



# COOLCHANGE

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## Tradie to Trainer

Australia's TAFE systems have long been supportive of experienced tradespeople wanting to become teachers, and a new TAFE SA program takes the support to a whole new level.

The 'Tradie to Trainer' program aims to attract experienced tradies who have both the hands-on experience and the educational qualifications to become lecturers. For people with the right trade skills, TAFE SA helps them to acquire the teaching skills and play their part in teaching some of the million-plus TAFE students around Australia.

Essential requirements to be a TAFE SA lecturer in refrigeration are:

- a RAC01 Refrigerant Handling Licence issued by ARC;
- a Certificate IV in Training and Assessing (TAE 40122); and
- at least 5 years of industry experience.

TAFE SA can help applicants to achieve the training qualification through a program of in-house workshops and online self-directed learning. Subjects for Tradie to Trainer, which are studied in the first year, include BSBCMM401 Make a presentation and TAEDEL301 Provide work skill instruction.

At the completion of the Tradie to Trainer program, successful trainees will graduate to the role of new lecturer at TAFE SA with an initial two-year contract and the opportunity to apply for ongoing positions as they become available. If you're interested in applying for TAFE SA's Tradie to Trainer program, email [lena.marchesan@tafesa.edu.au](mailto:lena.marchesan@tafesa.edu.au) attaching a copy of your resume.

Most TAFE systems around Australia have similar systems to encourage experienced tradespeople to move into teaching. If you have a local TAFE that teaches refrigeration and air conditioning, contact the TAFE HR department or the refrigeration/air conditioning section to explore the opportunities.



# ARC welcomes strengthening of ASQA

The Australian Refrigeration Council has welcomed plans to strengthen the powers of the Australian Skills Quality Authority (ASQA) to crack down on dodgy training organisations.

A new bill introduced into federal parliament responds to integrity and quality issues in the VET sector. The *National Vocational Education and Training Regulator Amendment (Strengthening Quality and Integrity in Vocational Education and Training No. 1) Bill 2024* is designed to tackle non-genuine providers and improve the integrity of the nation's vocational education and training (VET) sector. It provides for a five-fold increase in maximum penalties for breaches, intended to deter RTOs that currently see penalties as a risk worth taking or a 'cost of doing business'.

ARC chief executive officer, Glenn Evans, welcomed the planned legislation which would, if passed, boost ASQA's powers to take decisive action against RTOs that circumvent regulatory requirements. 'The permit scheme is competency based and reliant on qualifications, so training quality is critical,' he said.

'ARC and ASQA have long been allies in the battle to shut down these courses which are a blight on our industry, and we hope this legislation is passed as it would strengthen our hand considerably.'

'If this becomes law, it will support ARC's work to eliminate dodgy RTOs that issue spurious qualifications typically based on inadequate courses and inappropriate reliance on tick-and-flick recognition of prior learning (RPL) processes. This Bill, if passed, will support the majority of providers who are doing the right thing, while further strengthening our arm in keeping the dodgy courses shut down.'



Reports of dodgy RTOs should be made to ASQA:  
<https://www.asqa.gov.au/about/complaints>

## Watch out for counterfeit cylinders

American reports of counterfeit recovery cylinders have highlighted an international trade in non-compliant cylinders that might affect Australia.

The problem has emerged since the US EPA introduced measures aimed at increasing HFC recycling and reclamation, thereby increasing demand for recovery cylinders. Counterfeit cylinders were first identified in mid-2023, and some reports suggest up to 25% of the cylinders did not meet the required Department of Transportation (DOT) standard. The non-compliant cylinders are reported to be readily available online.

Counterfeit cylinders may pose a safety hazard as they could rupture in transit causing serious injury or property damage, or leak releasing gases back into the environment.

In Australia the required standard for recovery cylinders is AS2469-2005 Rec:2016. Any recovery cylinder not stamped with AS2469 is non-compliant, illegal, and should not be used. If you do use one, you may be fined, and your RTA suspended or cancelled.



## VACC talks air conditioning



Automotive air conditioning is one of several topics on the agenda for a round of member information events being run by the Victorian Automotive Chamber of Commerce (VACC).

ARC General Manager of Training and Compliance, Rod Cumming, is attending the events throughout regional Victoria to outline the latest developments in licensing. ARCTick licence holders accounted for almost half of the attendance at some of the early sessions. Several business owners and technicians are taking the opportunity to discuss industry issues with Rod, including hydrocarbon refrigerants, the growth in electric vehicles, and people working outside of the scheme.

Speakers from VACC are covering a variety of emerging issues in the automotive sector, along with latest developments with the Australian Automotive Service and Repair Authority (AASRA).





# Antarctic fridgie role suits the adventurous

Antarctica is hardly the first place one would expect to need a fridgie, but Matthew Aisbett found plenty to do in the year he spent there a couple of summers ago.

Refrigeration mechanic is one of 32 different roles required by the Australian Antarctic Program (AAP) at Davis, Mawson and Casey research stations, and Macquarie Island. Peak demand for fridgies is for construction work during the summer.

Matthew's refrigeration qualification, gained while he was in the Army, made him a valuable member of the expedition team. Expeditioners need to be versatile, proactive and community minded people, team players in a hostile environment, and Matthew fits the profile. He went down in 2021-22 as the sole fridgie in a 24-person team of expeditioners, spending a total of 13 months there before returning home.

As for why he went, Matthew says it was mainly curiosity. 'I'm just naturally curious – I was a curious kid,' he said. 'You could say my main attribute is a lack of the ability to sit still.'

He was surprised to find the equipment in Antarctica was less sophisticated than expected – mainly older technology in comparison to Australia – but good quality and robust. HVAC systems operate on a hot water loop, with the heating of the water done by diesel boilers, and refrigeration is more to do with consistency than outright cold. 'It can be minus 25 one day and minus 5 the next, so the refrigeration systems are there to regulate the temperature,' Matthew said.

His three colleagues on the electrical team all had different specialties, with his being high voltage power generation work as well as refrigeration. Being so remote, there's nobody else to offer help – and it's the same with parts. 'You can only get the parts they already have there, so you sometimes have to dig to find what you need,' Matthew said.

These days he can access all the parts and equipment he needs, working for the University of Western Australia as a senior technical officer on a major upgrade of the cooling systems for most of the campus buildings.

Would he return? 'Yes, now I've been back a year or so, I would,' he said. 'It might not be for everyone, but if you've got a sense for adventure then go for it.'



Top: Matthew Aisbett (left) and his electrician colleague Hayden digging refrigerant cylinders out of the Antarctic snow.



For more information about Antarctic jobs visit <https://jobs.antarctica.gov.au>



## The importance of refrigerant analysers

ARC recommends inclusion of a refrigerant analyser as an essential item of refrigeration and air conditioning workshop equipment, even though it is not a legal licensing requirement.

Refrigerant analysers are a sound investment in protecting against the hazards of inadvertently using contaminated refrigerant. They are vital for both commercial and safety reasons so that climate control technicians know what gas they are handling. This is a particular challenge in the automotive sector, where you might not know a vehicle's service history.

Having an analyser is insurance against the potentially serious consequences for you, your staff and your customers that having contaminated gas can cause.

"If someone unknowingly recovered contaminated refrigerant from a customer vehicle, it would contaminate

their workshop equipment and several other customer cars," said Brett Meads, President of VASA.

"That's a costly problem to fix, but an even greater risk is where a system might have been illegally charged with a flammable refrigerant, and that can lead to serious injuries."

"There are several brands on the market at different price points, which would prevent such problems before they happened. People who bring in a car with contaminated gas might not know it, but the damage will be done just the same, unless you analyse the gas before working on it."





# WorldSkills heads for France

WorldSkills Australia has named **Bailey Loenneker** to represent his country in refrigeration and air conditioning at the 47th International Competition in Lyon, France, in September.

Bailey works in the family business, Alwayscool Airconditioning and Refrigeration, and is training with TAFE Queensland.

He will be accompanied by long-serving WorldSkills expert Carl Balke as one of 33 young apprentices, trainees, and students heading for Lyon. More than 1,500 Competitors from 75 countries will compete in 59 skills.

The journey for selection has spanned two years, beginning with a regional WorldSkills competition in 2022 that involved more than 3,000 competitors. Winners from each region then competed in the National Championships in 2023.



The refrigeration and air conditioning category of WorldSkills Australia is supported by Kirby, Refrigerant Reclaim Australia and the Australian Refrigeration Council.

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## Robert Clark

When Robert Clark joined ARC 11 years ago, he already had more than 30 years in the industry behind him, so it's no surprise that he sees plenty of familiar faces when out doing permit condition checks.

Quite a few of those are former students from the 13 years he spent as a TAFE teacher, and this is just one element of his long and varied career. Along with working as a technician and manager for several respected firms in Western Australia, he was active in many industry and training committees. In January 2000 he moved into the TAFE sector because he felt he had something to offer others.

Over the years Robert has observed that there are always stand-out operators in the sector, including plenty of his former students. 'Doing things properly was drummed into them as apprentices, and it stays with them,' he said. 'Hats off to the apprentices who do the right thing – they're legends.'

Robert also admires the old-time fridgies who have always cared about the environment. 'I remember one who always understood that these gases can't be good if they are released into the atmosphere. He has always reclaimed, long before it was required by law,' he said.

Many fridgies, Robert finds, are motivated by a simple desire to do good work – and by peer pressure. 'They like to stand out from the crowd,' he said. 'They have to have the right van, the right look, the right equipment, and that transfers into the quality of their work.'

One big change that Robert welcomes is the growing presence of women in the industry. 'Women used to have fewer options, but the pioneers have set an example for others,' he said. 'Young women now see that it's OK to work in a trade – why not?'



## Essential equipment for splits

RSS03 restricted heat pump and decommissioning licence holders should have the following equipment in order to undertake their work in a manner which prevents refrigerant emissions.

### For both installation and decommissioning

- Gauge manifold and hoses
- Electronic leak detector or leak detection solution.

### For installation

- Oxygen free nitrogen, a regulator and hoses – nitrogen is important to pressure test copper tubing, and to bleed through tubing when any silver brazing or annealing is required
- Additional long hose to run the nitrogen through to where you need to use it
- Tension wrenches and lubricating oil to lubricate the flare nut thread and the back of the flare to ensure effective compression
- Large shifting spanner
- Flaring tools
- Tube cutter and deburring tool – deburring can make all the difference between a good and a bad flare
- Vacuum gauge, specifically an electronic Vacustat
- Vacuum pump.

### For decommissioning

- Electronic scales
- Refrigerant recovery unit
- Refrigerant reclaim cylinder
- Gauge lines with valves to isolate the line from recovery unit to reclaim cylinder.

All of this equipment is necessary to meet the conditions of a split system licence involved in installing and decommissioning work. It is a minimum in order to be compliant.



# What's On

## 19/06

19 June 2024

**AIRAH Darwin Industry Night**

An evening of networking and knowledge sharing at the Mindil Beach Casino Resort, Darwin - a fantastic opportunity to connect with industry professionals, gain insights, and stay up-to-date with the latest trends in the field. Details at <https://www.airah.org.au/industry nights>

## 04/08

4-6 August 2024

**RWTA National Conference + Exhibition**

RACV Cape Schanck Resort, Victoria. With the theme of *On Thin Ice, Navigating Australia's Cold Chain Viability*, this major RWTA event offers access to knowledge, experiences and networks to create an informed future. Details at <https://www.rwta.com.au/conference-2024>

## 23/08

23-25 August 2024

**VASA Wire & Gas in Brisbane**

Moving to a new home at The Westin Brisbane, Wire & Gas convention and trade show delivers the latest in automotive air conditioning, electrical and cooling, plus the official release of *Cool Mavericks*, the history of automotive air-conditioning. Details at <https://vasa.org.au>

# By the numbers

## Total Permit Holders (at 31 March)

RTA	Stationary	13,562
	Mobile	13,759
<b>RTA TOTAL</b>		<b>27,321</b>
RHL	Stationary	68,286
	Mobile	46,232
<b>RHL TOTAL</b>		<b>114,518</b>
<b>TOTAL all types</b>		<b>141,839</b>

## New Permits Issued (1 January-31 March)

New RTA applications	762
New RHL applications	1,283
New Trainee applications	2,867
<b>TOTAL applications</b>	<b>4,912</b>

## Permit Condition Checks (1 January-31 March)

On-site checks	1,472
Desk audits	2
<b>TOTAL</b>	<b>1,474</b>

## DID YOU KNOW RRA WILL PAY YOU FOR YOUR USED AND UNWANTED REFRIGERANT?



### To recover refrigerant:

- 1 Collect a recovery cylinder from your refrigerant gas supplier,
- 2 Fill it with used, contaminated and unwanted refrigerant from systems you service, repair, or decommission.
- 3 Return it to your refrigerant supplier and collect your rebate



**REFRIGERANT RECLAIM AUSTRALIA**

02 6230 5244

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