

Australian Government

Department of Agriculture, Water and the Environment Newsletter for the Refrigeration and Air Conditioning Industry

September 2021

COOLCHANGE

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ARC consumer advertising campaign launches industry into summer

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Each summer we deliver an online marketing campaign targeted at people looking to buy, install, service, repair and dispose of air conditioners (domestic and auto), refrigerators and freezers.

The goal of this year's campaign is to connect potential customers with authorised businesses and licensed technicians through our **www.lookforthetick.com.au** consumer website. Based on industry feedback, our campaign's messaging will focus on the following areas:

- Putting a stop to 'topping up' which is an offence under Commonwealth Ozone Protection and Synthetic Greenhouse Gas legislation and a major concern in the automotive sector,
- Encouraging the use of full refrigerant handling licence (RHL) holders for service and maintenance,
- Encouraging regular servicing and maintenance of cooling systems increasing work for appropriately licensed technicians, and
- Encouraging consumers to ask for a technician's licence card looking for the tick!

Strategies including search engine marketing, online advertising, Google AdWords, Instagram and Facebook advertising will spread the key messages to consumers.

We're here to service and support the RAC industry, so if there are other areas you would like to see promoted, or key messages that you think consumers should know about, please contact us at **enquire@arctick.org**

RAC qualification upgrade

New, upgraded qualifications now apply as the basis for a refrigerant handling licence (RHL) with the ARC.

Endorsed by the Department of Agriculture, Water and the Environment (DAWE), UEE Electrotechnology Training Package release 2 is the new refrigeration and air conditioning (RAC) qualification required for various ARC refrigerant handling licenses (RHLs). The new training package is the most up-to-date qualification reflecting improved industry standards and current practice, including competencies required for effective emission control and safe handling of refrigerants in the stationary sector.

Current RAC UEE qualifications and units of competency will continue to be recognised for the moment but the ARC has been communicating with registered training



organisations (RTO) to encourage them to migrate to the newly endorsed RAC UEE qualifications and units of competency by adding them to their scope of registration.

Further detail on licence categories to which the new qualifications package applies can be found at **www.arctick.org/refrigerant**handling-licence/licence-types/

Right records, right compliance

From time to time, businesses or individuals holding a refrigerant trading authorisation (RTA) may have a permit condition check conducted by a Field Officer from the ARC.

As an RTA holder contacted by a Field Officer regarding a permit check, you'll need to show you possess specific equipment and records. A permit check is a normal part of the conditions around holding an RTA. It's also a good opportunity to speak with an ARC Field Officer about how to meet your licence conditions. They can give advice on:

- managing your records and equipment,
- how to develop your refrigerant risk management plan,
- documentation required at licence renewal, and
- how to avoid the emission of refrigerant to the atmosphere through the use of appropriate equipment and equipment maintenance practices.



Records you'll need to show

When it comes to record keeping, ARC Field Officers are finding the main areas for non-compliance during a permit condition check relate to:

Equipment maintenance records

Each quarter, RTA holders are required to inspect, maintain and keep records for leak detectors, vacuum pumps and refrigerant recovery units.

Records of refrigerant handling staff

RTA holders are required to keep a record of all staff handling refrigerant.

Cylinder leak test records

RTA holders are required to keep a list of all refrigerant containers (cylinders) in their possession during each quarter and their test dates. You will need to supply quarterly records that show you have checked cylinders for leaks, at least once during the quarter.

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To make record keeping easier, we've created some handy record keeping templates for all your reporting requirements. Visit www.arctick.org/business-authorisation/business-reporting-templates-and-guides

Keeping the mining industry up-to-date

Hundreds of RAC technicians are employed in Australia's mining sector, often in Fly In Fly Out (FIFO) roles where they may be operating alone or part of a small team.

In coming weeks, over 200 mines around Australia will receive information packs containing ARC's *'Save time, money and the environment'* booklets and posters that cover a range of topics, including the obligations of mine managers, common causes of poor performance and refrigerant leakage of air conditioning systems, solutions for implementing preventative maintenance and leak detection processes.

Created with assistance from Industry Advisory Body members and Grant Hand from Automotive Training Solutions, these educational resources also emphasise the benefits of preventative maintenance and leak detection for mobile air conditioning.



Save time, money and the environment

Benefits of preventative maintenance and leak detection for mobile air conditioning

> Australian Government Department of Agriculture, Water and the Environment





Apprentice numbers soar

In positive news for our sector, the number of RAC apprentices and trainees enrolled at TAFEs around Australia are at a ten-year high.

Annual growth of almost 14% saw student numbers just under 300,000 as of December 2020, according to the National Centre for Vocational Education Research (NCVER).

While New South Wales leads the pack in sheer numbers – in that state there are now more RAC apprentices and trainees enrolled than any other trade – TAFE SA achieved a massive 21.5% annual increase in apprentice and trainee enrolments in 2020.

School-based commencements in South Australia also increased by just over 20%.

HFC Phasedown

Imports of the most common HFC pre-charged equipment since the HFC phasedown began



Australia will begin the next step in its phasedown of hydrofluorocarbons (HFCs) on 1 January 2022.

Annual quota for import of bulk HFCs will reduce to 6.25 million tonnes carbon dioxide equivalent (CO_2 -e) for 2022 and 2023, down from 7.25 million tonnes CO_2 -e in 2021.

Import data indicates a reduction of imports of bulk R134a and R410a. R404a and R407c are steady, while R32 imports are increasing. The data also shows a move away from imports of equipment using higher global warming potential (GWP) refrigerants, eg R134a (GWP 1430) and R410a (GWP 2088), and an increase in imports of equipment using lower global warming potential refrigerant R32 (GWP 675).

These import trends highlight the overall move to lower GWP options, with ongoing availability of a variety of refrigerants for servicing of existing equipment.

New electric vehicle refrigerant means greater driving range

Japanese air conditioner manufacturer, Daikin Industries, has developed a refrigerant for electric vehicles (EVs) that could extend range by up to 50%, with the product scheduled to go on sale by 2025.

In extreme temperatures, EV cabin temperature regulation uses significant amounts of power from an EV's battery. Daikin's new product is a major advancement, making air conditioning systems more efficient and boosting an EV's driving range.

Daikin's new refrigerant has a boiling point of around minus 40 degrees Celsius, 10 to 15 degrees lower than the product currently used by EV makers worldwide.

As a result, the new product reduces the power required for compression, saving electricity and allowing the EV to cover a longer distance on a full charge.

By 2025, global EV production is predicted to rise to 11.84 million units, 5.3 times higher than in 2020 and advancements like this continue to increase EV's appeal.



Going from strength to strength

Over the years, thanks to strong support from our licensees and industry partners, the ARC has continued to grow in numbers and reputation.

In the year to 30 June 2021, ARC issued more than 8500 refrigerant handling licenses (RHLs) and refrigerant trading authorisations (RTAs) to successful applicants, taking our network to more than 110,000.



At the ARC, we're committed to providing ongoing benefit to licensed technicians and the community through day-to-day support, education programs and consumer information campaigns.

Increased public recognition and understanding of our industry and its impact on the environment and modern society remains a primary goal of the ARC, along with improving technician safety, training pathways and standards.

Rebates on air conditioning for vulnerable Victorians

The Victorian Government's new Home Heating and Cooling Upgrades Program will fund installation of efficient, reverse-cycle air conditioners for around 250,000 low-income and vulnerable households.

Over the past year, ARC team members have worked closely with the program's coordinators, advising on issues of compliance, installation and the relevant Australian Standards.

If you're a licensee based in Victoria, you can register your interest to become an Approved Supplier in the program, which pays a \$1000 rebate to eligible owner-occupiers and community housing providers who replace their gas, wood or electric heaters with an efficient reverse-cycle unit.

Applicants will contact you directly for a quote on a recommended system, which is then submitted through the program's online portal for approval and payment.

Financial assistance is also available to successful applicants for additional works like decommissioning existing gas heaters or upgrading a switchboard.

The three-year, \$335m initiative forms part of the Victorian Government's commitment to 7-star home efficiency standards, focusing on helping low-income households and renters of existing homes.



To register interest in becoming an Approved Supplier for the Home Heating and Cooling Upgrades Program, visit www.heatingupgrades.vic.gov.au/suppliers-expression-interest

think safe. work safe. be safe.

As National Safe Work Month comes around again this October, it's time to reflect on the importance of safety awareness in everyday work life. National Safe Work Month's annual information campaign keeps workers' awareness high by promoting health and safety in the workplace and highlighting ways to improve on current practises.

Through its licensing, registration and ongoing information programs, the ARC promotes workplace safety principles through skills development, education and awareness.

Our sponsorship of the *HVAC&R Contractors & Engineers Guide* to *Workplace Safety* supports an important information source for key work health and safety issues affecting HVAC&R contractors and engineers. A copy of the guide is sent to ARC licensees each year. If you haven't received a copy of the 2020/21 guide, visit **www.provisual.com.au/hvacr.html**





World Ozone Day – September 16

Each year, World Ozone Day reminds us just how far the world has come in phasing out ozone depleting substances.

Licensed RAC technicians around Australia have made a massive contribution, as nearly 15 million tonnes of ozone damaging carbon dioxide emissions have been avoided since the establishment of the Australian Government's refrigeration and air conditioning permit scheme in 2004. The scheme helps protect the ozone layer and to avoid climate change by reducing emissions of CFCs, HCFCs and HFCs to the atmosphere.

Refrigeration and air conditioning technicians' work minimising refrigerant leaks, and capturing and returning waste refrigerant to Refrigerant Reclaim Australia for safe disposal have contributed to reducing emissions and ozone layer recovery.

Refrigerant Reclaim Australia (RRA) aims to further improve the industry's environmental performance by reducing the level of emissions of refrigerants through its take-back program. Established in 1993, the RRA has become integral in the management of used and unwanted refrigerant, and the reduction in emissions of ozone depleting and synthetic greenhouse gas refrigerants.

Useful tips to streamline your e-application

Using the ARC's online application facility makes applying for, or renewing, your refrigerant trading authority (RTA) or refrigerant handling licence (RHL) quick and easy.

What to check before you renew

- Check when your permit is due to expire. Renewals must be made at least 30 days prior to the expiry of a current permit to avoid possible delays in the processing and granting of a new permit.
- Check your details are up-to-date on the ARC's portal. Visit www.arctick.org and go to 'change your details'.
- For RTAs, confirm RHL holders listed against the RTA are current. Use the RHL check facility at www.lookforthetick.com. au/licence-check

- If you hold a RTA and a RHL, check that you're renewing the correct permit.
- For RTAs, check there are no compliance issues pending from a permit condition check, which can hold up your renewal. If you are unsure, contact the ARC on 1300 884 483.

Handy tips

- The online application/renewal facility should be used through Google Chrome or Firefox web browsers for optimal performance. It is also best to use a PC or laptop, not a mobile phone.
- Make sure there are no symbols in the business name, for example: &, * or @ symbols can come up as errors on your application/renewal and cause delays.
- Set reminders for your permit expiry date(s). The ARC sends all permit holders renewal reminders 90 and 30 days prior to expiry. However, setting your own reminders is a smart way to ensure you don't forget to renew your permit.

If you have any questions about applying for, or renewing a permit, please contact the ARC Licensing and Customer Service Team on 1300 884 483 or enquire@arctick.org