



**Australian Government**



**Issue 30**  
October 2013

## 61 businesses can no longer buy or handle f-gas due to non-compliance



See article on  
page 3 for more!

## Mixed refrigerants

When refrigerant is removed from a system, with a view to re-using it in another system, it needs to be tested and cleaned in accordance with Australian Standards ARI 700-2004.

Impure refrigerants can, at worst, cause damage to equipment and, at best, result in lower product energy efficiency, driving up costs.

It is critical that cylinders are clearly marked with the type of refrigerant they hold, so that cross-contamination is prevented.

Different refrigerants require different cylinders. For example, some flammable refrigerant cylinders require the cylinder to be reclassified and handled as a flammable compressed gas – like LPG.

To avoid the risk of mixing refrigerants:

- Ensure correct labelling of refrigerant type in systems
- Identify refrigerant type in systems prior to recovery
- Ensure you have the correct type of cylinder and it is labelled with the refrigerant type.

## What does my ARCTick licence do for me?

FIVE ways the ARCTick licence is good for your business

- 1 ARC generates business for you:**
  - Targeted advertising connects over 75,000 potential customers to your business via the RTA business search directory per year
- 2 The people who govern the ARC are members of the RAC community**
  - The ARC Board is truly a “refrigeration and air conditioning” industry board – and one that has the best interests of the industry at heart, so that the ARC is relevant and responsive
- 3 By following your audit/compliance requirements you can actually save your business money:**
  - Keeping refrigerant cylinders capped, secure and regularly leak tested will save you money in the long run and be better for the environment
  - Maintaining regular records on refrigerant purchase, use, sale and recovery could help to identify discrepancies
- 4 The online application facility is convenient, cutting your down-time**
  - The online RTA/RHL application facility cuts down the time it takes for you to lodge and receive your licence
- 5 ARC helps you to promote your business and your professionalism**
  - ARC provides a variety of free advertising tools for you to use to better engage your customers including: stickers, hand-outs and booklets for your customers. Visit [http://www.arctick.org/promote\\_rta\\_rhl.php](http://www.arctick.org/promote_rta_rhl.php)

### In this issue

- ✓ Mixed refrigerants
- ✓ What does my ARCTick licence do for me?
- ✓ Refrigerant recovery works in partnership with Councils
- ✓ Refrigeration and air conditioning – a major player in the economy
- ✓ Customers not listening when you say leaks must be repaired?
- ✓ Thinking of working with alternative refrigerants?
- ✓ 61 businesses can no longer buy or handle f-gas due to non-compliance
- ✓ Penalties increase for breaches of the Ozone Act or Regulations
- ✓ R32 refrigerant
- ✓ Flammable refrigerants safety guide released by AIRAH
- ✓ Summer’s on the way! Have you got everything organised?



All Greenhouse Gas emissions associated with producing this product have been offset.

This product is 100% Carbon Neutral

# Refrigerant recovery works in partnership with Councils

In partnership with ARC licence and authorisation holder Matt Ramage (Full RAC), Gladstone Regional Council has set up a free 'white goods' drop-off service for their residents. The aim being to collect air conditioners and fridges, recover the refrigerant, then safely – and legally – send them to the scrap metal pile for recycling.

Council's Manager of Waste Services, - Charlie Sotiris said this is a cost effective way of running the program, providing operational efficiency by stockpiling refrigerators before getting Matt in to recover the refrigerant. The free service discourages illegal dumping of refrigerators and/or the discharge of gas to the atmosphere before disposal.

This is a paid service, with Matt keeping the refrigerant he recovers which he then disposes of at participating refrigerant wholesalers who provide rebates or credits. The money or rebate for returning recovered refrigerant increased by 50% in July 2013.

The ARC is communicating with Councils, waste operators, metal recyclers, demolition businesses and auto repair shops to make sure the message of 'refrigerant recovery' is being heard loud and clear.

And the message for ARC-licensed businesses and technicians is – be proactive about starting partnerships with your local Council and Waste Transfer stations to help them with refrigerant recovery. Your next job might be just around the corner!

# Customers not listening when you say leaks must be repaired?

**The ARC is working with The Department of the Environment to develop a handout for licence holders to give to customers outlining their obligation to have leaks in their refrigeration and air conditioning systems fixed before any new gas can be introduced.**

The handouts will detail the importance of using licensed technicians, the potential for penalties if fluorocarbon gas is leaked into the atmosphere, and the fact that refrigerant leaks found in air conditioners/fridges must – by law – be fixed before any new gas is introduced. The handouts will help to emphasise this particular point to customers who may look to ignore the facts and risk using a sub-par operator willing to ignore the regulations.

These free handouts will be available prior to Christmas. The ARC will advise you when they are ready for ordering and will be available while stocks last.

# Refrigeration and air conditioning – a major player in the economy

Cold Hard Facts 2 was released recently and presents the most up-to-date findings of a detailed examination of the RAC industry in Australia.

It was prepared by Expert Group for The Department of the Environment.

Cold Hard Facts 2 – The Australian RAC industry at a glance:

- Employs around 173,000 people, employed in more than 20,000 businesses
- \$5.9 billion spent on purchasing and installing new equipment in 2012
- \$533 million spent on refrigerant gas in 2012 (at 2013 prices)
- 43,000 tonnes of synthetic refrigerant gas in use
- 4,800 tonnes of low global warming potential refrigerants in use

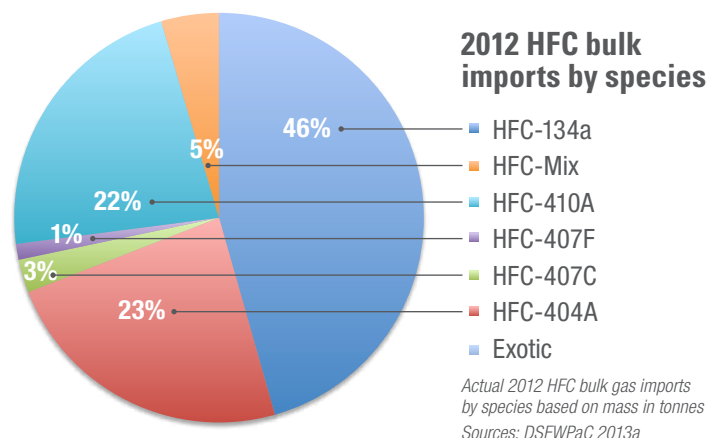
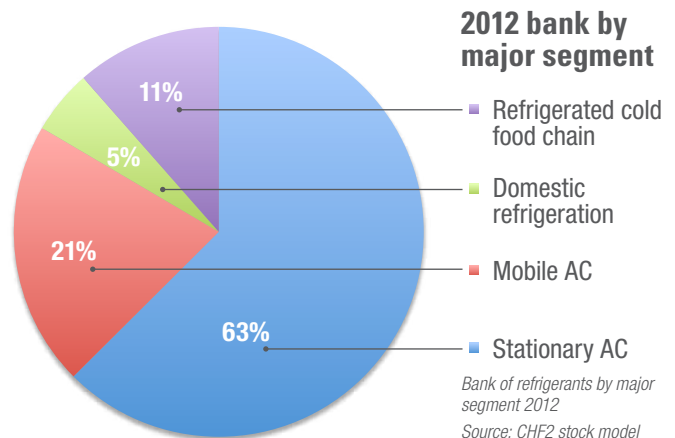
The use of RAC equipment makes up almost 22% of all electricity use in Australia. Through proper installation and servicing of RAC equipment, and by ensuring leaks of refrigerant gas are minimised, RAC systems will be able to work more efficiently and effectively.

According to the study, right now over 43,000 tonnes of synthetic refrigerant gases (ozone depleting substances and synthetic greenhouse gases) are in use in Australia. That's approximately 89% of all refrigerant gas currently being used.

It is an important figure to remember, as the ARCTick licence is in place to ensure these high global warming potential (GWP) refrigerants are not released into the atmosphere – both now, and into the future.

That's why it's more important than ever, when it comes to fluorocarbon air conditioning/refrigeration systems, that only ARC-licensed technicians – appropriately qualified to do the job – are legally allowed to install, maintain and decommission these systems.

Visit The Department of the Environment's website at [www.environment.gov.au](http://www.environment.gov.au) and enter Cold Hard Facts 2 in the search bar to view the report in full.



# Thinking of working with alternative refrigerants? Training available across the country

Alternative, or Low Global Warming Potential (GWP), refrigerant training in safety awareness and servicing of stationary refrigeration and air conditioning systems is becoming more available for existing workers across the country.

Low GWP refrigerants have their own unique characteristics and can be flammable and/or toxic, or have to operate at extreme pressures. To meet Work Health and Safety obligations, existing refrigeration and air conditioning workers may require up-skilling to safely handle alternative refrigerants like hydrocarbons, carbon dioxide and ammonia during the installation and maintenance of stationary refrigeration and air conditioning systems.

EE-Oz Energy Skills Australia has produced a variety of competency standard units for technicians to consider:

## Hydrocarbons

- Apply safety awareness and legal requirements for hydrocarbon refrigerant
- Service and repair self-contained hydrocarbon air conditioning and refrigeration systems

## Carbon Dioxide

- Apply safety awareness and legal requirements for carbon dioxide refrigerant
- Repair and service carbon dioxide refrigeration systems
- Repair and service self-contained carbon dioxide refrigeration and heat pump systems

## Ammonia

- Apply safety awareness and legal requirements for ammonia refrigerant
- Repair and service ammonia refrigeration systems
- Operate Ammonia Refrigeration plant

To view these competency standard units in more detail and to see which registered training organisations are hosting these units, visit the EE-Oz Energy Skills Australia website [www.ee-oz.com.au](http://www.ee-oz.com.au)

## 61 businesses can no longer buy or handle f-gas due to non-compliance

In the past 12 months, a total of 261 Refrigerant Trading Authorisation (RTA) re-applications were refused due to ongoing non-compliance issues.

Through a collaborative approach between the business and ARC in the last year, we have helped 200 of these businesses to become compliant.

However, 61 businesses are no longer legally 'in business' when it comes to the purchase and handling of fluorocarbon refrigerant.



## Penalties increase for breaches of the Ozone Act or Regulations

Penalties have increased for breaches of the Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 (the Act) and the Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995 (the Regulations).

**Not holding the relevant permit** A person who imports, exports or manufactures fluorocarbon refrigerant (either in bulk or pre-charged into equipment) without the appropriate licence (or exemption) is committing an offence under section 13 of the Act and may be fined up to \$85,000.

Under Regulation 111, it is an offence to handle refrigeration and air conditioning (RAC) equipment containing fluorocarbon refrigerant without a refrigerant handling licence (RHL) and a penalty of up to \$1,700 may apply.

Under Regulation 112, it is an offence to acquire, possess or dispose of bulk fluorocarbon refrigerant without a Refrigerant Trading Authorisation (RTA). A penalty of up to \$1,700 may apply.

**Unlawful discharge of fluorocarbon refrigerant** It is an

offence under section 45B(1) of the Act to act in a way that results in the unlawful discharge of ozone depleting substances (ODS) / synthetic greenhouse gases (SGG), including fluorocarbon refrigerant. A penalty of up to \$51,000 for an individual or up to \$255,000 for a corporation may apply.

**Breaching permit conditions** If an RHL holder breaches a condition of that licence, it is an offence under Regulation 136 and a penalty up to \$1,700 may apply. If an RTA permit holder breaches a condition of that permit it is an offence under Regulation 142 and a penalty up to \$1,700 may apply.

**Effects of breaches on gaining future permits** Under Regulation 122 an individual or corporation who is convicted of an offence under the Act or Regulations, or who has had a permit or licence cancelled, may be considered unfit to hold a RAC industry permit or licence. As a result their permit or licence may be refused on reapplication or, in accordance with Regulation 123, their permit or licence may be cancelled.

Penalties are as per the Ozone Protection and Synthetic Greenhouse Gas Management Act 1989, Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995 and the Crimes Act 1914 (Cth).

# R32 refrigerant

With R32 refrigerant likely to become more prevalent in imported split-system air conditioning equipment in the near future, it is important that technicians are aware of its properties and how to use it safely.

A derivative of R410a, R32 is not ozone depleting and has a smaller global warming impact, however, it is classified as mildly flammable by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHREA).

R32 refrigerant is included in the list of prescribed substances covered in the Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 and therefore requires a handling licence and trading authorisation from the ARC.

Further information on the safe handling of R32 is available from equipment manufacturers and general advice is available in the recently released AIRAH Flammable Refrigerants Safety Guide.

# Flammable refrigerants safety guide released by AIRAH

ARC-member the Australian Institute of Refrigeration, Air conditioning and Heating (AIRAH) – with the assistance and support of The Department of the Environment – has released the Flammable Refrigerants Safety Guide.

The guide was developed by independent organisations and stakeholders and covers the management of health and safety risks associated with handling flammable refrigerants.

The Flammable Refrigerants Safety Guide specifically applies to all stationary (while in use) refrigerating systems of all sizes, including air conditioners and heat pumps that are to be charged with flammable refrigerants with a refrigerant classification of A2 or A3, or any other refrigerant that meets the criteria to be classified as an A2 or A3 refrigerant.

The guide does not cover non-stationary (while in use) applications of flammable refrigerants such as in-vehicle air conditioning (cars, trucks, busses, trains, boats, aircraft) or transport refrigeration (road, rail, air, marine).

The Flammable Refrigerants Safety Guide is available to download FREE from the “Technical Resources” section of [www.airah.org.au](http://www.airah.org.au)

## Summer's on the way! Have you got everything organised for another bumper season?

Before the summer season sees most RAC professionals hitting their stride, now is the time to take stock of what you will need to do to make sure your operation is running smoothly and efficiently, and to make sure you're ready when the ARC ramps up its promotions of RTA and RHL holders this summer.

A few ARCTick licence-related items for you to check off have been listed below:

### Will your RTA/RHL be up for re-application soon?

- Make sure to re-apply before expiry to ensure you don't have to apply 'as new' and provide all your details and proof of qualifications again. Remember “no RTA means no gas”
- If you let your RTA/RHL expire you will be issued with a new number, so don't risk losing your Licence/Authorisation number and re-apply before expiry
- Check your RTA/RHL status by visiting [http://www.arctick.org/online\\_services.php](http://www.arctick.org/online_services.php) and go to the 'change of details' section, or contact 1300 88 44 83

### Make sure your business is following its legal, RTA requirements:

- Updated refrigerant records (quarterly – bought, sold, recovered)
- Updated RAC equipment list and maintenance records
- Ensure you have a risk management plan for handling/storage of refrigerant
- Are your cylinder leak test and test date records current?
- Have you notified ARC of any changes of staff who hold a Refrigerant Handling licence?
- Are you displaying your RTA number on all RAC services advertising (including vehicle, stationery, print ads etc.)?

Don't be a 'wally' when it comes to re-applying for your authorisation/licence in time, and keeping your records accurate and up-to-date. After all, when things start sliding in the work place, things can start sliding on the job! Photo below courtesy of RHL holder Dave Bazen, WA.

