Sheets covering chemical management, published in April 2018 that got my attention:

[Ignitable Liquid Storage Tanks](#) (45 page pdf, April 2018)

[Spray Application of Ignitable & Combustible Materials](#) (31p)

From: [www.fmglobal.com/research-and-resources/fm-global-data-sheets](http://www.fmglobal.com/research-and-resources/fm-global-data-sheets)

## • Perspectives on Risk by Warren Black & Panel

29 May 2018 Engineers Australia Webinar (YouTube: 1hr55m)

This Risk Engineering Society webinar is the first in a series to set out the fundamentals of risk management for engineers and examine the range of approaches in the engineering context. In this first webinar (Presentation 34 minutes, Panel & Questions 1hr 21 minutes), five major approaches to risk are introduced and the common elements of a risk management framework are identified. The Panel included: Warren Black; Geoff Hurst; Richard Robinson, Peter Flanagan).

While there are some fundamental principles underpinning risk engineering, there are also a huge range of competing perspectives and approaches.

From: [www.youtube.com/watch?v=ftUWYqImPMU&feature=youtu.be](http://www.youtube.com/watch?v=ftUWYqImPMU&feature=youtu.be)

This webinar series is part of multi-year project by the **Risk Engineering Society** to develop a Risk Engineering Body of Knowledge, capturing the diversity of perspectives and linking to international best practices.

From: [www.engineersaustralia.org.au/Event/perspectives-risk-engineers-frameworks-and-new-ways-thinking](http://www.engineersaustralia.org.au/Event/perspectives-risk-engineers-frameworks-and-new-ways-thinking)

You can become a member of the Risk Engineering Society for \$55 incl.GST to June 2019.

General Email: [RES@engineersaustralia.org.au](mailto:RES@engineersaustralia.org.au)

<https://www.engineersaustralia.org.au/Communities-And-Groups/Technical-Societies/Risk-Engineering-Society>

## • Please Support NTN with a Tax Deductible Donation

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

NTN takes responsible care very seriously, which has meant NICNAS has reviewed many important chemicals of concern issues. Industry and professional associations in Australia are less pro-active in this area of reassessing chemicals of concern, so NTN carries out an important role.

**Please provide your support** at: [www.givenow.com.au/ntn](http://www.givenow.com.au/ntn)



## • USA OSHA Quick Takes e-News: Mar18-June18

**19 March 2018:** 1/ USA OSHA will Enforce the Beryllium Standard, the [Final Rule on Occupational Exposure to Beryllium](#) in construction, shipyard, and general industries 11 May 2018; 2/ New Bulletins provide Information on Horizontal Drilling Hazards and Chemically Induced Hearing Loss. The USA OSHA has released two new Safety and Health Information Bulletins warning of potentially serious workplace hazards. "[Preventing Hearing Loss Caused by Chemical \(Ototoxicity\) and Noise Exposure](#)" was published in conjunction with USA NIOSH.

**3 April 2018:** 1/ The American Chemistry Council has created Guidance for Working with Isocyanates in the Automobile Industry. The [infographic](#) (5.6Mb 1 page pdf) provides general info on the importance of PPE during the refinishing process.

**1 May 2018:** 1/ California Company Ordered to Pay \$110,000 to a Manager who Reported Concerns about E-Cigarette Ingredients. For information, read the [OSHA News Release](#).

**15 May 2018:** 1/ USA OSHA Issued the Direct Final Rule Revising the Beryllium Standard for General Industry; and Delays Enforcement of Certain Provisions. On 4 May, OSHA issued a [Direct Final Rule](#) clarifying aspects of the Beryllium standard for general industry as it applies to processes, operations, and areas where workers may be exposed to materials containing <0.1% w/w Beryllium. The Direct Final Rule will go into effect on 4 July unless OSHA receives significant adverse comments by 4 June; 2/ New York U-Haul Facility Cited for Exposing Employees to Asbestos and Silica.

**4 June 2018:** 1/ Proposed Rule Clarifies Some Beryllium Standard Compliance Dates; 2/ General Industry and Maritime Silica Standard Effective 22 June 2018; 3/ New York Cosmetics Manufacturer Cited for Safety and Health Hazards Following Fire for failing to protect its employees from dangerous chemicals and other hazards; 4/ Wisconsin Battery Company Cited for Exposing Employees to Lead & Other Hazards; 5/ Iowa Fines Electric Company for Exposing Workers to Asbestos and Lead Hazards.

From: [www.osha.gov/as/opa/quicktakes/](http://www.osha.gov/as/opa/quicktakes/)

## NICNAS (Industrial Chemicals)

### • Draft Categorisation Guidelines (now pdf & docx)

17 May 2018: Download the draft Categorisation Guidelines as [pdf](#) or [docx](#) (277 page) files.

Consultation was extended from the 4 May to 31 May 2018.

From: [www.nicnas.gov.au/reforms/Rules-Guidelines/draft-categorisation-guidelines-main/Categorisation-guidelines](http://www.nicnas.gov.au/reforms/Rules-Guidelines/draft-categorisation-guidelines-main/Categorisation-guidelines)

*Editor:* This is a very useful document, being a complete version, whereas I was never sure on the NICNAS website that I had seen all the Categorisation Guideline webpages, which contained so much information, I found difficult to systematically read, understand and come back as needed.

### • AICIS Reforms Case Studies: Categorising Guides

17 May 2018: **What is in the AICIS Reforms Case Studies?**

Checklists of the information you will need for Categorisation;

Summary of the steps needed to categorise the Chemical Introduction;

Walk through each of the Steps 1-6, including:

- determining the Indicative Risk for human health and environment
- determining the Introduction Category

Finally, NICNAS explains what happens next and give a brief comparison for the same Introduction under current legislation.

**Non-Cosmetics Case Studies** (All are 15-17 pages in length)

Low concentration (non cosmetic) - [pdf](#) or [docx](#)

High volume lower hazard (non cosmetic) - [pdf](#) or [docx](#)

High MW polymer (non cosmetic) - [pdf](#) or [docx](#)

**Cosmetics Case Studies:** (All are 14-15 pages in length)

Very low volume, no haz info available (cosmetic) - [pdf](#) or [docx](#)

Low concentration (cosmetic) - [pdf](#) or [docx](#)

High volume surfactant (cosmetic) - [pdf](#) or [docx](#)

From: [www.nicnas.gov.au/reforms/Rules-Guidelines/draft-categorisation-guidelines-main/case-studies-guides-to-categorising-chemicals](http://www.nicnas.gov.au/reforms/Rules-Guidelines/draft-categorisation-guidelines-main/case-studies-guides-to-categorising-chemicals)

*Editor:* A useful starting point to help us all to train ourselves to use the proposed Australian Industrial Chemicals Introduction Scheme (AICIS). The above Case Studies need to be worked through with directly accessible:

[Industrial Chemicals General Rules](#) (Draft) (86p, [pdf](#) or [doc](#)) &

the [Categorisation Guidelines](#) (Draft) (277p, [pdf](#) or [doc](#)).

## • General Rules & Categorisation Guidelines: Comment

*Editor:* I have included some of my key comments I made:

### Section 25 Human Health Hazard Band & Section 29 Environmental Hazard Band

There is a qualifying statement for every entry in these Hazard Band Lists “(within the meaning given by the Guidelines)”

These Guidelines are mentioned in Section 5 Definitions as Guidelines “as existing on the commencement day”.

*Comment:* The Draft Guideline (now available as a 277 page document) makes this document reference very unwieldy and difficult to understand as currently expressed.

*Comment:* It means we will all have a **lot of re-reading to do** following the commencement day.

*Comment:* There **does not appear to be a process to correct** errors, typos or misunderstandings, or updating them, after the commencement day. Also I regard that we will need a simplified introduction approach, with the Authority taking an additional role with an additional cost, so we have an industrially workable approach for non hazardous chemicals & low hazards chemicals.

### Schedule 1 Polymers of Low Concern

**Point 2 Reactive Functional Groups** are first mentioned in Sub Part (3).

There is no reference to the definition of RFGs in Clause (8).

Suggestion: Either make a reference to Clause (8) in Clause (3) OR rearrange Clause (8) to directly follow Clause (3) and renumbering the following Clause numbers.

*Comment:* Polymers are named with their reactive monomer chemical names so this will make it clearer to non specialists that once an RFG has been fully reacted it is not present.

*Example:* Polymers that originally contained an "Isocyanate" group BUT where this RFG has been reacted with other polymer groups & then ALL the remaining Reactive Functional Groups have been deliberately deactivated with an Alcohol, such as Ethanol, this I no longer a Polymer with an RFG.

### Editor's General Comment: on the General Rules & Categorisation Guidelines.

*Comment a/:* There is a lot of work to obtain and document information to meet the General Rules and Categorisation Guidelines, particularly for the Exempted Chemicals. I suggest that the costs to create and maintain these documents over time will be expensive and that the specialists (who I suggest will need to be specialised toxicologists) who can prepare them will need to be like Environmental Auditors, as they will need to be able to sign off that they have met the requirements. There is quite a significant liability for consultants to do this for other entities, that will only be realised when the Industrial Chemical Authority arrives to do a detailed audit, maybe several years after being prepared and there is no longer an association with the consultant.

I suggest a simplified approach be decided for the Exempted Chemicals where an abbreviated set of information is able to be provided by a lower level chemical specialist (such as qualified chemist) where the chemical name, the CAS No., the presentation of the chemical and the likely uses, are provided to the Authority AND the Authority is paid to keep track of these chemicals and then alerts the importers where an increased hazard to the Report Chemical level is decided.

This then provides a simplified route of introduction, where the expertise of the Authority is paid for and utilised by the importer, particularly for small trading businesses that don't have easy access to such specialist expertise.

*Comment b/:* As the data behind the Reports will normally be confidential, how does the Authority expect to obtain access to the confidential documentation behind the Exempted Chemical Reports and the Reported Chemical Reports?

As this information is typically held in highly protected databases (such as SAP), it is very unlikely access to the Authority to the underlying data will be allowed.

## • NICNAS Chemical Gazettes

[No. C 04, April 2018](#) (takes you to the initial webpage)

[No. C 05, May 2018](#) (takes you to the initial webpage)

[No. C 06, June 2018](#) (takes you to the initial webpage)

From: [www.nicnas.gov.au/news-and-events/chemical-gazette](http://www.nicnas.gov.au/news-and-events/chemical-gazette)

## • Rotterdam Convention Annex III proposed Additions

6 April 2018: At the [2017 Conference of the Parties to the Rotterdam Convention](#), a decision was made to add Tributyl Tin Compounds and Short Chain Chlorinated Paraffins to the **industrial use** category in [Annex III of the Rotterdam Convention](#).

The [chemicals listed](#) will be prohibited from introduction and export unless written Authorisation is obtained from the NICNAS Director. Tributyl Tin Compounds: CAS 1461-22-9; CAS 1983-10-4; CAS 2155-70-6; CAS 24124-25-2; CAS 4342-36-3; CAS 56-35-9; CAS 85409-17-2; and Alkanes, C10-13, Chloro-: CAS 85535-84-8.

**Call for Information:** If you introduce(d) and/or export(ed) any chemicals listed below for industrial uses, you must provide details to NICNAS by 4 May 2018 for the following periods:

1 Jan 2017 to 3 April 2018; and Proposed or estimated introduction/exports from 4 April 2018 to 31 Dec 2018

From: [www.nicnas.gov.au/news-and-events/chemical-gazette/numbers/2018/No.-C-04,-April-2018/Call-for-information-Rotterdam-Convention-Annex-III-proposed-additions](http://www.nicnas.gov.au/news-and-events/chemical-gazette/numbers/2018/No.-C-04,-April-2018/Call-for-information-Rotterdam-Convention-Annex-III-proposed-additions)

## • NICNAS Secondary Notification of Irgalube 232

6 April 2018: Irgalube 232 may also be known by the following trade names: CGA 28-0132 & TKA 40116.

The original assessment (NA/638), completed in Dec 1998, assessed the use of this chemical as an anti-wear additive in hydraulic fluids and compressor lubricating oils. Based on the data available at that time, the chemical was not classified as hazardous to human health or the environment.

Secondary Notification is required as the chemical will now be used as a collector in the Sulphide flotation process in mining operations and, in addition, the intended introduction volumes significantly exceed those previously assessed.

The new use may potentially result in release of the chemical to the environment with increased risk of adverse effects to the aquatic environment. Therefore, a reassessment of the human health and environmental risks for the chemical is required.

Secondary Notification submissions for the chemical were to be received by the Scheme no later than 1 May 2018. The penalty for non-compliance may include prohibition from further importation or manufacture of the chemical.

From: [www.nicnas.gov.au/news-and-events/chemical-gazette/numbers/2018/No.-C-04,-April-2018/secondary-notification-of-irgalube-232](http://www.nicnas.gov.au/news-and-events/chemical-gazette/numbers/2018/No.-C-04,-April-2018/secondary-notification-of-irgalube-232)

## • Amendments of the Inventory (AICS) – 2 Amdts

1 May 2018: Australian Inventory of Chemical Substances.

Hexanedioic Acid Ethane Polyesterdiol (with no CAS No.) This Duplicate Record was removed from the Inventory.

Hexanedioic Acid, Polymer with 1,2-Ethanedioic Acid; (C<sub>6</sub>H<sub>10</sub>O<sub>4</sub>.C<sub>2</sub>H<sub>6</sub>O<sub>2</sub>)<sub>x</sub>; CAS 24938-37-2. This Record was retained on the Inventory.

*Previous Chemical Name:* Benzene, 1,1'-Methylenebis[4-Isocyanato- Adduct with Hexanedioic Acid Ethanepolyesterdiol

*Amended Chemical Name:* Hexanedioic acid, Polymer with 1,2-Ethanedioic Acid and 1,1'-Methylenebis[4-Isocyanatobenzene]; (C<sub>15</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub>.C<sub>6</sub>H<sub>10</sub>O<sub>4</sub>.C<sub>2</sub>H<sub>6</sub>O<sub>2</sub>)<sub>x</sub>; CAS25931-01-5

From: [www.nicnas.gov.au/news-and-events/chemical-gazette/numbers/2018/no.-c-05,-may-2018/amendment-of-the-inventory](http://www.nicnas.gov.au/news-and-events/chemical-gazette/numbers/2018/no.-c-05,-may-2018/amendment-of-the-inventory)

## • Addition of 12 Industrial Chemicals from the TNA

16 May 2018: In the NICNAS Chemical Gazette May 2018 NICNAS confirmed the removal of all the products listed in the Trade Name Annex (TNA) and the addition of 12 industrial chemicals to the non-confidential section of the Inventory.

23 companies submitted composition information on 88 products on the TNA totalling 807 chemicals. Two hundred and seventy five (275) unique chemicals were reported.

12 of the 275 chemicals submitted were not on the Inventory and were added under section 20AB of the Act. We conducted a preliminary search of databases to identify if any of the 12 chemicals were hazardous. We were able to ascertain that 4 of the 12 chemicals were considered hazardous, 4 chemicals were not listed in ECHA C&L Inventory database and no hazard classification could be identified from other sources for 4 chemicals.

The 12 CAS No. Chemicals are listed on the webpage below. 68130-31-4; 128819-84-1; 26125-61-1; 25765-47-3; 121888-68-4; 214495-33-7; 179796-73-7; 53563-70-5; 2035064-87-8; 121888-67-3; 18765-38-3; 67701-02-4 (Fatty Acids, C14-18).

3 Chemicals not listed but considered to be on the Inventory: 10028-15-6 (Ozone); 1318-59-8 (Chlorite-group mineral); 10213-79-3 (Silicic Acid (H<sub>2</sub>SiO<sub>3</sub>), Disodium Salt, Pentahydrate).

From: [www.nicnas.gov.au/news-and-events/news-and-notice/news-and-notice-content/trade-name-annex-report](http://www.nicnas.gov.au/news-and-events/news-and-notice/news-and-notice-content/trade-name-annex-report)

## • NICNAS Business Registration Numbers: Update

17 May 2018: The number of businesses registered with NICNAS has exceeded 7000. NICNAS has seen an increase across all areas, but mainly by small to medium enterprises.

In 2011-2012 there were around 5000 registrants.

From: [www.nicnas.gov.au/news-and-events/news-and-notice/news-and-notice-content/update-on-business-registration-levels](http://www.nicnas.gov.au/news-and-events/news-and-notice/news-and-notice-content/update-on-business-registration-levels)

## • Wrongly included CAS numbers to be Deleted from the Australian Inventory of Chemical Substances

5 June 2018 Chemical Gazette

CAS 68199-28-0 2-Cyclohexene-1-Octanoic Acid, 5(Or 6)-Carboxy-4-Hexyl-, Polymer with 2-Methyloxirane and Oxirane

CAS 27401-59-8 Terephthalic Acid, Polyester with 1,4-Cyclohexanedimethanol and 4,4'-Isopropylidenediphenol

Under section 20AA (Chemicals wrongly included in the Inventory) a person may give a written statement to the Director within 3 months of this notice giving reasons why the chemical should not be removed.

From: [www.nicnas.gov.au/news-and-events/chemical-gazette/numbers/2018/No.-C-06.-June-2018/amendments-and-proposal-for-deletion-of-wrongly-added-chemicals](http://www.nicnas.gov.au/news-and-events/chemical-gazette/numbers/2018/No.-C-06.-June-2018/amendments-and-proposal-for-deletion-of-wrongly-added-chemicals)

## • Proposal for Deletion of Wrongly Added Chemical from the Australian Inventory of Chemical Substances

5 June 2018 Chemical Gazette

Incorrect listing on the Inventory

CAS 63818-08-6 1,4-Benzenedicarboxylic Acid, Dimethyl Ester Polymer with 1,2-Propanediol, 1,2-Ethandiol and 1,3-Dihydro-1,3-Dioxo-5-Isobenzofurancarboxylic Acid

Correct listing on the Inventory

CAS 63813-09-2 1,4-Benzenedicarboxylic Acid, Dimethyl Ester, Polymer with 1,3-Dihydro-1,3-Dioxo-5-Isobenzofurancarboxylic Acid, 1,2-Ethandiol and 1,2-Propanediol. Formula:  $(C_{10}H_{10}O_4.C_9H_4O_5.C_3H_8O_2.C_2H_6O_2)_x$

Thus there are duplicate entries in the Inventory for the same chemical with one entry having an incorrect CAS number.

The wrongly included CAS No. is to be deleted from the AICS.

Under section 20AA (Chemicals wrongly included in the Inventory) a person may give a written statement to the Director within 3 months of this notice giving reasons why the chemical should not be removed.

From: [www.nicnas.gov.au/news-and-events/chemical-gazette/numbers/2018/No.-C-06.-June-2018/proposal-for-deletion-of-wrongly-added-chemical](http://www.nicnas.gov.au/news-and-events/chemical-gazette/numbers/2018/No.-C-06.-June-2018/proposal-for-deletion-of-wrongly-added-chemical)

## Scheduled Poisons

### • The Poisons Standard (SUSMP No. 21) June 2018

[Poisons Standard June 2018 \(SUSMP No. 21\)](#)

686 page Standard commenced 1 June 2018. The SUSMP:

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

*Editor: The Index, starting at page 368 is 318 pages long!*

Changes are detailed in the [Explanatory Statement](#) supporting Poisons Standard June 2018.

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

Amended Existing Substances include:

- Cannabis; • Climbazole; • m-Aminophenol; • 2-Chloro-6-(Ethylamino)-4-Nitrophenol; • 2,4-Diaminophenoxy-Ethanol;
- Chloroacetamide; • Cardarine; • Stenabolic (SR9009) and • Other Synthetic REV-ERB Agonists; • Ibutamoren;
- Cathinones; • Methylone (MDMC); • alpha-Pyrrolidinovalerophenone (alpha-PVP); • Melanotan II; • Cimicoxib;
- Fluralaner; • Metofluthrin; • alpha-Cypermethrin; • Silver Oxide; • Dinotefuran; and • Afidopyropen

The added New Substances are:

- Atezolizumab; • Avelumab; • Baricitinib; • Benralizumab; • Blinatumomab; • Cerliponase Alfa; • Daratumumab;
- Durvalumab; • Etofenprox; • Glecaprevir; • Idebenone; • Inotuzumab Ozogamicin; • Lifitegrast; • Metamitron;
- Midostaurin; • Neratinib; • Nivolumab; • Obeticholic Acid; • Olaratumab; • Palbociclib; • Pegaspargase; • Pibrentasvir;
- Ramucirumab; • Rufinamide; • Secukinumab; • Siltuximab; • Tezacaftor and • Voxilaprevir.

From: [www.tga.gov.au/publication/poisons-standard-susmp](http://www.tga.gov.au/publication/poisons-standard-susmp)

### • New AHMAC Scheduling Policy Framework (SPF)

16 April 2018: Following extensive stakeholder, and in collaboration with State and Territory departments, the SPF has been redrafted as two documents - a Policy document, the [SPF](#), and a Guidance document, the [Scheduling Handbook](#).

The SPF contains the factors for each Schedule and Appendix, and the new version has been endorsed by the **Australian Health Ministers Advisory Council (AHMAC)**, the committee of Heads of State, Territory and Commonwealth Health Departments). The SPF remains an AHMAC document and any future changes will require AHMAC consideration and endorsement.

18 Jan 2018: AHMAC - Scheduling Policy Framework for Medicines and Chemicals. This Scheduling Policy document is to be read in conjunction with the [Scheduling Handbook](#).

The Scheduling Policy Framework (Scheduling Policy) sets out the national policy for applying access restrictions on all "Poisons". As defined in the [Poisons Standard](#), poisons include medicines for human therapeutic use, veterinary medicines, agricultural, domestic and industrial chemicals where there is a potential risk to public health and safety.

[Print version of AHMAC - Scheduling Policy Framework for Medicines and Chemicals \(18 page pdf\)](#)

From: [www.tga.gov.au/publication/ahmac-scheduling-policy-framework-medicines-and-chemicals](http://www.tga.gov.au/publication/ahmac-scheduling-policy-framework-medicines-and-chemicals)

From: [www.tga.gov.au/scheduling-news](http://www.tga.gov.au/scheduling-news)

## • New TGA Scheduling Handbook

18 Jan 2018: The [Scheduling Handbook](#) contains details of the scheduling process, including when and how matters are referred to the Advisory Committees, information on the public consultation process and guidance for applicants. The Handbook is a Department of Health document and will be maintained by the Scheduling Secretariat within the Health Products Regulation Group of the Department. Changes to the Handbook can be made without referral to AHMAC, but will be made in consultation with the Delegates, and/or the Advisory Committees for Medicines and/or Chemicals Scheduling. There may also be a public consultation depending on the significance of the change. Read the Scheduling Handbook in conjunction with the [Scheduling Policy Framework for Medicines and Chemicals](#).

[Print version of Scheduling Handbook \(28 page pdf\)](#)

From: [www.tga.gov.au/publication/scheduling-handbook-guidance-amending-poisons-standard](http://www.tga.gov.au/publication/scheduling-handbook-guidance-amending-poisons-standard)

From: [www.tga.gov.au/scheduling-news](http://www.tga.gov.au/scheduling-news)

*Editor's Comment:* This is an important document to study and understand to be aware of the difference of approach to the GHS Hazard Classification for industrial chemicals.

## • Scheduling Delegate's Final Substance Decisions

**10 April 2018:** (Note: Only Chemicals considered by ACCS and the Delegate-only Decisions are included below)

2. Joint meeting of the Advisory Committee on Chemicals and Medicines Scheduling (ACCS/ACMS #17)

- [2.1 Helium](#) - [2.2 Salts of Boric Acid](#)
- [2.3 Polihexanide](#) - [2.4 Cimicoxib](#)

3. Advisory Committee on Chemicals Scheduling (ACCS #21)

- [3.1 Fluralaner](#) - [3.2 Metofluthrin](#)
- [3.3 Alpha-Cypermethrin](#) - [3.4 Silver Oxide](#)
- [3.5 1-Deoxy-1-\(Methylamino\)-D-Glucitol N-C10-16 Acyl Derivatives](#) - [3.6 Phenyl Methyl Pyrazolone](#)
- [3.7 Dinotefuran](#) - [3.8 Afidopyropen](#)

4. Delegate-only Decisions on Agricultural and Veterinary chemicals

- [4.1 Bacillus amyloliquefaciens MBI 600](#) - [4.2 N,N-Dimethyloctanamide And N,N Dimethyldecanamide](#)
- [4.3 Etofenprox](#) - [4.4 Metamitron](#)

From: [www.tga.gov.au/scheduling-decision-final/final-decisions-amending-or-not-amending-current-poisons-standard-april-2018](http://www.tga.gov.au/scheduling-decision-final/final-decisions-amending-or-not-amending-current-poisons-standard-april-2018)

**31 May 2018:** All the Decisions were only for medicines for human therapeutic use (which this newsletter does not cover).

From: [www.tga.gov.au/scheduling-decision-final/scheduling-delegates-final-decisions-nces-may-2018](http://www.tga.gov.au/scheduling-decision-final/scheduling-delegates-final-decisions-nces-may-2018)

## • Scheduling Delegate's Interim Chemical Decisions

7 June 2018: There was an opportunity for further comment, on ACCS chemicals, which closes on the 5 July 2018.

2. Joint meeting of the Advisory Committee on Chemicals and Medicines Scheduling (ACCS/ACMS #18)

- [2.2 Vinyl Acetate](#) (see *Specific Note following*)

3. Advisory Committee on Chemicals Scheduling (ACCS #22)

- [3.1 Mefenitruconazole](#) (Foliar spray of plant crops, >7.5%)
- [3.2 Moxidectin](#) (treatment of animals, >2%)
- [3.3 Eprinomectin](#) (control of parasites in animals, S6 ≤5%)

From: [www.tga.gov.au/scheduling-decision-interim/publication-interim-decisions-amending-or-not-amending-current-poisons-standard-june-2018](http://www.tga.gov.au/scheduling-decision-interim/publication-interim-decisions-amending-or-not-amending-current-poisons-standard-june-2018)

## • Vinyl Acetate: Scheduling Delegate's Interim Decision

Schedule 6 - Amend (1 Oct 2018) Entry

VINYL ACETATE MONOMER  
(excluding its derivatives) except:

- a. in preparations for therapeutic use; or
- b. in cosmetic preparations containing 0.01 per cent or less of Vinyl Acetate as residual monomer in a polymer; or
- c. in other preparations containing 1 per cent or less of Vinyl Acetate.

**Delegate's Reasons:** The Delegate has decided to retain the words 'as residual monomer in a polymer' and 'MONOMER' in the Schedule 6 entry for Vinyl Acetate to ensure that the intention of the schedule entry - to capture only Monomer Vinyl Acetate and not Polymer Vinyl Acetate - is clear for all stakeholders.

The Original Schedule 6 New Entry (for 1 Oct 2018) was:

VINYL ACETATE MONOMER  
(excluding its derivatives) except:

- a. in preparations for therapeutic use; or
- b. in preparations for domestic use containing 1 per cent or less of vinyl acetate; or
- c. in preparations containing 0.01 per cent or less of vinyl acetate as residual monomer in a polymer

From: [www.tga.gov.au/book-page/22-vinyl-acetate](http://www.tga.gov.au/book-page/22-vinyl-acetate)

### **Editor: An important issue for DIY product formulators:**

*None of your DIY products can be intended for body contact applications or where users allow your product to dry on them. This means understanding how your market intends to use your products that contain >0.01% to <1% Vinyl Acetate. I suggest a clear alert needs to be on labels such as: "Remove splashes immediately and promptly wash the skin."*

## • Public Submissions on Scheduling Matters

[11 April 2018 \(ACMS#22, ACCS#21, & joint ACMS-ACCS#17\)](#) weblinks to 7 pdfs for ACCS related substances.

[13 April 2018 \(ACMS#21, ACCS#20 & joint ACMS-ACCS#16\)](#) weblinks to 4 pdfs for ACCS related substances.

From: [www.tga.gov.au/public-submissions-scheduling-matters](http://www.tga.gov.au/public-submissions-scheduling-matters)

## • Invitation to Comment: Scheduling Amendments

12 April 2018: Submissions were invited by 10 May 2018.

Proposed amendments referred for Scheduling advice to the Joint ACMS-ACCS #19 on: 2-Butoxyethanol; Dimethyl sulfoxide (DMSO); Aliphatic Allyl Esters; Astodimer Sodium;

From: [www.tga.gov.au/consultation-invitation/consultation-proposed-amendments-poisons-standard-being-referred-june-2018-meetings-accs-acms-and-joint-accsacms](http://www.tga.gov.au/consultation-invitation/consultation-proposed-amendments-poisons-standard-being-referred-june-2018-meetings-accs-acms-and-joint-accsacms)

## Food Chemical Issues

### • P1047: Review of Reg. Nutrient Ref. Values

Review and update the Regulatory Nutrient Reference Values in the Australia New Zealand Food Standards Code in light of the 2006 and 2017 Australia/New Zealand nutrient reference values. Anticipated to be published in late 2019.

[Administrative Assessment Report - 10 April 2018](#) (2 p pdf)

From: [www.foodstandards.gov.au/code/proposals/Pages/P1047.aspx](http://www.foodstandards.gov.au/code/proposals/Pages/P1047.aspx)

### • A1136: Protein Glutaminase as a Processing Aid

3 May 2018: This Application is to permit the use of Protein-Glutaminase from *Chryseobacterium Proteolyticum* as a Processing Aid to improve Protein functionality in baking, noodle, dairy, meat, fish and yeast products.

Protein Glutaminase enhances Protein solubility in various applications. The technological purpose is to improve emulsification, foam stabilisation and gelling in (various) Proteinaceous foods. It also decreases flavour fade or 'off flavour' problems associated with flavour-Protein interactions.

[Approval Report - 22 Feb 2018](#) (21 page pdf)

[Risk & Technical Assessment \(at Approval\)](#) (17 page pdf)

[Call for Submissions \(21 Sept 2017\)](#) (14 page pdf)

[Risk & Technical Assessment \(at 21 Sept 17\)](#) (17 page pdf)

## • A1146: Thermolysin (Protease) as a Processing Aid

12 April 2018: Processing aid (Enzyme): to permit the use of Thermolysin (Protease) from Anoxybacillus Caldiproteolyticus as a processing aid in Protein, dairy, egg, meat and fish processing and flavour production.

[Call for Submissions – 12 April 2018](#) (17 page pdf)

[Supporting Document 1 – Safety Assessment](#) (15 page pdf)

[Application](#) (48 page pdf); [Executive Summary](#) (5 page pdf).

From: [www.foodstandards.gov.au/code/applications/Pages/A1146.aspx](http://www.foodstandards.gov.au/code/applications/Pages/A1146.aspx)

## • A1161: Potassium Polyaspartate Food Additive

15 May 2018: This Application is to permit the use of Potassium Polyaspartate as a Food Additive in wine at levels of Good Manufacturing Practice (GMP). (3 pages)

To permit the use of Potassium Polyaspartate as a Food Additive in wine at 100mg/L. The technological function of the Food Additive is as a Stabiliser.

[Administrative Assessment Report 15 May 2018 \(pdf\)](#) ([docx](#))

From: [www.foodstandards.gov.au/code/applications/Pages/A1161.aspx](http://www.foodstandards.gov.au/code/applications/Pages/A1161.aspx)

## • A1162: Triacylglycerol Lipase (Enzyme) Prepar'n from Trichoderma Reesei (as a Processing Aid)

31 May 2018: This Application is to permit the use of the enzyme Triacylglycerol Lipase from Trichoderma Reesei (a new microbial source) as a Processing Aid in the manufacturing of cereal-based products. (3 pages)

[Administrative Assessment Report 31 May 2018 \(pdf\)](#) ([docx](#))

[Executive summary \(5 page pdf\)](#)

From: [www.foodstandards.gov.au/code/applications/Pages/A1162.aspx](http://www.foodstandards.gov.au/code/applications/Pages/A1162.aspx)

## • A1163: Food Irradiation Herbs & Spices Definition

7 June 2018: This Application is to vary Food Standard 1.5.3 Irradiation of Food, to remove the reference to Schedule 22 in relation to the definition of Herbs and Spices.

[Administrative Assessment Report 7 June 2018 \(pdf\)](#) ([docx](#))

[Executive summary \(3 page pdf\)](#)

There are 4 possible interpretations of the definition "herbs and spices means the herbs and spices described in Schedule 22" for the purposes of 1.5.3-4.

Option 3 is the most inclusive: It recognises Cinnamon, which is a listed spice commodity but, as a Bark, does not meet the definition of spices in Schedule 22. It also includes: Allspice, Cassia Bark, Celery, Chilli-dehydrated, Garlic-Dehydrated, Green Bell Pepper, Onion-Dehydrated, Oregano, Paprika-dehydrated, Cayenne Pepper; which Options 2 & 4 do not.

From: [www.foodstandards.gov.au/code/applications/Pages/A1163.aspx](http://www.foodstandards.gov.au/code/applications/Pages/A1163.aspx)

## • P1046: L-Amino Acid Acetate in Food for Special Medical Purposes

3 May 2018: This proposal has removed a negative impact on trade by enabling the sale of Food for Special Medical Purposes (FSMP) containing L-Arginine Acetate.

On 14 Sept 2017, FSANZ approved a variation to the AU NZ Food Standards Code after considering an Urgent Proposal to remove a negative effect on trade in by permitting L-Arginine Acetate in food for special medical purposes.

FSANZ has assessed the resulting variation and is calling for submissions to help FSANZ decide whether to re-affirm the variation or to prepare a proposal to replace, amend or add to the variation.

[Call for Submissions - Assessment of the Variation \(pdf\)](#) (10p)

[Final Consideration Report - \(pdf\)](#) (15 pages)

From: [www.foodstandards.gov.au/code/proposals/Pages/P1046.aspx](http://www.foodstandards.gov.au/code/proposals/Pages/P1046.aspx)

## • FSANZ: Permission for L-Arginine Acetate in Food for Special Medical Purposes

3 May 2018: FSANZ issued a call for comment on the recent urgent approval of Acetate forms of L-Amino Acids in food for Special Medical Purposes. Comment closed 31 May 2018; which are used to manage the diets of people with certain diseases, disorders or medical conditions.

FSANZ has assessed their Sept 2017 variation to the ANZFS Code and is now seeking comment to inform our decision to re-affirm the variation or to prepare a proposal to replace, amend or add to the variation.

3 May 2018: [Second Call for Comment \(webpage\)](#) & [Call for Submissions - Assessment of the Variation \(pdf\)](#) ([docx](#))

[Food for Special Medical Purposes](#) (webpage June 2016)

From: [www.foodstandards.gov.au/media/Pages/Call-for-comment-Permission-for-L-Arginine-Acetate-in-food-for-special-medical-purposes.aspx](http://www.foodstandards.gov.au/media/Pages/Call-for-comment-Permission-for-L-Arginine-Acetate-in-food-for-special-medical-purposes.aspx)

## • FSA NZ: Mandatory Labelling for Lupin starts soon

10 May 2018: FSA NZ reminded food businesses that mandatory Allergen labelling requirements for Lupin began on 26 May 2018.

Lupin is a Legume which belongs to the same plant family as Peanuts, and has the potential to be an Allergen. In Australia, Lupin has not typically been used in food, however, due to its high Protein and Fibre content FSA NZ are seeing an increase in its use.

In 2017, Lupin was added to the list of allergens that must be declared on food labels from 26 May 2018 – even if it's already on the shelf; and must also be available for example, for food prepared at and sold from a takeaway shop.

[Allergy Information for Food Manufacturers, Retailers & Importers](#)

From: [www.foodstandards.gov.au/media/Pages/Mandatory-labelling-for-lupin-starts-soon.aspx](http://www.foodstandards.gov.au/media/Pages/Mandatory-labelling-for-lupin-starts-soon.aspx)

## • FSA NZ Survey of Plasticisers in Australian Foods

March 2018: The following plasticisers (which may be used in food packaging materials) were inspected by FSA NZ in a broad range (65) of Australian foods & beverages:

- Di(2-Ethylhexyl) Phthalate (DEHP)
- Diisononyl Phthalate (DINP)
- Butyl Benzyl Phthalate (BBP)
- Dibutyl Phthalate (DBP)
- Diisodecyl Phthalate (DIDP)
- the Adipate plasticiser; Di(2-Ethylhexyl) Adipate (DEHA)
- the Citrate plasticiser; Acetyltributylcitrate (ATBC).

[Survey of Plasticisers in Australian Foods \(pdf\) \(word\)](#) 101p

The survey results indicate that the levels of these seven plasticisers in Australian foods are generally low. Estimated dietary exposure for Australian consumers was below internationally recognised safe levels. No public health and safety concerns were identified for the Australian population.

The estimated dietary exposure for Australian consumers was found to be well below internationally recognised Tolerable Daily Intakes (TDIs). For all seven plasticisers, average and high (90<sup>th</sup> percentile) estimated dietary exposure was no greater than 25% and 50% of the TDI respectively, using highly conservative modelling scenarios representing a range of Australian population groups.

The conclusions from this survey formed part of the evidence base for the packaging proposal: [P1034 – Chemical Migration from Packaging into Food](#).

From: [www.foodstandards.gov.au/publications/Pages/Survey-of-Plasticisers-in-Australian-Foods.aspx](http://www.foodstandards.gov.au/publications/Pages/Survey-of-Plasticisers-in-Australian-Foods.aspx)

## • FSA NZ: New Web Information on Sugar

February 2018: The differences in the types of sugars, data on consumption and sugar requirements in the Food Standards Code is now available. Some extracts are below:

The [World Health Organization \(WHO\)](#) recommends that 'free' sugars make up no more than 10% of daily kilojoule intake to prevent unhealthy weight gain and dental caries. Free sugars are Monosaccharides (such as Glucose, Fructose) and Disaccharides (such as Sucrose or table sugar) added to foods and drinks, and sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates. For an adult of a healthy body mass index (BMI), this amount works out to about 12 teaspoons (or 50 grams) of 'free' sugar per day.

Nutrition content claims and health claims about sugar must meet certain criteria. For example, for a claim about 'low sugar', the food must not contain more than 2.5 g of sugar per 100 mL of liquid food or 5 g per 100 g of solid food. For a 'reduced sugar' claim, the food must contain at least 25% less sugar than the comparison food.

From: [www.foodstandards.gov.au/consumer/nutrition/Pages/Sugar.aspx](http://www.foodstandards.gov.au/consumer/nutrition/Pages/Sugar.aspx)

## Agricultural Chemicals

### • APVMA Digital Strategy 2018-2022 & Armidale

8 May 2018: A new APVMA business operating model, supported by modern technology, will assist the Authority to improve and sustain organisational performance levels for completing client Applications within statutory timeframes and also increase client and industry satisfaction rates.

The APVMA's present Information and Communication Technology (ICT) environment is at the point of critical failure. Investment in the Authority's infrastructure, applications and core business systems is vital to support the transition to Armidale, New South Wales, and underpins future efficiencies in Application Assessment and Registration.

This Digital Strategy outlines the APVMA's vision for a digitally enabled Regulator by 2022. The Strategy provides the framework for investment in an enabling technology program that will address the significant risk of ICT failure – stabilising, digitising and modernising APVMA's Regulatory Service delivery.

Document (8 May 2018, 25 pages): [pdf](#) [docx](#)

The horizon of 2022 represents a period of significant change for the APVMA. This change stems from the government commitment to decentralise the Authority by relocating operations to regional Australia.



The Digital Strategy will support teleworking and will allow (the APVMA) to retain access to highly specialised regulatory scientists who choose not to relocate, enabling a period of sustained operation and knowledge transfer to new staff. Introducing end-to-end online registration will streamline and improve the efficiency of the APVMA's assessment functions, allowing for sustained effort when registering new products. New and better communication tools, and online submissions and end-to-end management of applications, will ensure maintained access to stakeholders and clients.

The APVMA Enabling Technology Program is at:  
<https://apvma.gov.au/node/29526>

From: <https://apvma.gov.au/node/29521>

## • APVMA: Latest AgVet Chemicals - first in Aust.

2 May 2018: "Registrations (for Afidopyropen and Duddingtonia Flagrans) provide Australia's agricultural industries with enhanced access to safe and effective pest management tools for use in vegetable, cotton and livestock production." By APVMA CEO, Dr Chris Parker.

"Australia is the first nation to register Afidopyropen, which is an insecticide to aid in the control of aphids and silverleaf whitefly in cotton and vegetables."

"The APVMA is also the first Regulator to approve Duddingtonia Flagrans, a biological present as a palatable feed supplement used to treat parasitic gastrointestinal nematodes of grazing animals."

Details of the active constituent *Afidopyropen* in Versys Insecticide and *Duddingtonia Flagrans* in BioWorma and Livamol with BioWorma products can be found on the APVMA's public database of registered chemicals at [portal.apvma.gov.au/pubcris](http://portal.apvma.gov.au/pubcris).

APVMA regulatory framework: [Approval of Active Constituents](#)

From: <https://apvma.gov.au/node/29466>

## • FAISD Handbook 1/2018 to 31 March 2018

The [Handbook of First Aid Instructions, Safety Directions, Warning Statements and General Safety Precautions for Agricultural and Veterinary Chemicals \(FAISD Handbook\)](#). (161 page pdf)

Safety Directions are set for formulations, rather than Active Constituents. In the event that submission of data for a new source of an active constituent reveals a significantly different toxicological profile from the reference Active Constituent, revised Safety Directions for products based on this new source may need to be developed.

The Label Layout requirements specified in the SUSMP shall also apply to First Aid Instructions, Safety Directions, Warning Statements and General Safety Precautions specified in this Handbook. New and amended Labels must also be approved by the APVMA.

An overview and amendments up to 31 March 2018 are listed on the website: <https://apvma.gov.au/node/26586>

## • Risk Assessment Manual for Chemistry & Manufacture

3 May 2018: This APVMA Manual outlines the assessment approaches we use to evaluate chemistry and manufacture data. It is intended as a Guidance document for both the APVMA and stakeholders.

This revised version (66 pages) of the Risk Assessment Manual for Chemistry & Manufacture includes explanatory notes to aid understanding for how, what and why specific data is used and how this data relates to the AgVet Code & Regs.

For prospective applicants, this manual should be considered in conjunction with the APVMA Data Guidelines for Chemistry and Manufacture.

<https://apvma.gov.au/registrations-and-permits/data-guidelines>

Draft [pdf](#) & [docx](#) files are at <https://apvma.gov.au/node/29286>

Comment closed on 24 May 2018.

From: <https://apvma.gov.au/node/29476> *Reg Update 270*.

## • Polihexanide: APVMA Regulatory Decisions

25 May 2018: Polihexanide: Regulatory Decisions: The reconsideration of products containing Polihexanide and approvals of their associated labels, May 2018 (19 pages) ([pdf](#)) ([docx](#))

The review found that Polihexanide product registrations can continue, with labels updated to reflect strengthened First Aid Instructions and Safety Directions. Read all of the details about the [Polihexanide Chemical Review](#) on the APVMA website.

"Although the assessments identified Polihexanide as a potential carcinogen in rodents, this was only at high exposure levels which are unlikely to be encountered in occupational or public settings from use of Polihexanide products."

"Specifically, (the APVMA) assessed risk from occupational exposure and risk from post-application exposure (e.g. from bathing or swimming in pools treated with Polihexanide). The APVMA determined that products containing Polihexanide can be used safely provided that appropriate Signal Headings and First Aid Instructions and Safety Directions are included onto labels."

From: <https://apvma.gov.au/node/30956>

And: <https://apvma.gov.au/node/12691>

## • APVMA response to EU Neonicotinoid concerns

The European Union (EU) Commission has voted (on the 27 April 2018) to restrict the use of three Neonicotinoid compounds - Imidacloprid, Clothianidin and Thiamethoxam to only be used on plants and seeds grown in greenhouses. The APVMA will not be initiating a review into registered Neonicotinoids used in Australia at this point.

The EU's decision was based on concerns that Neonicotinoids may be contributing to a decline in Europe's honey bee population. The reasons for this decline, including nutrition, environment and disease issues, are currently not a concern to Australia's honey bee population. The information available for Australia indicates that managed and wild honey bee populations are not in decline. ([Environmental Toxicology and Chemistry, Vol. 36, No. 1, January 2017](#)).

From: <https://apvma.gov.au/node/31111>

And: <https://apvma.gov.au/node/28786>

## • APVMA Ag Active Constituent: 112 g/L Eugenol

### Toad Blitz Cane Toad Killer Containing 112 g/L Eugenol

(APVMA) has before it an application for registration of a new product containing an approved active where this application presents the first product containing this active constituent. The product is Toad Blitz Cane Toad Killer.

The APVMA is satisfied that the proposed use of Toad Blitz Cane Toad Killer would not be an undue hazard a/ to the safety of people exposed to it during its handling and use; b/ to the safety of people; and c/ The APVMA is satisfied that the proposed use of Toad Blitz Cane Toad Killer containing the active constituent Eugenol is not likely to be harmful to human beings if used according to the product label directions.

Eugenol is not currently nor intended to be used in products which are used in food producing crops or animals. The active eugenol is in Schedule 6 of the SUSMP except when in preparations containing  $\leq 25\%$  where it is exempt from the requirements of Scheduling. The proposed product formulation at 112 g/L Eugenol is therefore exempt from the requirements of Scheduling.

The APVMA estimated the hazard of the product based on the active and excipients contained in the formulation, and has determined that the acute toxicity of the product is expected to be low by oral, dermal and inhalational (toxicity) and it is not expected to be an irritant or sensitiser to the skin based on patch testing in 11,632 volunteers. The product is expected to be a slight eye irritant.

After consideration of the hazards associated with the proposed product, along with the exposure and risks expected with use of the product, it was considered (by the APVMA) that Toad Blitz Cane Toad Killer Agent will not be an undue health hazard to the safety of people.

Since the active constituent is naturally derived from plants, it is expected to degrade in the environment through normal biological, physical and chemical processes.

Trial results have demonstrated that Toad Blitz Cane Toad Killer is effective.

Comment closed 22 May 2018

From: 24 April 2017 APVMA Gazette, pages 32-35

<https://apvma.gov.au/node/29256>

And: <https://apvma.gov.au/node/29281>

*Editor's Note:* Even though this product is not Scheduled and does not appear to require Safety Directions etc, the Eugenol (CAS 97-53-0) at 112 g/L will classify this formulation as a GHS Hazardous Chemical based on:

1/ ECHA Registered Substances Database information at: <https://echa.europa.eu/registration-dossier/-/registered-dossier/13694/2/1/?documentUUID=a42b8226-9cfd-44a3-841a-ec861133d606> and based on the classifications on:

2/ ECHA Classification & Labelling Inventory Database at:

<https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/128562> and also on:

3/ NZ Chemical Classification & Info Database (CCID) at:

[www.epa.govt.nz/database-search/chemical-classification-and-information-database-ccid/view/5282](http://www.epa.govt.nz/database-search/chemical-classification-and-information-database-ccid/view/5282)

RESULT: At 11.2% w/v Eugenol the product will be classified with Eye Irritant H317 and Skin Sensitiser H319 hazard statements, plus applicable precautionary statements which may also need to be on the AgVet product label.

This labelling discrepancy is not managed by the APVMA!

## Dangerous Goods

### • CSB: Floods & Arkema Inc. Chemical Plant Fire

Final Report 24 May 2018 about 29 Aug 2017 fire & explosion.

On 29 August 2017, flooding from Hurricane Harvey disabled the refrigeration system at the Arkema plant in Crosby, Texas, which manufactures Organic Peroxides. The following day people within a 1.5 mile radius were evacuated. As the trailers increased in temperature the Peroxides spontaneously combusted on 31 August. Officials ignited the remaining trailers, on Sunday, 3 Sept 2017. The evacuation zone was lifted on 4 Sept 2017.

Video (13m 30sec) <https://youtu.be/itWvyBMwRt-A>

From: [www.csb.gov/arkema-inc-chemical-plant-fire/](http://www.csb.gov/arkema-inc-chemical-plant-fire/)

## • CSB: Packaging Corp' of America Hot Work Explosion

Final Report 24 April 2018 about the 8 Feb 2017 Explosion.

On 8 Feb 2017, three contractors were fatally injured and seven contractors sustained injuries in an explosion at the Packaging Corporation of America facility in DeRidder, LA. The fatally injured contractors were conducting hot work activities near a tank which contained a flammable atmosphere (Turpentine) and ultimately exploded.

Video (6m 20sec) <https://youtu.be/a96kriSo6EQ>

From: [www.csb.gov/packaging-corporation-of-america-hot-work-explosion/](http://www.csb.gov/packaging-corporation-of-america-hot-work-explosion/)

## • CSB: MGPI Toxic Chemical Release

Final Report 3 Jan 2018 about the 21 Oct 2016 Release

On 21 Oct 2016, a chemical release occurred at the MGPI Processing plant in Atchison, Kansas. MGPI Processing produces distilled spirits and specialty Wheat Proteins and Starches. The release occurred when a chemical delivery truck, owned and operated by Harcros Chemicals, was inadvertently connected to a tank containing incompatible material (Sulphuric Acid delivered into a Hypochlorite Solution tank). The plume generated by the chemical reaction led to a shelter-in-place order for thousands of residents. At least 120 employees and members of the public sought medical attention.

Video (11min): <https://youtu.be/Tflm9mttAAI>

Final Report: [MGPI Case Study](#) (48 page pdf). Key Lessons for Preventing Inadvertent Mixing During Chemical Unloading Operations. Chemical Reaction & Release.

From: [www.csb.gov/mgpi-processing-inc-toxic-chemical-release/](http://www.csb.gov/mgpi-processing-inc-toxic-chemical-release/)

## • Vic MFB: Incident Reports from the MFB

[www.mfb.vic.gov.au/News/Media-releases.html](http://www.mfb.vic.gov.au/News/Media-releases.html)

13 May 2018: Chemical spill (Peracetic Acid) at Epping Hospital [www.mfb.vic.gov.au/News/Media-releases/Chemical-spill-at-Epping-hospital.html](http://www.mfb.vic.gov.au/News/Media-releases/Chemical-spill-at-Epping-hospital.html)

6 May 2018: Suspected Ammonia gas leak at supermarket Distribution Centre [www.mfb.vic.gov.au/News/Media-releases/Suspected-gas-leak-at-supermarket-distribution-centre.html](http://www.mfb.vic.gov.au/News/Media-releases/Suspected-gas-leak-at-supermarket-distribution-centre.html)

15 April 2018: Hazmat incident in Reservoir (30 drums with 2 compromised seals) [www.mfb.vic.gov.au/News/Media-releases/Hazmat-incident-in-Reservoir.html](http://www.mfb.vic.gov.au/News/Media-releases/Hazmat-incident-in-Reservoir.html)

30 March 2018: Chemical leak/spill (believed to be Sodium Hydroxide solution) at Coode Island (West Melbourne) <http://www.mfb.vic.gov.au/News/Media-releases/Chemical-spill-at-Coode-Island.html>

## • Vic CFA: Incident Reports/News from the CFA

22 May 2018: Clandestine Drug Labs - Danger for First Responders <https://news.cfa.vic.gov.au/-/drug-labs-danger-for-first-responders>

## • WA: Serious Chemical Burns - \$47900 Penalty

30 May 2018: Serious chemical burns resulted in a \$47900 penalty. Rand Transport (1986) Pty Ltd, a cold storage food distributor, pleaded guilty to failing to provide & maintain a safe workplace where contractors were not exposed to hazards.

They were fined \$45000 and a \$2900 costs penalty in the Perth Magistrate Court following serious Ammonia gas burns to a contract worker.

On 11 Dec 2014, during the construction of a dividing wall within a large cold storage room, Luke Passmore - a contractor for Bondor, was sprayed in the face with Ammonia liquid and gas as it was released from a purge valve. Mr Passmore suffered serious chemical burns to his eyes, face and severe internal respiratory damage.

The purge valve was part of a live, forced air cooler unit suspended from the ceiling. Mr Passmore was operating a scissor lift at height, within a small restricted space. As he manoeuvred the lift, it struck the valve on the unit, releasing the pressurised toxic refrigeration chemical.

From: [www.commerce.wa.gov.au/announcements/serious-chemical-burns-result-47900-penalty-principal-employer-rand-transport](http://www.commerce.wa.gov.au/announcements/serious-chemical-burns-result-47900-penalty-principal-employer-rand-transport)

## • WA Flammable Liquid Fire: Worker Seriously Injured

22 May 2018: A serious accident at a mechanical workshop involving the ignition of a Flammable Liquid is currently being investigated by WA DMIRS. The workshop uses a Flammable solvent to clean car components. An ignition source was introduced near an open tray of solvent which ignited the fumes, causing serious burn injuries to a worker attempting to control the fire, and destroying the building.

Contributing factors in fires of this type; and Action required; are discussed in this WA Safety Alert.

[WA Safety Alert 01-2018 - Worker Seriously Injured by Flammable Liquid Fire](#) (2 page pdf)

From: [www.commerce.wa.gov.au/publications/safety-alert-012018-worker-seriously-injured-flammable-liquid-fire](http://www.commerce.wa.gov.au/publications/safety-alert-012018-worker-seriously-injured-flammable-liquid-fire)

## • Fireworks line-of-fire Incident: Injured Technician

16 May Incident Report:

In December 2017, a fireworks technician was working at a fireworks display, which included both ground and aerial fireworks. After lighting the fan firework, the technician retreated backwards. Feeling that she was too close to an area where aerial fireworks were being initiated behind her, she stepped away, inadvertently moving into the line-of-fire of the fan firework, and was struck in the face by an unidentified projectile, receiving facial injuries.

Note: The WA Dept of Mines, Industry Regulation and Safety's investigation is ongoing.

From: [www.dmp.wa.gov.au/Documents/Dangerous-Goods/DGS\\_SIR\\_0218.pdf](http://www.dmp.wa.gov.au/Documents/Dangerous-Goods/DGS_SIR_0218.pdf) (2 page pdf)

## • WA: New Code for Close Proximity Fireworks

19 April 2018: A new Code of Practice has been released by the Department of Mines, Industry Regulation and Safety targeting the handling and use of close proximity fireworks.

Close proximity fireworks are intentionally designed so they can be used near or close to performers, spectators and users. The Code of Practice covered the type of fireworks commonly used at sports events and entertainment performances.

Code: [www.dmp.wa.gov.au/Documents/Dangerous-Goods/DGS\\_COP\\_CloseProximityFireworks.pdf](http://www.dmp.wa.gov.au/Documents/Dangerous-Goods/DGS_COP_CloseProximityFireworks.pdf) (32 page pdf)

From: [www.dmp.wa.gov.au/News/New-code-for-close-proximity-24138.aspx](http://www.dmp.wa.gov.au/News/New-code-for-close-proximity-24138.aspx)

## • WA Dangerous Goods Documents & Publications

16 May 2018: [Overview of WA Dangerous Goods Reportable Situations and Incidents 2017](#) (17 page pdf). This Report describes Dangerous Goods (32S&H+14T+6MHF) and Explosives (84) incidents that occurred in 2017 and compares the incident data with comparable data collected since 1984.

24 April 2018: [Accredited Consultants Charter - Guide](#). The WA Chief Officer accredits approved persons to provide certificates in accordance with Regulations 26(3) and 29(4B) of the Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007.

12 April 2018: [Dangerous Goods Safety Regulations Amendment Regulations 2018 Information Sheet](#)

This WA Information Sheet summarises the Amendments to the WA Dangerous Goods Safety (Explosives) Regs 2007 and the Dangerous Goods Safety (Storage & Handling of Non-explosives) Regs 2007 that took effect on 21 March 2018.

9 April 2018: [Design Approval Requirements for Bulk Containers Used to Transport Solid Dangerous Goods - Information Sheet](#). This Information Sheet explains the requirements in the WA Dangerous Goods Safety (Road & Rail Transport of Non-explosives) Regs 2007 (Transport Regulations) for the Design Approvals of Bulk Containers.

3 April 2018: [Consultants approved to examine and endorse storage and handling proposals - list](#). WA Dangerous Goods Accredited Consultants Internet List

21 March 2018: [Security Risk Assessment and Security Plan Template - SSAN Fertiliser Use](#). Use of this WA template is not mandatory; however, the security plan should sufficiently address the national Ammonium Nitrate Guidance Note No.3, Agricultural Use.

16 March 2018: [Notification of Temporary Storage or Handling of Dangerous Goods - Form](#). This form should be completed by the operator of a Dangerous Goods site if the operator intends to store/handle less than 3 times the manifest quantity of Dangerous Goods for no more than 6 months.

From: [www.dmp.wa.gov.au/Dangerous-Goods/Dangerous-Goods-Publication-11093.aspx?query=Search&sort=date&start\\_rank=1](http://www.dmp.wa.gov.au/Dangerous-Goods/Dangerous-Goods-Publication-11093.aspx?query=Search&sort=date&start_rank=1)

## • WA Incident: Gasket Rupture at Processing Facility

11 April 2018 - WA 2016 Incident: Gasket Rupture at Processing Facility results in Gas Leak. Sudden failure of a newly installed gasket within a bolted flange joint assembly.

It is estimated that around 20,000 m3 of gas was released to the atmosphere during the incident. There were no injuries or damage to the plant.

[http://www.dmp.wa.gov.au/Documents/Dangerous-Goods/DGS\\_SIR\\_118.pdf](http://www.dmp.wa.gov.au/Documents/Dangerous-Goods/DGS_SIR_118.pdf) (2 pages)

From: *Dangerous goods safety significant incident reports*

[www.dmp.wa.gov.au/Safety/Dangerous-goods-safety-alerts-13195.aspx](http://www.dmp.wa.gov.au/Safety/Dangerous-goods-safety-alerts-13195.aspx)

## • WA: Dangerous Goods Offences - \$14000 Fine

10 April 2018: Transport company fined \$14000 for Dangerous Goods offences in Armadale Magistrates Court.

On 20 March 2017 a quantity of 60% Sulphuric Acid being transported in an Intermediate Bulk Container (IBC), on a truck was spilt on the Kwinana Freeway in southbound lanes between Mill Point Road and South Terrace.

BBBM Pty Ltd, trading as Growers Agrishop, was charged with two offences under Dangerous Goods Safety Regulations and pleaded guilty to both charges.

The charges related to using an expired storage container for transporting the Sulphuric Acid and not ensuring the employee who loaded the acid was trained and competent in loading and restraining Dangerous Goods.

The incident is useful to set out the context of the offences and the potential harm that can result from transporting Dangerous Goods. All those involved in transporting Dangerous Goods need to be aware of the higher standards required to ensure that inherently dangerous substances are contained.

Since the incident, the company has developed new procedures for transporting Dangerous Goods.

From: [www.dmp.wa.gov.au/News/Transport-company-fined-14-000-24098.aspx](http://www.dmp.wa.gov.au/News/Transport-company-fined-14-000-24098.aspx)

## • Dangerous, Hazardous & Harmful Cargoes Handbook

A new version of the text was finished in Oct 2017: This handbook is an information resource for those involved in the transport of Dangerous Goods intended to be shipped by sea.

It will be used as a training text incorporating and updating the Dangerous Goods compendium contained in IMO Model course 1.10. For this reason, the handbook includes a guide to the training required for each function described in Chapter 1.3 of the IMDG code (Annex 1 outlines training requirements and relevant handbook sections and other references).

In mid May 2018 I was informed that the handbook should now become available by the end of July 2018. The cost including GST and postage is not yet available.

In July phone the AMSA Office on 02 6279 5000 (8am-5pm) or email: [AMSAConnect@amsa.gov.au](mailto:AMSAConnect@amsa.gov.au).

From: [www.amsa.gov.au/qualifications-training/safety-and-navigation-training/dangerous-hazardous-and-harmful-cargoes](http://www.amsa.gov.au/qualifications-training/safety-and-navigation-training/dangerous-hazardous-and-harmful-cargoes)

## Environmental Notes on Chemicals

### • National Pollutant Inventory Data for 2016–17

29 March 2018: [National Pollutant Inventory \(NPI\) data for 2016–17 is now available](#)

Each year, more than 4000 industrial facilities estimate their emissions and waste transfers of toxic substances and report them to the NPI. This data helps communities, governments and researchers understand and monitor the sources of industrial.

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

- search the [NPI data \(link is external\)](#)
- download [NPI data on data.gov.au \(link is external\)](#).

From: [www.environment.gov.au/news/2018/03/29/national-pollutant-inventory-npi-data-2016%E2%80%9317-now-available](http://www.environment.gov.au/news/2018/03/29/national-pollutant-inventory-npi-data-2016%E2%80%9317-now-available)

### • NSW Govt: Release of \$47M to Support Recycling

NSW has a strong kerbside recycling system and the Government, Councils and Recycling Industry are committed to working together to ensure it continues, in responding to China's National Sword policy which restricts the types of recycled material China will accept. (NSW Environment Minister Gabrielle Upton)

As China is the largest importer of recyclable products from Australia this policy threatens NSW's kerbside recycling system and the options for recycled material currently produced in NSW.

From: [www.epa.nsw.gov.au/news/media-releases/2018/epamedia180320-\\$47-million-to-support-recycling-in-nsw](http://www.epa.nsw.gov.au/news/media-releases/2018/epamedia180320-$47-million-to-support-recycling-in-nsw)

### • Pollution Burden that Waste Incineration Creates

"Waste incineration emits a range of toxic and hazardous air pollutants<sup>4</sup> that include Mercury, Nanoparticles and Persistent Organic Pollutants (POPs) such as Dioxins and Furans (PCDD/DF), hexachlorobenzene (HCB), Polychlorinated Biphenyls (PCBs) and Brominated persistent organic pollutants which are subject to the International Stockholm Convention on POPs. Australia is a signatory to this convention and are therefore obliged to reduce and where possible, eliminate all forms POPs." "Approving incinerators will unnecessarily increase Australia's output of Dioxins and other POPs thereby undermining the objectives of the Convention."

### 5 June 2018: A Consensus Statement: Zero Waste Solutions for Australia - Not Waste Incineration.

[Download the Consensus Statement \(4 page pdf\) continued](#)

We the undersigned, demand an immediate end to Government subsidies and finance for all waste to energy incinerator proposals in Australia and urgent investment in sustainable Zero Waste models of waste management with the full engagement and inclusion of the community.

We stand in solidarity with communities across Australia facing the threat of multiple waste incineration projects. These technologies impose significant pollution burdens and associated health and environmental impacts that extend well beyond the facility fence-line. Waste to energy incinerators destroy finite resources and leave a legacy of dangerous air emissions and toxic ash. Establishing waste to energy incinerators is a step in the wrong direction for positive action on climate change, clean renewable energy, sustainable waste management and a circular economy. We are calling for the adoption of safe, sustainable and proven Zero Waste management models in all Australian states and Territories.

From: [www.ntn.org.au/uncategorized/a-consensus-statement-zero-waste-solutions-for-australia-not-waste-incineration](http://www.ntn.org.au/uncategorized/a-consensus-statement-zero-waste-solutions-for-australia-not-waste-incineration)

## • Health Dept: Expert Health Panel's Report on PFAS

The members of the PFAS Expert Health Panel are:

- Chair: Professor Nick Buckley (University of Sydney);
- Professor Malcolm Sim (Monash University);
- Dr Ki Douglas (Douglas Consulting Australia);
- Professor Helen Håkansson (International Representative, Karolinska Institutet).

The purpose of the Report is to provide the Minister of Health with the Panel's assessment of:

- findings of recent reviews regarding Australian and international evidence on potential human health effects of PFAS exposure;
- future research needs related to PFAS exposure and its potential impacts on health.

This Report also contains the findings from the public consultation that was targeted at Australians who were concerned about PFAS to gather information on how they perceived PFAS affected their health, and what they thought research priorities should be.

The full Expert Health Panels Report on Per- & Poly-Fluoroalkyl Substances (PFAS) is available on the Dept of Health website: [www.health.gov.au/internet/main/publishing.nsf/Content/ohp-pfas-expert-panel.htm](http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-pfas-expert-panel.htm)

Expert Health Panel for PFAS - Combined Report:

[http://www.health.gov.au/internet/main/publishing.nsf/Content/C9734ED6BE238EC0CA2581BD00052C03/\\$File/expert-panel-report.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/C9734ED6BE238EC0CA2581BD00052C03/$File/expert-panel-report.pdf) (446 page pdf) (2 docx files are available)

Summary of the Expert Health Panel for PFAS – Report:

[http://www.health.gov.au/internet/main/publishing.nsf/Content/C9734ED6BE238EC0CA2581BD00052C03/\\$File/summary-panels-findings.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/C9734ED6BE238EC0CA2581BD00052C03/$File/summary-panels-findings.pdf) (3 page pdf) ([docx summary](#))

**Media Release 7 May 2018:** Expert Health Panel's Independent PFAS Advice. "An independent expert health panel established by the Australian Government has concluded there is mostly limited, or in some cases no evidence, that human exposure to PFAS is linked with human disease."

[www.health.gov.au/internet/main/publishing.nsf/Content/mr-yr18-dept-dept05.htm](http://www.health.gov.au/internet/main/publishing.nsf/Content/mr-yr18-dept-dept05.htm)

*Media Release of Expert Health Panel's Independent PFAS Advice 7 May 2018* (2 page pdf)

From: [www.health.gov.au/internet/main/publishing.nsf/Content/ohp-pfas-expert-panel.htm](http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-pfas-expert-panel.htm)

## • PFAS Chemicals Health Effects 'Cannot Be Ruled Out' Expert Panel finds (ABC News)

8 May 2018: There is limited or no evidence to link exposure to PFAS chemicals with human disease, but health effects cannot be ruled out, an independent panel has advised the Australian Government.

An expert health panel was set up in October 2017 to advise the Government on the potential health impacts associated with exposure to the chemicals, which were historically used in firefighting foams, and to identify priority areas for further research.

While it concluded there was no increase in overall cancer risk, it did note the "most concerning signal reported" in the scientific studies was a "possible link" with an increased risk of testicular and kidney cancer.

Per- & Poly-Fluoroalkyl Substances, known as PFAS chemicals, were used in firefighting foams at 18 Defence bases across the country starting in 1970.

Use of the foams was phased out from 10 years ago but caused widespread contamination in the soil, groundwater and surface water around some of the bases.

From: [www.abc.net.au/news/2018-05-07/pfas-chemicals-not-linked-to-disease-says-expert-panel/9734726](http://www.abc.net.au/news/2018-05-07/pfas-chemicals-not-linked-to-disease-says-expert-panel/9734726)

## • Melbourne Airport confirms toxic PFAS spread in Water beyond the Airport Boundaries

Melbourne Airport has confirmed contamination caused by toxic chemicals, historically used in firefighting foams at the site, has spread beyond the airport boundaries. In a statement to the ABC, airport spokesman Grant Smith said the Melbourne Airport Authority (MAA) was contacting a group of landholders to inform them of the contamination. The MAA will also ask residents and landholders whether they use the surface water flowing through local waterways on their properties. Mr Smith said the authority believed the health risk posed by the chemical contamination to landholders downstream of the site was low.

"At some times of the year, some of our off-airport testing locations recorded per- and poly-fluoroalkyl substances (PFAS) levels in surface water above the current Australian Government guidelines," he said.

PFAS chemicals accumulate over time and the health effects of exposure to the chemicals is a matter of dispute.

[The Australian Government maintains there is limited evidence of links between the chemicals and disease](#), but notes health effects cannot not be ruled out based on the current facts.

From: [www.abc.net.au/news/2018-05-31/toxic-chemicals-spread-into-water-beyond-melbourne-airport-site/9816774](http://www.abc.net.au/news/2018-05-31/toxic-chemicals-spread-into-water-beyond-melbourne-airport-site/9816774)

## • NZ Govt Widens Foam Contamination Investigation

29 May 2018: The NZ Government is expanding the investigation into water and soil contamination from chemicals commonly found in firefighting foam. Responsibility for the investigation - which has been led by the NZ Defence Force until now - will also pass to an across-government group. "The national scale of the investigation requires a significantly larger response for at least the next 12 months," a newly released NZ Cabinet paper said. The Defence Force had a water and soil testing programme planned for the next year "prioritised in order of risk to human health". The paper signalled that Defence was handing over the reins and the investigation at Defence Bases would now be led by the all-of-government programme headed by the NZ Environment Ministry.

"All information arising from the test results is reviewed by the all-of-government group, including the NZ Ministry of Health, NZ Ministry for Primary Industries, and NZ Local Government so that communities can be provided with the best advice," the NZ Ministry told RNZ today.

Read the PFAS Cabinet paper (10 page pdf)

<https://assets.documentcloud.org/documents/4486464/PFAS-Cabinet-Paper-May-2018-AOG-National.pdf>

From: [www.radionz.co.nz/news/political/358380/toxic-foam-govt-widens-contamination-investigation](http://www.radionz.co.nz/news/political/358380/toxic-foam-govt-widens-contamination-investigation)

## • EPA Vic: Fact Sheet - Engaging Consultants

7 June 2018: [Publication 1702](#) (2 page pdf)

Managing risks to human health and the environment can sometimes be complicated. You may need a consultant to help to identify and understand hazards, and design solutions to prevent or mitigate harm. This fact sheet provides information about how to engage a consultant.

From: [www.epa.vic.gov.au/our-work/publications/publication/2018/june/1702](http://www.epa.vic.gov.au/our-work/publications/publication/2018/june/1702)

## • EPA Vic: Guide - Assessing & Controlling Risk

15 May 2018: [Publication 1695](#) (11 page pdf).

This Guide provides businesses with a risk management framework that can be applied to help prevent harm to human health and the environment. Its principles can be applied to businesses of any size, and of varying levels of risk, but larger businesses or those that pose a high level of risk to the environment and public health may need to adopt more complex methods.

From: [www.epa.vic.gov.au/our-work/publications/publication/2018/may/1695](http://www.epa.vic.gov.au/our-work/publications/publication/2018/may/1695)

## Standards & Codes

### • Standards – <https://infostore.saiglobal.com/>

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

**ASTM E3027-18a:** Standard Guide for Making Sustainability-Related Chemical Selection Decisions in the Life-Cycle of Products. This Guide outlines sustainability factors for product manufacturers to consider when comparing alternative chemicals or ingredients across the life cycle of a product. Published 1 April 2018, 7 pages, pdf (No Copy/No Paste & Print Once): \$73.69; Hardcopy: \$73.69.

**ASTM D8175-18:** Standard Test Method for Finite Flash Point Determination of Liquid Wastes by Pensky-Martens Closed Cup Tester. This test method covers the procedure for a finite flash point test, within the range of 20-70 °C, of liquid wastes using a manual or automated Pensky-Martens Closed Cup tester. Published 15 March 2018, 12 pages, pdf (No Copy/No Paste & Print Once): \$83.31; Hardcopy: \$83.31.

**ASTM F1186-18:** Standard Classification System for Chemicals According to Functional Groups. A classification system for chemical compounds whereby chemicals are assigned a three-digit code based primarily on chemical class. Poly-functional compounds should be classified by all applicable code numbers associated with their component functional groups. Published 1 June 2018, 3 pages, pdf (No Copy/No Paste & Print Once): \$65.68; Hardcopy: \$65.68.

### • Drafts – <https://infostore.saiglobal.com/>

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

**DR AS 2809.6:2018:** Road Tank Vehicles For Dangerous Goods - Tankers for Cryogenic Liquids. Published 1 May 2018, 20 pages, pdf: Free; Hardcopy: Free.

**DR AS ISO 14021:2018:** Environmental Labels & Declarations - Self-Declared Environmental Claims (Type II Environmental Labelling). Revision of [AS/NZS ISO 14021:2000](#) (23 pages). Published 28 May 2018, 20 pages, pdf (No Copy/No Paste & Print Once): Free; Hardcopy: Free. (But no ISO draft available)

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

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

## • NFPA News (Codes Newsletter)

### Newly Published NFPA Codes

No highlighted NFPA Codes on chemical management.

**NFPA News** [April 2018](#) (7 page pdf)

**NFPA News** [May 2018](#) (17 page pdf)

includes 1 page discussion about Calcium Ammonium Nitrate.

**NFPA News** [June 2018](#) (26 page pdf)

### NFPA Research Foundation:

Variables Associated with the Classification of Ammonium Nitrate - A Literature Review. March 2017 45 page pdf.

“The purpose of this project was to summarize the available information on the different forms of Ammonium Nitrate and how they are classified. This was accomplished through a two-step literature review: summarizing the available information on AN classification from chemistry and code-based documentation, and identifying the variables which led to AN instability from existing test data and results.”

“Recent hazardous material incidents involving AN have resulted in differing views regarding the reactivity of the compound and whether or not it should be considered an unstable reactive in NFPA 400. The different behaviours of AN in different fire situations make it difficult to determine the appropriate safe practices for AN storage and handling.”

Research Report: [www.nfpa.org/-/media/Files/News-and-Research/Resources/Research-Foundation/Research-Foundation-reports/Hazardous-materials/RFANHazardClassification.pdf](http://www.nfpa.org/-/media/Files/News-and-Research/Resources/Research-Foundation/Research-Foundation-reports/Hazardous-materials/RFANHazardClassification.pdf) (45 page pdf)

From: [www.nfpa.org/News-and-Research/Fire-statistics-and-reports/Research-reports/Hazardous-materials/Variables-Associated-with-the-Classification-of-Ammonium-Nitrate](http://www.nfpa.org/News-and-Research/Fire-statistics-and-reports/Research-reports/Hazardous-materials/Variables-Associated-with-the-Classification-of-Ammonium-Nitrate)

All NFPA documents are at: [www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards](http://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards)

Those open for input / comment are found at NFPA News:

[www.nfpa.org/codes-and-standards/resources/nfpa-news](http://www.nfpa.org/codes-and-standards/resources/nfpa-news)

### Standards Seeking Public Input

For a complete listing of NFPA standards accepting Public Input, please go to [www.nfpa.org/publicinput](http://www.nfpa.org/publicinput)

Both of the above take you to the various Committees:

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

### Standards Seeking Public Comment

For a complete listing of NFPA standards accepting

Public Comment, please go to [www.nfpa.org/publiccomment](http://www.nfpa.org/publiccomment)

## Seminars, Conferences, Courses

### • Hazards Australasia 2018, Perth, 26-27 June 2018

Process Safety: building resilience. How to respond to these challenges and maintain safe production show the level of resilience achieved. Leadership across knowledge and competence, engineering and design, systems and procedures, assurance, human factors and culture are fundamental to managing process safety.

From: [www.icheme.org/events/conferences/hazards-australasia-2018.aspx](http://www.icheme.org/events/conferences/hazards-australasia-2018.aspx)

### • Chemical Engineering for Non-Chem Engineers 10-12 July 2018, Brisbane

Offers an introduction to some of the main subject areas involved in chemical engineering disciplines, and will broaden the technology base of participants with a view to promote improved communication with chemical engineers.

Cost: Non-Members \$2940, IChemE Members \$2415.

Email: [austcourses@icheme.org](mailto:austcourses@icheme.org), ph: 03-9642-4494

From: [www.icheme.org](http://www.icheme.org) and search on “Brisbane”

### • Environmental Toxicology & Health, 11-12 July 18

World Congress on Environmental Toxicology and Health 11-12 July 2018 Sydney. Theme: **Multidisciplinary Approaches towards Environmental and Health Safety**

Cost: Academic US\$899; Business US\$999, Student US\$349

From: <https://environment.conferenceseries.com/>

### • Green Chemistry & Green Engineering, 19-20 July

5th World Congress on Green Chemistry and Green Engineering, 19-20 July 2018 Melbourne. Theme: **The Sustainable Future of Earth with Green Chemistry and Engineering.**

Cost: Academic US\$899; Business US\$999, Student US\$249

From: <https://greenchem.conferenceseries.com/>



## • DGAG Meeting, MFB Burnley, 1 Aug 2018, Melb

Dangerous Goods Advisory Group meeting, **Wed 1<sup>st</sup> August 2018**, 5.30pm for 6pm - 8.15pm meeting at MFB Burnley Complex. No Cost to attendees. There will be tea / coffee and biscuits and for those interested will go for a meal after.  
[www.haztech.com.au/meetings/meetings/](http://www.haztech.com.au/meetings/meetings/)

To be added to my Dangerous Goods Advisory Group / Chemical Hazard Communication Network meeting issues email list, contact: [Jeff.Simpson@haztech.com.au](mailto:Jeff.Simpson@haztech.com.au).

## • CHCN Meeting, Port Melbourne, 5 Sept 2018 Melb

Chemical Hazard Communication Network meeting, **Wed 5<sup>th</sup> September 2018**, 5.30pm for 6pm - 8.15pm meeting at Sandridge Trugo Community Centre (Port Melbourne). Cost \$4 each if 15 come. Corner Albert & Poolman Streets. There will be tea / coffee and biscuits and those interested, go for a meal after.  
[www.haztech.com.au/meetings/chem-haz-comm-network/](http://www.haztech.com.au/meetings/chem-haz-comm-network/)

IF you would like to be added to my Dangerous Advisory Group / Chemical Hazard Communication Network email meeting issues list, please email me: [Jeff.Simpson@haztech.com.au](mailto:Jeff.Simpson@haztech.com.au). You don't have to be in Melbourne, to be on the email meeting alert list.

## • AIDGC-Hazmat Conference, 20-21 Sept 2018, Sydney

The AIDGC Annual Conference and the FPAA Hazmat Stream have been combined together, with the AIDGC organising the speakers. *Cost (not yet available).* For details go to: <http://aidgc.org.au/news-events/> (late June)

*Program Conference Speaker Details (not yet available).* Registration (preferably by late Aug 2017) (not yet available).

Also see: [www.fpaa.com.au/news/news/dedicated-event-for-hazmat-2018.aspx](http://www.fpaa.com.au/news/news/dedicated-event-for-hazmat-2018.aspx)

## • ACTRA Forum: Particulates, 26-28 Sept 2018 WA

Call for Abstracts – Deadline 29 June 2018

Although topics directly related to the Annual Scientific Meeting theme What's the Matter? Toxicity and Health Effects of Particulates – Size or Composition are preferred, abstracts relating to or dealing with toxicology and/or risk assessment are most welcome. Download the [Call for Abstracts Flyer here](#). Registration Early Bird \$990 by 10 Aug 18. [ASM Flyer](#)

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

## • Ecoforum & PFAS Summit, 2-4 Oct 2018, Sydney

Ecoforum 2 day conference \$1500; PFAS 1 day Summit \$600.

Preliminary Program: ['Preliminary Program Spreadsheet'](#). Five streams: Evaluation; Remediation & Rehabilitation; Communication & Governance; Extreme; & Room for Change.

Contact: [Events@landandgroundwater.com](mailto:Events@landandgroundwater.com)

M: 0490 802 518, W: 02 4885 1136 or 1300 789 719

From: <http://landandgroundwater.com/conference/2018-ecoforum-conference-exhibition>

## • Fundamentals of Process Safety, Oct 2018, Melb

**Melbourne, 15-19 Oct, 2018:** Will benefit staff at all levels in an organisation keen to develop or improve their knowledge of process safety, hazards, risk and their management.

*Cost: Non-Members \$3990, IChemE Members \$3465.*

*Email: [austcourses@icheme.org](mailto:austcourses@icheme.org), ph: 03-9642-4494*

From: [www.icheme.org](http://www.icheme.org) and search on "Melbourne"

## • HAZOP Leadership & Mgmt, 30 Oct 2018, Perth

**Perth, 30 Oct – 1 Nov 2018:** Explores best practice in HAZOP Leadership and Management. Learn about the application of the technique and how to plan and manage study programmes more effectively. Learn how best to lead study teams to ensure maximum effectiveness and successful project execution.

*Cost: Non-Members \$3990, IChemE Members \$3465.*

*Email: [austcourses@icheme.org](mailto:austcourses@icheme.org), ph: 03-9642-4494*

From: [www.icheme.org](http://www.icheme.org) and search on "Perth"

## • AIOH 2018 Conference, 1-5 Dec 2018, Melbourne

Occupational Hygiene: Challenges, Opportunities & Solutions.

The Occupational Hygiene profession is being challenged by a changing workplace base, new technologies and a more holistic approach to workers' health. Registrations open soon.

From: [www.aioh.org.au/aioh2018/aioh2018](http://www.aioh.org.au/aioh2018/aioh2018)

**Haztech Environmental:** Chemical Hazard Classifications done & reviewed. SDSs prepared & reviewed. Labels prepared & reviewed. Chemical Management & Safety Regulatory Compliance: checked for NICNAS, APVMA, FSANZ, TGA; prepared & reviewed for Dangerous Goods & Combustible Liquids, Workplace Hazardous Chemicals / 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 27 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](mailto:Jeff.Simpson@haztech.com.au), Website: [www.haztech.com.au](http://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. May 19 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 14 <sup>th</sup> June 2018
<b>Description of Supply</b>		
Please start my subscription to Hazmat & Environment Notes from the		<b>April-May-June 2018 Newsletter.</b>
<b>Subscription Costs</b> for 5 bimonthly issues from <b>July 2018 to May 2019</b> are: <span style="float: right;"><b>Circle the subscription type you want</b></span>		
* <b>Please Note:</b> 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 <b>posted</b> copy to the same group + \$56 (includes GST) + Extra <b>emailed</b> copy to the same group + \$50 (includes GST)
<b>Note: The above prices include a 10% Australian Goods &amp; Services Tax (GST) for the supply.</b>		
International destinations	- \$96 emailed (Credit Card), (or \$108 <sup>#</sup> 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)
<b># International EFT</b> 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.		
<b>Total Price Including GST (GST only applicable in Australia)</b>	<b>Payment Sent \$</b> _____	
Please keep a copy of this <b>tax invoice</b> 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		14/06/2018notes-scrn

**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](mailto:Jeff.Simpson@haztech.com.au) International EFT: use Westpac SWIFT code WPACAU2S