



COOLCHANGE

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\$500,000 fine

A Victorian-based fire protection company has been fined a record \$500,000 for importing bulk hydrofluorocarbon (HFC) without a licence or quota.

Since 1 January 2018 it is illegal to import bulk HFC into Australia without a controlled substances licence and quota under the HFC import quota system.

Five tonnes of HFC-227ea, a widely used fire extinguishing agent (common trade name FM 2000), was imported by the company, formerly known as Fire Protection Technologies Pty Ltd, without a licence, despite the company being aware that a licence and quota was required.

Reducing HFC emissions is an important part of Australia's emissions reduction commitment under the Paris Agreement, and is now part of a global commitment under the Montreal Protocol. The Australian Government, with the strong support of Australian industry, took early action to reduce HFC imports starting in 2018.

Australia's HFC import quota system was developed with industry to contribute to the phase down of global warming HFCs by gradually reducing the amount of bulk HFC permitted into Australia. Maintaining the integrity of the import quota system helps Australia to reduce its emissions of HFCs.

HFC-227ea has a global warming potential 3220 times more powerful than carbon dioxide. The amount of HFC-227ea imported by the company was equivalent to around 16,100 tonnes of carbon dioxide emissions, with the potential to create emissions equivalent to the annual emissions of 6,600 cars or 2,300 households.

The Department of Agriculture, Water and the Environment seized five one-tonne capacity cylinders from the company's premises in Melbourne and Perth, three of the cylinders were full and two were nearly empty. The Department undertook a civil action against the company in the Federal Court of Australia. The company was found to be in contravention of section 13(1) of the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* and ordered to pay a civil penalty of \$500,000 and pay for disposal of the remaining gas at a cost of around \$100,000. This is the largest ever fine handed down under the ozone protection and synthetic greenhouse gas laws.

To read the full media release from the Hon Sussan Ley MP, Minister for the Environment, visit <https://minister.awe.gov.au/ley/media-releases/company-fined-500000-unlawfully-importing-synthetic-greenhouse-gas>



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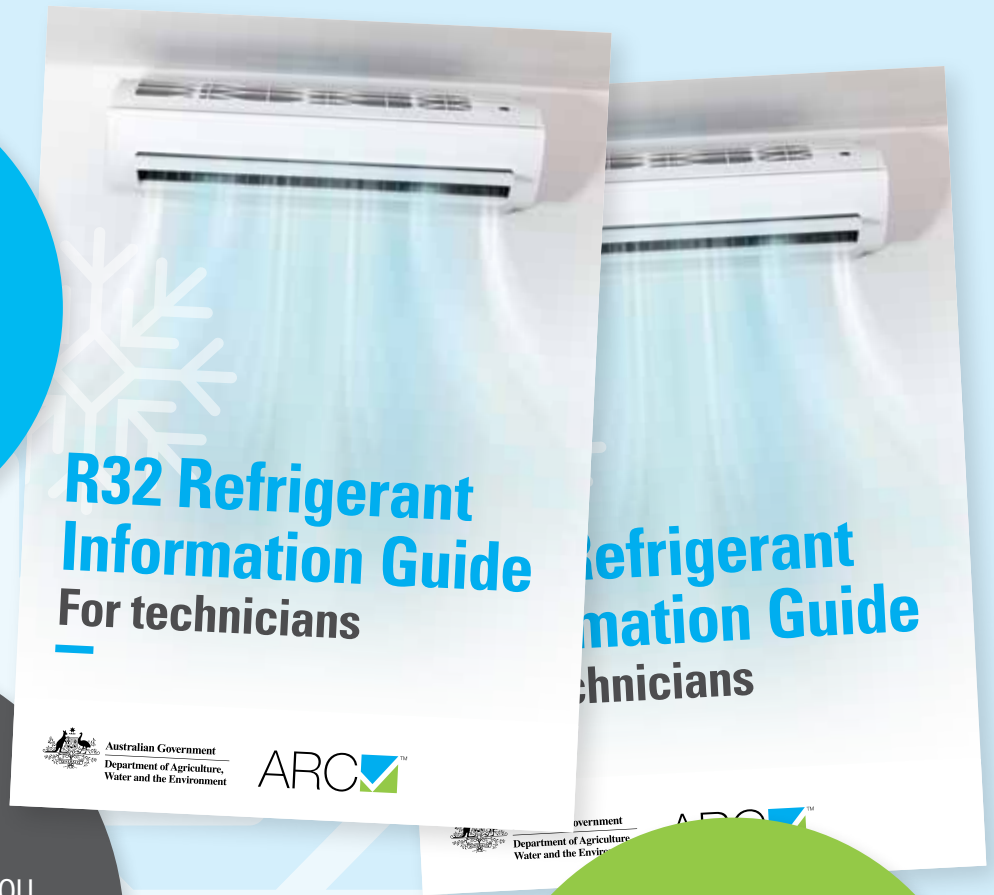
Free R32 'tech-packs' for licence holders

The ARC and the Department of Agriculture, Water and the Environment have created free 'tech-packs' on R32 refrigerant for licensed technicians and authorised businesses.

These 'tech-packs' contain R32-specific information on: refrigerant characteristics and properties, equipment requirements, safety, relationship to R410A, plus more. The tech packs include:

Education booklets for technicians:

A handy resource at work, or when you are working off-site.



Refrigerant safety service stickers:

These stickers will help you, and future employees, identify the refrigerant and its basic characteristics, before you work on the system.

This system contains R32 refrigerant ❄️

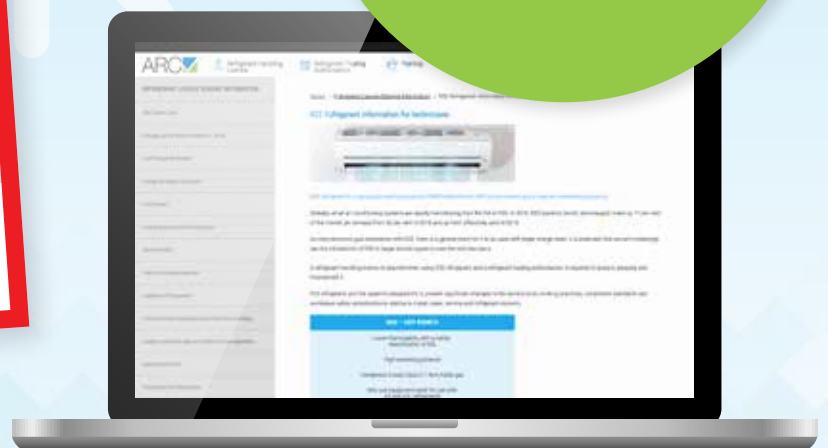
Boiling Point	-51.7°C
Critical temperature	78.4°C
Flammability Rating	A2L lower flammability
Safety Considerations	R32 is a flammable refrigerant. Only use equipment that is ignition proof and meets the relevant Standards. Use appropriate personal protective equipment. Ensure no open flames are near the system (including smoking).

Before working with any refrigerant, please refer to the product manufacturers' recommendations, industry standards, codes of practice and material safety data sheets.

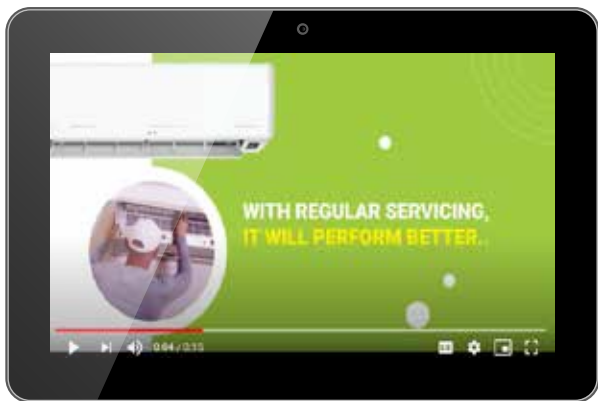
Australian Government
Department of Agriculture,
Water and the Environment

Links to a dedicated webpage and video:

On the ARC website
www.arctick.org/information/r32/



'Tech-packs' will be mailed to all stationary refrigerant trading authorisation holders Australia-wide in the new year.



Pumping up the RAC and Auto AC trades

This year's licensing summer advertising is underway, and already we are seeing thousands of visitors to www.lookforthetick.com.au.

Visitors are locating authorised businesses, checking that individuals have the right licence for the job and learning about the value of the refrigeration and air conditioning (RAC) and automotive air conditioning (AC) industries.

Supporting licence holders and their business is critical to the success of the refrigeration and air conditioning industry. Keep an eye out online and on social media for some of our key messages including:

- Discouraging 'topping up' in the automotive sector.
- Encouraging the use of Full RAC licence holders for service and maintenance.
- Encouraging regular servicing and maintenance of cooling systems – increasing work for appropriately licensed technicians.

If you come across one of our advertisements on Facebook, share it with your customers and spread the word about how important RAC and automotive air conditioning technicians and businesses are to society.



Recovered refrigerant rebate increases to \$10 per/kg with Gas Seeker Initiative

Refrigerant Reclaim Australia (RRA) is more than tripling the rebate offered for recovered ozone depleting and synthetic greenhouse gas refrigerant, with the launch of the RRA Gas Seeker Initiative.

From 1 January to 30 June 2021, the rebate will be increased from \$3 per kg to \$10, to give back to the industry.

"We recognise that 2020 has been a challenging year" said Kylie Farrelley, General Manager of RRA. "We want to do what we can to help and have been looking at ways that we can support the HVAC&R community".

"The Gas Seeker Initiative will do just that. By increasing the rebate during this period, we will further reward those who recover refrigerant and hope that individuals and businesses will use this as an opportunity get rid of any stored unwanted refrigerant.

"We're encouraging everyone to make the most of the Gas Seeker Initiative while you can, as it will only be available for a limited time."

Simply return your recovered refrigerant to your local gas supplier and collect your \$10/kg.

The Australian HVAC&R community are to be commended for their recovery efforts. As an industry, we have prevented the emission of between 800,000 and 1 million tonnes of CO₂e annually. That's the equivalent of taking 400,000 vehicles off our roads each year. Together we can still do more.

Limitations and terms and conditions apply.

For more information, please visit www.refrigerantreclaim.com.au or contact RRA at info@refrigerantreclaim.com.au



2020 Compliance Activities

In 2020 the Department of Agriculture, Water and the Environment undertook action in the Federal Court of Australia against a company that was fined a record \$500,000 for importing bulk hydrofluorocarbon (HFC) without a licence or quota. Other compliance activities undertaken included the issue of the following infringement notices:

Infringement	Notices
Importing bulk hydrochlorofluorocarbon (HCFC) without a controlled substances licence	1
Storing refrigerant in disposable cylinders	1

In 2020 the ARC conducted a number of compliance activities including:

Compliance activity	Numbers
Permit condition checks/Desktop reviews	6,175
Education visits	165
Reviews of potential breaches of the <i>Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 and Regulations 1995</i>	59
Refrigerant trading authorisation applications refused due to on-going non-compliance	76 (annual average)

2020 figures as at 30 November 2020

This year, in an effort to minimise the risk of COVID-19 to industry, face-to-face permit condition checks were replaced by desktop reviews. The desktop review process is the same as a permit condition check, except it is conducted via email. As restrictions ease, the ARC looks forward to once again helping permit holders in-person and seeing first-hand the great work industry is doing as Australia charges out of COVID-19.

RESULTS OF 2020 PERMIT CONDITION CHECK SURVEY

“95 per cent of respondents felt that ARC Field Officers helped them to better understand their obligations as RTA holders.”

“90 per cent of respondents felt that ARC Field Officers were flexible when organising a time for a permit check.”

In 2020 many RTA holders were surveyed about their permit condition check experience. This information helps ARC to better understand how to make the experience more effective for industry.



Technician safety comes first with new RAC training package

The updated UEE Electrotechnology Training Package – which includes many refrigeration and air conditioning (RAC) qualifications - has been endorsed by the Skills Ministers providing apprentices and technicians with a modern, practical and safety-first training experience.

Key components of the updated package relate to changes to *UEE32220 Certificate III in Air Conditioning and Refrigeration* to ensure it includes the latest refrigerants, technologies, Standards, code of practice references and work health and safety requirements.

Other changes include the development of a new unit of competency for refrigerant recovery from end of life stationary RAC equipment and the addition of the safe handling of A2/A2L refrigerants unit. The safe handling of A2/A2L refrigerants unit was developed by the Australian Refrigeration Council (ARC) and, together with the existing hydrocarbon refrigerant unit, will form the flammable refrigerant unit of competency.

Over the past four years, the Industry Reference Committee's (IRC) RAC Technical Advisory Committee, made up of representatives from various industry stakeholder groups, has worked together to provide input and advice to the Australian Industry Standards organisation on these changes and updates.

This Training Package contained over 80 qualifications and 600 units of competency.

ARC's Technical and Training Manager, Mr. Noel Munkman, sits as RAC technical expert on the Australian Industry and Skills Committee (AISC) Electrotechnology IRC, together with past ARC Chair Kevin O'Shea AM.

The UEE Electrotechnology Training Package (release two) was endorsed by the AISC on 12th August 2020, signed off by the Skills Ministers on 2nd October 2020 and published on the national register at <https://training.gov.au/Training/Details/UEE> on the 5th October 2020.

Normally, registered training organisations must transition to new Training Packages within 12 months of a revised package's publication on the national register. However, in this case the AISC supported an extended transition timeframe of two years.

The cold hard facts of the RAC industry

The latest in the Cold Hard Facts series of reports on the refrigeration and air conditioning industry in Australia is now available – *Cold Hard Facts 2020*. The Cold Hard Facts reports provide economic and technological assessments of the Australian industry.

The 2020 report estimates the 'cooling economy' - the total of all goods and services that involve the employment of vapour compression refrigeration and heat exchange systems – to be worth more than \$4 billion, or 2.1 per cent of gross domestic product, in 2019.

Cold Hard Facts 2020 analyses data from 2019 to identify key developments and emerging trends. They are:

Overall

- A small decline in refrigeration and air conditioning equipment sales in 2018 and 2019 across nearly all major equipment segments, including split system air conditioners.
- A trend towards uptake of new equipment designs that use smaller charge sizes to do the same work.
- New refrigerants continue to be developed and used, trending towards lower or no global warming potential refrigerants, including lower flammability (A2L) blends.
- These trends suggest that the global warming potential value of the Australian bank of refrigerants may have reached its peak in 2019-20 and will decline in the years ahead.
- The stock of refrigeration and air conditioning equipment is expected to continue to grow, with peak energy related emissions expected in the decade ahead. Continued improvements in energy efficiency will lower that peak.



To read the full report visit

<https://www.environment.gov.au/protection/ozone/publications/cold-hard-facts-2020>

Annual indexation of RAC industry permit fees

The Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995 require the annual indexation of permit application fees.

The annual indexation formula uses the Wage Price Index (WPI) figures published by the Australian Bureau of Statistics. Consistent with the WPI figures for the September 2020 Quarter, the refrigeration and air conditioning (RAC) industry permit application fees will increase by 1.354 per cent from 1 January 2021.

The fees for 2020 and 2021 are outlined here.

RAC permit type	Duration	Application Fee 2020	Application Fee 2021
Refrigerant handling licence	2 years	\$154	\$156
	3 years	\$231	\$234
Restricted refrigerant handling licence	2 years	\$154	\$156
	3 years	\$231	\$234
Trainee refrigerant handling licence	1 year	\$33	\$33
Refrigerant trading authorisation	2 years	\$490	\$496
	3 years	\$735	\$744
Restricted refrigerant trading authorisation	2 years	\$154	\$156
	3 years	\$231	\$234

Air conditioning

- R32 is continuing to take over from R410A in non-ducted split system air conditioners. R32 is also starting to appear in ducted split systems and chillers. Decreasing supply and increasing prices for HCFC-22 since 2012 has created an active recycling industry.
- Use of HFO-1234yf in the automotive air conditioning sector is still low, estimated at less than five per cent in new vehicles. R134A still dominates this sector.

Refrigeration

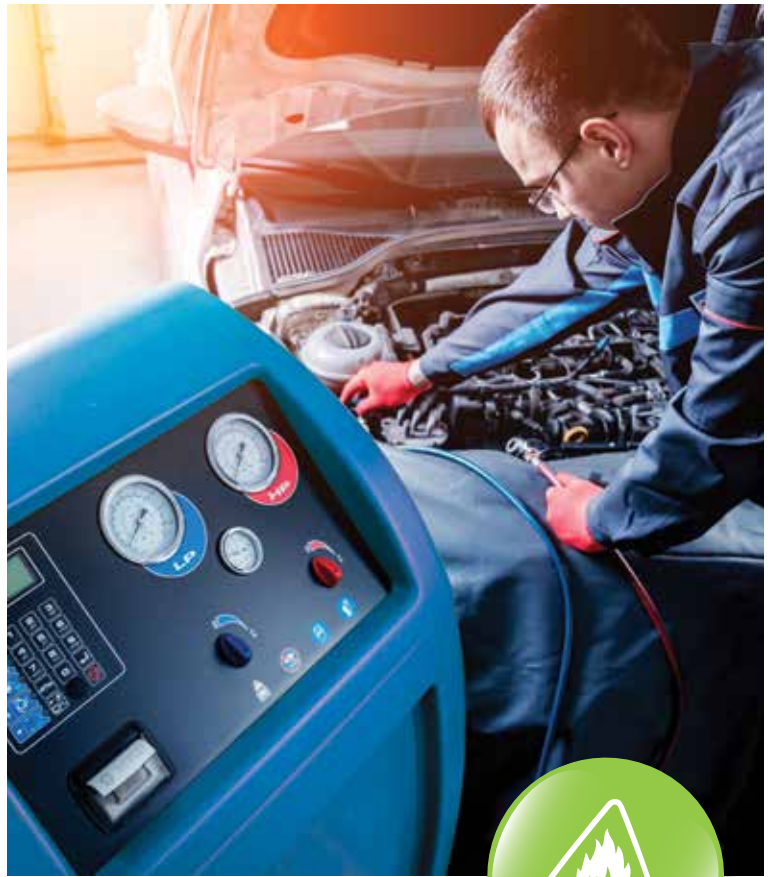
- Growth in natural refrigerants and hydrofluoroolefin/hydrofluorocarbon (HFO/HFC) blends in refrigeration continues. For example, refrigerated display cabinets using hydrocarbon charges smaller than 150 grams have been rapidly adopted, and HFO/HFC blends are starting to be used in larger commercial refrigerated display cases with charge sizes up to 3 kg.
- While some supermarkets are implementing trans-critical carbon dioxide charged refrigeration systems, demand for R404A for servicing and new equipment in the refrigerated cold food chain continues to be high.
- Domestic refrigerators and freezers now use hydrocarbons, with only very low charge portable and vehicle systems (<65 grams) still using R134A.
- There is potential for improvements in design and operation of the cold food chain, including equipment.

COVID-19 updates

There have been several developments around Australia regarding COVID-19 restrictions.

For updates specific to your state or territory, please head to the following websites:

- Queensland
<https://www.qld.gov.au/health/conditions/health-alerts/coronavirus-covid-19>
- Tasmania
<https://www.coronavirus.tas.gov.au/>
- South Australia
<https://www.covid-19.sa.gov.au/>
- Western Australia
<https://www.wa.gov.au/government/covid-19-coronavirus>
- Victoria
<https://www.dhhs.vic.gov.au/coronavirus>
- New South Wales
<https://www.nsw.gov.au/covid-19>
- Northern Territory
<https://coronavirus.nt.gov.au/>
- Australian Capital Territory
<https://www.covid19.act.gov.au/>



Safety Alert: Online Sales of Auto AC Gas 'Cool Penguin F-12' (USA)

The United States Environment Protection Agency (US EPA) recently performed tests on a product being marketed as refill cylinders of CFC-12 for motor vehicle air conditioners (AC).

CFC-12 was commonly used in motor vehicles prior to 1996 at which point bans were implemented under the *Montreal Protocol on Substances that Deplete the Ozone Layer*.

In Australia, it is an offence under Section 13 of the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (the Act) to import CFC-12. There are potential civil penalties of 500 units for an offence under this Section. A civil penalty unit is currently worth \$222.

The purchase of cylinders like this from an online overseas marketplace would be considered an import under Section 13 and the associated penalties could apply. Any person handling refrigerant or carrying out work in relation to refrigeration and air conditioning equipment must hold the appropriate refrigerant handling licence or associated penalties could apply.

The US EPA also notes that although the product is being marketed as CFC-12, the cylinders that they have tested also contained other controlled substances of varying quantities, flammability and toxicity. This can pose a potential hazard to the handler.

