

























## Advisory Note AN-004 Extinguishment of Li-Ion Battery Fires

This advisory note provides important information regarding the evaluation and verification of evidence of conformity for the extinguishment of Li-Ion batteries under the CSIRO Verification Services' ActivFire® Scheme.

With increasing usage of Li-Ion batteries in our daily lives, there has been an increase in documented fires, both in Australia and globally, caused by failure of Li-Ion batteries. Some of these fires have caused serious damage to properties in Australia, while fatalities have occurred overseas, throwing a spotlight onto the safety of Li-Ion batteries.

While a number of Li-ion battery fire extinguishment solutions have been proposed globally, no Australian Standard has been published to provide performance requirements for the extinguishment of fires related to Liion batteries.

In Australia, the Australia Competition and Consumer Commission (ACCC) sets out a list of mandatory standards to make particular safety or information features on products compulsory for legal supply of the product into the Australian market. This includes portable aerosol fire extinguishers and portable non-aerosol fire extinguishers. More information can be found here: <a href="https://www.productsafety.gov.au/product-safety-laws/safety-sandards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-handards-bas-hand

Accordingly, CSIRO Verification Services' ActivFire\* Scheme advises its stakeholders that it <u>has not and will not</u> certify, and thus provide a Certificate of Conformity, that any fire extinguisher can effectively extinguish a Li-lon battery fire.

CSIRO Verification Services' ActivFire\* Scheme supports the development of an Australian Standard and/or acceptance of an internationally recognised Standard that includes performance requirements for the extinguishments of Li-lon battery fires and will continue to work with key stakeholders in the development of such a Standard.

Please contact your local fire brigade in the case of a Li-Ion battery fire.

### Issuing Authorities

Kai Loh, Executive Office, ActivFire scheme - CSIRO Verification Services

Tracey Gramlick, Deputy Director - Growth and Strategy, Infrastructure Technologies

#### Issue date

30-Nov-2023

As Australia's national science agency and innovation catalyst, CSIRO is solving the greatest challenges through innovative science and technology.

CSIRO. Unlocking a better future for everyone.

Contact us 1300 363 400 +61 3 9545 2176 csiroenquiries@csiro.au ctiro.au For further information

CSIRO Conformity Services Branch conformityServices@csiro.au



# **COMMONWEALTH PFAS BAN**

Solar Panels + the Electrical Wiring sourced from China are both coated in PFOS (Perfluorooctane Sulfonate or Perfluorooctane Sulfonic Acid) listed as a Toxic Contaminant in the updated Australian Drinking Water Guidelines.

Lithium-ion Batteries are also a Toxic PFAS Contaminant.

Due to these 'Forever Chemicals' being linked to cancer, birth defects, liver disease, thyroid disease, plummeting sperm counts and a range of other serious health problems the Commonwealth Government has effectively banned the import, use and manufacture of some of the more prominent types of PFAS (PFOS, PFOA and PFHxS) from 1 July 2025.





# Unreliable, Intermittent, Solar/Wind/BESS are NOT IN THE INTERESTS **OF CONSUMERS -DEFYING NATIONAL ELECTRICITY LAW OBJECTIVES OF:-**\*PRICE, QUALITY, **SAFETY, RELIABILITY &** SECURITY OF SUPPLY OF ELECTRICITY. \*THE RELIABILITY, SAFETY & SECURITY OF THE NATIONAL ELECTRICITY SYSTEM.



- 1. <u>NEW MODERN SLAVERY CONDITION</u>requiring proof prior to construction that
  NO Slave Labour supply chain
  components be used in construction.
- \*\*New Condition Inserted C4A Dealing With Modern Slavery.

Commonwealth Modern Slavery Act 2018

- \*NSW Local Council Act 1993
  428 Annual Report
  438 ZE Duty to Ensure Goods & Services
  Are Not Procured From Modern Slavery.
- 2. AMENDED STORM WATER

  MANAGEMENT PLAN CONDITION reCONTAMINATION QUALIFIED TESTING/
  REPORTING, CONTAMINATION
  RESPONSE PROCEDURE, etc.

\*\*Amended Condition C8.

# The Recently Updated National Health and Medical Research Council (NHMRC) Review of PFAS for <u>AUSTRALIAN</u> <u>DRINKING WATER GUIDELINES</u> includes:

\*perfluorooctanoic acid(PFOA); \*perfluorooctane sulfonic acid (PFOS); \*perfluorohexane sulfonic acid (PFHxS); \*perfluorobutane sulfonic acid (PFBS) \*hexafluoropropylene oxide dimer acid and its ammonium salt (GenX chemicals). TOXIC Renewabulls ARE THE ASBESTOS OF THE FUTURE

# The PFOS of Wind Energy is Bisphenol A Shedding from Wind Turbine Blades Lethal to Young Children & as Toxic as Blue Asbestos

# \*\*COMMONWEALTH PFAS BAN

Some types have been found to be toxic to human health and the environment. In its most definitive regulatory action taken to date, the Commonwealth has effectively banned the import, use and manufacture of some of the more prominent types of PFAS (PFOS, PFOA and PFHxS) from 1 July 2025.

(21 Feb 2024)















HOME

ACCOUNT

ENVD

**ORDER BOOKS** 

ACCREDITATION

HELP

### LPA Accreditation

### Food safety on your property

Question: 2.8

Do livestock have access to leaking electrical transformers, capacitors, hydraulic equipment, solar panels, wind turbines, coal seam gas structures or coal mine wastes?

- O Yes
- O No
- O I am now aware and making plans to restrict access.



Select your answer and then click 'Save and continue' to continue