News*Brief*



Issue No.107 November 2020



The 2020 Annual Election capped a tumultuous year for New Zealand Inc. Covid-19 concerns continue to dominate, however science continues to protect us from the worst effects of the pandemic. With our economy rebounding faster than anticipated, the collective relief associated with the relative freedoms of Level One now applying throughout the country, heralds a weary public eagerly looking forward to a much-anticipated Christmas break.

Washing and drying your hands kills the virus



Chemical Industry Response to Covid-19

Chemical manufactures and importers (suppliers) were quick to contribute their products and expertise to combating the Covid-19 epidemic. While increasing the production of PPE and scarce ventilators, leading multinationals stepped up research into potential vaccines, also donating massive quantities of sanitisers and PPE to public health organisations, particularly in developing economies.

As the local 'Matchmaker', your association provided the vital liaison between those with the ingredients and those venturing into producing hand sanitisers and cleaning products.

First-time sanitiser producers navigating mandatory specifications and regulatory compliance obligations, welcomed our guidance which enabled Members and non-Members alike to overcome often frustrating delays in government agency responses to technical questions, delaying production and distribution of essential products.

Our CHEMCALL® team responded to a massive increase in calls about products related to Covid 19. Although most were not strictly emergencies, responders performed a valuable service in calming concerns and reducing anxiety arising from uncertainly about the suitability of hazardous substances being promoted on social media.

Callers were grateful for the expert 'one stop' response to their concerns.

Valuable lessons to date include the necessity to better co-ordinate enquiries regarding sourcing essential products through a crisis commence centre including industry experts and successfully implementing safe and pragmatic solutions not readily available in inflexible regulations.

Scientists New Heroes?

Encouraging news of progress with the development and evaluation of potential Covid 19 vaccines raises hopes for a return to a 'new normal' sooner than generally expected. New Zealand researchers are engaged in both local and international vaccine development.

Meanwhile, thanks to a clear, science-based strategy, New Zealand is fortunately avoiding thus far the worst of the pandemic outcomes.

An unexpected \$95m from the goods and services tax is welcome. Local businesses are also benefiting from the successful 'See your own country' campaign, with the hospitality sector reporting heavy bookings for the Summer.

The pending approval for the return of up to 300 overseas students to complete advanced degrees, particularly in the sciences, is welcomed by universities struggling to retain staff. The continuing return of expatriate Kiwis bodes well for alleviating our shortage of skilled professionals.

The commencement of Cathay Pacific flights on 27th November, linking Hong Kong and Singapore to Auckland is encouraging, however strict testing and some quarantine requirements apply at each destination. In New Zealand, pre-booked quarantine accommodation for 14 days is mandatory.

Meanwhile, our major logistics members KiwiRail and Mainfreight are ramping up resources to shorten delivery times for the Christmas goods accumulating in our congested provincial ports and storage facilities. Extra stevedores and drivers are being sought to help reduce the backlog, particularly consignments requiring trans-shipment to Auckland.



Watch Those Eyes!

Our 24/7 CHEMCALL® hotline deals with preventable incidents involving eye injuries, all resulting from the lack of eye protection.

Eye damage can be significantly reduced if irrigation is prompt and applied continuously, for longer than the standard GHS recommendation of 15 minutes. CHEMCALL® recommends callers irrigate eyes for at least 30 minutes, while seeking professional medical attention.



A sample of CHEMCALL® feedback received from a relieved caller during Covid 19 Level 4 lockdown:

"Thank you for your help today - greatly appreciated. Managed to see my GP straight away. They pH tested my eye - numbed it and flushed it with a litre of Saline, put some yellow dye in, then checked with a blue light for any burns. No burns and all the chemical is gone. I'm wearing an eye patch and on antibiotics. Your help was wonderful. Again, thank you."





Second Opinion Can Prove Cost-Effective

Wide variations in compliance advice from certifiers are generating requests for an RCNZ independent confirmation of options to address alleged compliance shortcomings, often with expensive solutions. Typical is the confusing interpretation of individual site 'Protected Place' requirements. Members report workplace inspectors and local authorities are reluctant to discuss individual site compliance options.

RCNZ can help, with both a site assessment and accurate compliance advice.

Free Trade Deal Signed

New Zealand exporters will benefit from the creation of the world's largest free trading bloc, comprising 30% of the world's population and 30% of global GDP. Signing of the Regional Comprehensive Economic Partnership (RCEP) introduces rules covering investment, competition and intellectual property, together with eliminating tariffs and fast-tracking customs services, streamlining the delivery of perishable food in 15 Asia Pacific countries.

Inspired by the ASEAN partners and hailed as a coup by economic powerhouse China, the last minute withdrawal of India has not overshadowed expectations exporters will be able to better manage both the quality and delivery times of particularly food exports. As a vocal free trade advocate, New Zealand exported \$48b in goods and services to RCEP countries in 2019. We have long sought relief from tariffs on our exports, some as high as 150% duties on our wine and dairy products. Once ratified by at least nine signatories, the RCEP is expected to be progressively implemented from 2022.



Wine Industry to the Rescue!

Global exports of fine New Zealand wine to 100 countries increased 10% to a record NZ\$ 1.95b by volume. Perhaps attributable to helping those under lockdown cope with the Covid 19 'blues', the popular Sauvignon Blanc varieties continue to win accolades and new aficionados.



Wool is Back!

Iconic NZ carpet manufacturer Cavalier Bremworth is to cease using synthetic fibres and return to high value, pure wool carpets and rugs, in response to customer demand for natural, high quality, sustainable products.



A Warm Welcome to New Members

Myriad Pharmaceuticals Inc is a bio-pharmaceutical company focused on discovering, developing and commercializing novel small molecule drugs that address severe medical conditions, including cancer and HIV infection. RCNZ has trained Myriad's Competent Chemical Handlers.



A privately owned NZ company, **Pure Ingredients** was founded in Auckland in 2006 and supplies over 1,000 high quality, certified products for the rapidly expanding cosmetic, skin care and supplement sectors. Pure Ingredients is a

certified organic supplier (BioGro 5401).



PRINCE® Achievers

We are proud to announce the latest recipients for **PRINCE®**, our hard-won Responsible Care® Excellence in Safety Health and Environmental Performance awards.



PRINCE Gold® achiever **Interchem Agencies** is a family-owned business established in 1987, importing and distributing raw materials to support a diverse range of customers.

Product sourced from China includes industrial chemicals, detergents, cleaners and agrichemicals for the food industry, adhesives and coatings for the construction sector, water treatment and refrigerants, together with consumer healthcare products and animal health distributed from 20 facilities throughout Australia and NZ.

This unprecedented fourth renewal of their prestigious 2001 RCNZ PRINCE Gold® award demonstrates this dynamic company's determination to lead by example in their commitment to demonstrating the Responsible Care® ethic of safe chemical management.

⚠ DeLaval

PRINCE® achiever Hamilton-based De Laval NZ is part of an international network of 14 production sites and seven R & D centres enabling sustainable food production in more

than 100 countries.



CORTEVA

Founded in Sweden 150 years ago, the company is a long-standing global leader in advanced technological solutions for agriculture, best known for inventing the iconic Alfa-Laval cream separator, found in milking sheds throughout the world.

Today, the company provides ground-breaking robotics, automating the milking of dairy herds comprising hundreds of animals in hi-tech milking sheds, requiring minimal human intervention, in safer working conditions.

Downsizing Will Hurt

The pending cessation of manufacturing at the former Dow AgroSciences site in New Plymouth will be sorely felt by employees and is another blow to the beleaguered Taranaki economy, already struggling with the ban on new oil and gas exploration.

Company History Intriguing

Emigrating from France to the United States in 1802, the du Pont family established the famous E.I. du Pont de Nemours and Co to make gunpowder. In 1906, the Dow Chemical Company began producing agricultural product, followed by insecticides in 1928 and the 'Lorsban' insecticide in 1972.

In 1944, the local Watkins Brothers established a seed and nursery business in New Plymouth, N.Z; Ivor Watkins Ltd imported and distributed plant hormone technology from the American Chemical Paint Company.

The rapidly growing business began manufacturing the herbicides '245-D' and '245-T', establishing the Waireka Research Station in 1967 and expanding on to the present Paritutu Road site in 1960. Going public in 1958, the successful family enterprise became Ivor Watkins Dow, with the Dow Chemical Company acquiring outright control in 1973.

The company became embroiled in accusations the 245-T was used to manufacture the infamous 'Agent Orange' defoliant dispersed throughout the Vietnam War.

In 1997 Ivor Watkins Dow became Dow AgroSciences and now Corteva Agriscience, following the merger of industry giants Dow and DuPont.

Manufactured crop protection products will be imported, affecting 35 employees, with the company understood to be retaining a sales office in New Plymouth.



Fieldays Online Innovation Awards 2020

This world-class, annual 'Agriculture on Display' three-day Field Day Event is the largest Southern Hemisphere showcase for our agricultural sector, attracting more than 120,000 farmers, 'townies' and merchandisers, celebrating innovation and Kiwi ingenuity with awards recognising hi-tech products and simple back yard solutions to everyday farming issues.

This year, thanks to Covid-19 it was a virtual event, featuring the multi award winning **Hivesite** demonstrating autonomous, chemical-free thermal treatment for eradicating the Varroa mite, the pest devastating domestic bee colonies and threatening a booming export market. Our Members enjoyed success in two award categories.

RCNZ Member Ballance Agri-Nutrients was an Innovation Launch Award Runner Up with SurePhos, a sustainable yet effective fertiliser which reduces phosphate loss by more than 70% compared to Superphosphate.



In addition to their meritorious PRINCE® award, **De Laval NZ** was **International Innovation Runner Up** with Evanza, a reliable and efficient milking cluster (the set of four cups applied to the animal's teats) enabling increased milk flow and improved animal health, saving milking time and minimising human interaction.

Across the Ditch: Imports Replace Self-Sufficiency

Oil industry giant BP is closing its only oil refinery in Australia in favour of importing transport fuels. The shutdown of the Kwinana Refinery in Western Australia, the largest in the country, involves the loss of 600 jobs. Viva Energy Group is reportedly considering conversion to two

import terminals, leaving just Exxon-Mobil in Melbourne, Victoria. The combined output of the remaining refineries is half that of India's newest production site.

New Zealand's lone refinery at Marsden Point is considering a similar conversion to a fuel import facility.

STANDARDS NEW ZEALAND

NZS 5433 Update

The updated NZS 5433 is nearing release. The new format still comprises two volumes but with differing levels of document control. The Standard is now a single document which does not include the list of UN numbers.

As the UN number list changes frequently, the committee chose to separate this from the Standard and format the list as a 'supplementary handbook (HB)'. The HB is then able to be readily updated, without the need to progress through the entire Standards review process, which takes at least two years.

NZS 5433 Update - Lithium Batteries in Transport

Lithium batteries involve high-end technical instrumentation and require special handling and due care during transportation. Following several transport incidents involving lithium batteries, the UN Committee of Experts has developed safe methods of transport.

New Zealand is duty bound to comply with UN guidelines and those guidelines are included in the revised NZS 5433 due for release shortly. The above requirements have not yet been incorporated into the DG Rule. RCNZ foresees problems regarding second hand items using Lithium Battery technology (e.g. electric bicycles) being sold and transported via freight forwarding and courier operations.

These are unlikely to be declared if they originate from a domestic dwelling, despite these 'used, misused, and damaged units' being the most likely to overheat and decay, causing fires.



Vaping Added to Smokefree Laws

Vaping and vaping products (also called 'e-cigarettes') now share many of the same rules as smoking and tobacco products. This includes:

- No sales or supply of vaping products to people aged under 18 years of age.
- No vaping in indoor workplaces.
- Vaping only allowed in open areas of restaurants, bars, pubs and casinos.
- No vaping on aeroplanes, buses, trains, ferries, taxis and ride-share services.
- No vaping anywhere in or around early childhood centres and schools.
- Most advertising and sponsorship banned.
- Import restrictions.

Why? To limit the marketing, sale and use of vaping products in order to:

- Protect the health of non-smokers, especially young people.
- Ensure vaping remains an option for smokers who want to cut down or switch to lower-risk nicotine products.

What you need to do: Most businesses must take reasonable steps to ensure no-one vapes indoors at any time. This includes workers, customers, suppliers and visitors.



Food' vs 'Dangerous Goods' When the DG Article is Also Consumed by Animals

Debate sometimes takes place (often on the roadside) between consignors and NZ Police CVST, over what is a 'food' and what is a 'DG', when a product falls into the 'Food' definition (DG Rule 2005) but is also assigned a DG Class 9 Environmentally Hazardous Substance (EHS) Not Otherwise Specified (NOS).

This is usually triggered by a DG consigned product that cannot have 'food' alongside, but is an animal medicine, such as drench. Orally applied drench is often (but not always) interpreted as 'Food' in the following DG Rule Food definition, which creates confusion when stored alongside other DG.

'Food' means:

- (a) Anything that is used or represented for use as food or drink for humans or animals; and includes:
 - (i) Any ingredient or nutrient or other constituent of any food or drink, whether that ingredient or nutrient or other constituent is consumed or represented for consumption by itself, or when used in the preparation of or mixed with or added to any food or drink; and
 - (ii) Anything that is, or is intended to be, mixed with or added to, any food or drink; and
 - (iii) Chewing gum, and any ingredient of chewing gum, and anything that is, or is intended to be, mixed with, or added to chewing gum; and
 - (iv) Medicines other than those that are dangerous goods of Division 6.1; and
- (b) Any packaging known, reasonably expected to be known, intended for, or which may in the future be used to contain food, drink or any other substance intended for human or animal consumption, other than a refrigerator, oven or item of furniture.

Orally applied Animal Medicine and Veterinary Compounds that are DG Class 9 Environmentally Hazardous Substance (EHS) Not Otherwise Specified (NOS) products:

If the associated DG Declaration states 'Food Item', it automatically defines loading a 'food item' as the first loading priority. The fact it is also a DG Class 9 EHS NOS is then irrelevant, as DG Class 9 EHS NOS can be placed with Food items, without breaching the required segregation. This eliminates the need to decide which has the highest priority when deciding segregation requirements, as it now has a clear loading requirement assigned to it. We recommend you ask your consignors to assign their products accordingly.



EU Chemical Regulations to Increase

Anticipating a need to double production by 2030 of the chemicals essential to maintaining the quality of life demanded by a growing and increasingly risk-averse society, European Union regulators propose sweeping changes to chemical management, including greater restrictions on consumer products containing toxic chemicals, together with stronger enforcement.

The EU Chemicals Strategy for Sustainability has major implications for chemical producers who fail to implement a hazard-based risk assessment process.

Requirements include:

- Banning the most harmful chemicals in consumer products unless proven essential.
- Accounting for the 'cocktail effect' when assessing the risk of formulations.
- Phasing out both perfluoroalkyl and polyfluoroalkyl substances (PFAS) unless essential.
- Introducing a simpler 'one substance, one assessment' process for hazard and risk assessments.
- Encouraging design, production and use of safer chemicals throughout their lifecycle.
- Leading by example in promoting high chemical safety standards and not exporting chemicals banned in the EU.

The EU's complex and controversial Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) legislation is likely to require extensive revision, should all the proposed criteria be adopted.

New PFAS Limits for Food

The European Food Safety Authority is recommending a limit of 4.4ng/kg body weight for a combination of per and polyfluoroalkyl substances (PFAS) in food products, particularly fish and eggs. Contamination of soil and groundwater arising from the prolonged use of PFAS firefighting foams on NZ military bases, airfields and firefighting training areas is subject to ongoing investigations throughout the country.

Site Signage

Just because the Hazardous Substance Regulations may not stipulate Hazchem signage for your site, it is no excuse for failing to display appropriate signage if you have (or may have) hazardous substances, including chemicals, on location. "As safe as reasonably practicable" or "So Far as Reasonably Practicable" means you must ensure you have done all you can to protect the safety and health of all who may enter the premises under your control. This includes personnel such security guards, overnight or after-hours delivery staff, emergency responders and anyone else required to have legal access when you are not present.

Emergency Action Code (EAC)

The HAZCHEM Emergency Action Code enables immediate emergency response for the containment of a hazardous situation to save life and protect, dilute or contain until site and chemical information is available. It was not intended as a long-term incident action plan. Originally designed for transport incidents, in New Zealand the EAC has been extended for use in the static location to also include environmental protection.

Using a single EAC on HAZCHEM signage at a site entrance where a mix of chemicals is present is problematic, as EAC selection is hierarchal and requires careful consideration before selecting a single EAC to address what may be multiple substances on a site.

Safety Data Sheets on the other hand, are a highly effective tool to support incident management. While the EAC is useful at the outset of an incident, full product information should quickly become available as the Emergency Response Plan is activated.

To use an analogy: the EAC is the 1:250 Topomap (lacks detail), while the SDS for the specific product is the 1:50 Topomap (good detail).



Emergency Action Code Change for Anhydrous Ammonia

The EAC for Anhydrous Ammonia changed from 2RE to 2XE between 2015 and 2017. From 2017, adopting 2XE encourages techniques to initially contain a chemical release.

Emergency responders were historically advised to dilute a product release, but as knowledge improves and attitudes change towards environmental protection, containment (whilst difficult to achieve) is now the preferred approach.

Canada Bans Single Use Plastics

Supermarket bags, straws, cutlery and coffee cup lids are to be banned as Canada seeks to set an example for recycling or elimination of 'singe use' plastic items by 2021. Canadians discard 3m tonnes of plastic waste each year, presently recycling less than 10%. The government will focus on eliminating hard to recycle products, seeking to match EU targets of 90% reusable/recyclable.

Measures include improving the design of products, specifying a minimum proportion of reusable material in the manufacturing process, as well as requiring manufacturers and their customers to collect and recycle their products. New Zealand exported most of our plastic waste due to limited opportunities to process significant quantities. The Government-subsidised AgRecovery scheme operated by agrichem suppliers successfully collects used agchem containers and plastic wrap used to protect stock feed. Industry, local authorites and ratepayers meet the cost of local urban recyclable schemes, much of which is being stockpiled awaiting solutions.



WTO Revival Frustrated

ORGANIZATION Paralysis of the World Trade Organisation continues as the leading contender for the role of Director-General, Nigerian economist and US citizen Ngozi Okonjo-Iweala, was vetoed by the United States, the sole objector. The US favours South Korean Trade Minister Yoo Myung-Hee as the most experienced contender. The selection process will resume under the new US President.

New Cabinet Portfolios of Interest

Dr Megan Woods
Hon Chris Hipkins
Hon Andrew Little
Hon David Parker

Minister of Research, Science and Innovation
Minister for Covid-19 Response, Education
Minister Responsible for Pike River Re-Entry
Minister for the Environment

Hon Stuart Nash Minister for Economic and Regional Development

Hon Kris Faafoi Minister of Immigration

Hon Michael Wood Minister for Workplace Relations and Safety

Hon Kiri Allan Minister for Emergency Management

Hon James Shaw (Green Party Co-Leader): Minister for Climate Change,
Associate Minister for the Environment (Bio-diversity)



Enjoying That Cuppa? Chinese researchers say heating the water for your cup of favourite tea should not be done in a microwave. C&EN magazine reports revelations of wide variations in tea resulting from microwaving a cup of water prior to adding the tea bag. The surface temperature can be as much as 8°C hotter than water at the bottom of the cup. Stirring does not seem to help. Tea connoisseurs and growers support researching a solution to resolve this unacceptable

impediment to the hallowed brewing process. Meanwhile, conventional wisdom suggests staying with the trusty kettle.

