



Import licence holder found in breach of the Act

A company that failed to report its imports and exports of ozone depleting substances and synthetic greenhouse gases – and equipment containing those gases – has been found in breach of *The Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (the Act).

The Department of the Environment commenced legal proceedings against Ayre Conditioning Pty Ltd after the company failed to submit quarterly reports for three consecutive reporting periods by the due date, despite receiving multiple notifications and warning letters.

In December 2013, the Federal Court of Australia declared that Ayre breached the Act and the Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995 (the Regulations), by not submitting quarterly reports for the periods October to December 2012, January to March and April to June 2013.

In addition to the declaration, the Department was awarded costs. The Australian Government administers a national compliance program to monitor and enforce the licensing and reporting requirements under the Act and Regulations. Ozone depleting substances and synthetic greenhouse gases are monitored throughout the supply chain.

In cooperation with the Australian Customs and Border Protection Service, the Department has a range of monitoring and inspection arrangements in place to ensure compliance and undertake enforcement activities.

Breaches of the Act and Regulations are investigated and may result in an infringement notice or prosecution. A licence may also be cancelled if the licensee is considered to be no longer a fit and proper person to hold a licence, or has contravened a condition of the licence.

The Department urges all licence holders to meet their responsibilities under the Act and Regulations.

For further information log on to:
www.environment.gov.au/topics/environment-protection/ozone

Slip, Slop, Slap and Tick – the ultimate protection from the sun



When you slip, slop, slap to protect yourself from the hot sun, it's reassuring to remember that holding a licence/authorisation means you are also doing your part to help cover Australia with sunscreen and protect people and the environment from the sun's harmful UV rays.

The ARCTick licence scheme was originally set up to minimise emissions of refrigerant gases into the atmosphere. Fluorocarbon refrigerant gas, when released into the atmosphere, can damage the ozone layer, which protects us from the Sun's harmful UV rays that can cause skin cancer as well as damage to crops and other plants.

Right now, over 43,000 tonnes of ozone depleting substances and synthetic greenhouse gases are in use in Australia as refrigerants, according to the most recent industry study Cold Hard Facts 2. That's approximately 89% of all refrigerant gas currently being used, so it's a good thing you are playing your part to ensure these refrigerants are not released into the atmosphere – both now, and into the future.

And as an ARCTick licence holder you're definitely not alone. At the end of last financial year there were over 55,000 licence holders and 17,000 authorisation holders. In fact in the last year, licences and authorisations have increased by a total of 5%.

Visit the
ARC stand at
ARBS in May –
we'll see you
there!

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Licence scheme strengthened with regulation changes

From 1 January 2014 changes were made to the application of the fit and proper person test in the Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995, as it applies to the assessment of refrigerant handling licence and refrigerant trading authorisation applications.

In March 2012, the Department consulted with key stakeholders on suggestions for streamlining the fit and proper person tests in regulations 122, 243 and 314 to align the requirements of the Regulations more closely to the equivalent requirements in the Ozone Protection and Synthetic Greenhouse Gas Management Act 1989.

Recent Changes

- A single fit and proper person test relating to RAC industry permits, feedstock permits and fire protection industry permits – Regulation 102.
- Broadening the financial history test and clarifying the application of the test to a body corporate.
- Placing a time limit on consideration of past convictions as part of the fit and proper person test:
 - for consideration of prior convictions, any offence carrying a penalty of 6 months (rather than a year) should be considered.
 - any civil penalty order made against a person or an executive officer of a body corporate applying for a permit, in the 10 years immediately preceding the application. Civil penalties were introduced to the Act in 2010.

Broadly speaking, the fit and proper person requirements are intended to ensure that licence and authorisation holders have the character and uphold the principles necessary to ensure the quality and integrity of their work is in-line with the principles of the ARC licence scheme.

When the ARC is deciding whether a person who holds, or is applying for, a RAC industry permit is a fit and proper person to hold the permit, we may take into account matters including – but not limited to – the following:

- (a) any conviction of the person for an offence against the Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 or the Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995;

- (b) in the case of an individual:

- (i) any conviction of the person for an offence under a law of the Commonwealth, of a State or of a Territory that is punishable by imprisonment for a period of one year or longer; and
- (ii) whether the person is bankrupt;

- (c) in the case of a corporation:

- (i) any conviction of the corporation for an offence under a law of the Commonwealth, of a State or of a Territory that is punishable by a fine of 50 penalty units or more, being an offence committed at a time when a person who is a director, officer or shareholder of the corporation was a director, officer or shareholder of the corporation; and
- (ii) whether the corporation is an externally administered body corporate (within the meaning of the Corporations Act 2001);

- (d) if any statement by the person in an application was false or misleading in a material particular – whether the person knew that the statement was false or misleading;

- (e) whether the person has contravened a condition of an RAC industry permit;

- (f) whether the person held an RAC industry permit that was cancelled.



The national licence is dead... long live the national licence

The attempt to 'nationalise' current State-based occupational licences has failed with the majority of States deciding not to pursue the proposed National Occupational Licensing Scheme (NOLS) reform, previously scheduled to be implemented in 2014.

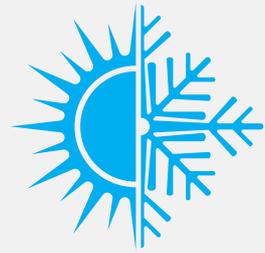
In a comment by COAG, it was noted that most states 'identified a number of concerns with the proposed NOLS model and potential costs. States instead decided to investigate approaches that would increase labour mobility and deliver net benefits for businesses and governments.'

It is important to note that the RAC sector is unique as the ARCTick national licence scheme has been in place since 2005.

Other factors were also noted which demonstrated that the NOLS proposals may not have been of benefit to the RAC sector:

- The adoption of NOLS would have only applied to 2-3 states, with the ARC scheme continuing to apply to all states
- Limited opportunity for significant efficiencies due to policy remaining a State responsibility

The 'good oil' on R32 refrigerant



In this edition's Technical Section we thought we'd get some expert advice on R32 refrigerant from Fujitsu and Daikin – manufacturers who are both currently producing split-system air conditioners charged with R32.

Peter Cashel, National Product Manager at Fujitsu General and Blake Mortimer, Engineering Support at Daikin kindly provided valuable answers to some frequently asked questions.

What are some of the differences between systems that work with R32 and R410A?

Flammability

Daikin R32 is classified as Mildly Flammable. As a result, the electrical / electronics of the air conditioner must be designed so that any potential "source of ignition" (i.e. arc or spark) is not present in areas of the equipment where refrigerant could leak.

Operating Pressure and piping

Fujitsu R32 has a very similar operating pressure to R410A with R32 only being a slightly higher value. Because of this, there are suitable copper pipes already available at trade outlets. The pressure vessel ratings are higher meaning vessels in products such as the compressor and accumulator must be specifically designed and manufactured for use with R32 Refrigerant.

Cylinders

Daikin The required refrigerant cylinder design pressure for R32 is 5.481 MPa which is just above the 5.4 MPa design pressure of current R410A cylinders and as such existing R410A cylinders are not suitable for R32. New cylinders are being manufactured and they will be fitted with a Left Hand Thread valve outlet to differentiate them from current A1 class refrigerants such as R410A and R22.

ARC It would also be recommended to check the 'transportation of dangerous goods' requirements around the transportation of cylinders containing flammable refrigerants.

Tools

Fujitsu Many tools used for R32 air conditioners are common with R410A, for example gauge manifolds, charging hoses, weighing instruments, pipe benders, pipe cutters, flaring tools and torque wrenches. It's also recommended that technicians and installers check that their vacuum pump and electronic leak detector are compatible with systems that use R32. A refrigerant recovery unit or vacuum pump suitable for use with R32 can also be used with R410A but not necessarily the opposite way. Always check the statement of the supplier.

Can a R32 system be charged with R410A or vice versa?

Daikin The simple answer is no. The operating characteristics of both refrigerants are different and the systems have been designed accordingly. One example is that the compressor runs hotter for a R32 system so the compressor design will be different.

Safety precautions – as they differ from systems with R410A

Daikin In general the installation of an R32 system is very similar to the installation of a system containing R410A. However some extra caution is needed to ensure no ignition of a flammable mixture of air and refrigerant can occur through safe handling (avoiding of leaks), ventilation (avoiding of concentrations) and a safe work area (elimination of potential sources of ignition).

Fujitsu The main issues will be for technicians to follow their normal safe work procedures that should already be in place when working on any refrigeration system containing a Hydro Fluoro Carbon. This includes the use of nitrogen while brazing and checking for sources of ignition prior to handling the refrigerant.

Daikin A ventilation unit may be required during installation works indoors or in confined spaces to avoid a flammable mixture of air and refrigerant.

Daikin As required by State Work, Health and Safety Regulations, technicians must perform a risk assessment of the required works (i.e. installation or repair) before commencing. When repairing or installing R32 equipment the assessment must include consideration of risks associated with flammable refrigerants.

Daikin As with any air conditioner or refrigerating equipment the maximum refrigerant charge per room volume requirements of AS/NZS 1677.2 need to be observed. For R32 the practical limit is currently 54 grams per cubic metre.

ARC *The Flammable Refrigerants Safety Guide* is available for download from the AIRAH website – www.airah.org

Do technicians need extra training to handle R32?

ARC The characteristics of R32, being a mildly flammable refrigerant, are different to many of the mainstream refrigerants currently in use. Accordingly, technicians are well advised to undertake training consistent with the properties and characteristics of mildly flammable refrigerants, like R32.

ARC Summer Advertising – building your business

Over the summer period the ARC conducts numerous cost-effective advertising activities to promote licensed air conditioning and refrigeration installation and servicing (RAC and Auto). Online marketing, local paper advertising and several editorial features have been published so far and the results have been very encouraging:



Four questions to ask before you purchase an air conditioner

This quick reference guide provides you with important questions to ask to ensure you select the right air conditioner for your needs, and that it is installed legally and correctly.

ARC Air Con Checklist

ARC driving customers to you...

KPIs	2013/14	Difference from last year
Consumer website visits	64,853	Up 46%
RTA directory use	2,624	Up 3%
Licence check use	2,401	Up 20%
Info guide downloads	7,261	Up 44%

Air Con retailers promoting licensed installation

Over 1000 air conditioner retailers received copies of the ARC Air Con Checklist this summer. The ARC encouraged retailers to stock the Checklist for customers to read while they are browsing in the store. As well as important questions regarding room size, type of home, and energy efficiency considerations, the Checklist highlights the significance of using licensed technicians to install and maintain fluorocarbon air conditioners.

This will raise awareness among customers about the importance of having a licensed technician install and service their air conditioner, to ensure it is installed legally as well as to improve the standard of installations and maintenance.

Free promotional items still available

We still have plenty of free promotional items for you in stock. Visit www.arctick.org/promote_rta_rhl.php to see what's available or contact the ARC on 1300 88 44 83.

"I have used these free promotional items before and they have enhanced my business reputation in and around the Shepparton area."

Simon Cowell Refrigeration

Swingtag

Refrigerant type used: _____

Refrigerant oil type used: _____

Ultraviolet dye added: _____

Service person name: _____

Service person ARC licence no: _____

Business name: _____

Date of service: _____

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"We have recently received a batch of your AC service stickers. We think they are great and really like using them."

Dore Bros Garage

Your record of air conditioning service

Your air conditioning was serviced/repaired on: ____/____/____

Service person ARC licence no: _____

Next service due: ____/____/____

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AC service stickers

European F-Gas agreement to be introduced in 2015

Similar to the regulation of fluorocarbon gas in Australia under the Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995, Europe has its own regulations in place to minimise fluorocarbon refrigerant emissions into the atmosphere.

The European Union's regulations initially aimed to improve leak-tightness of equipment containing f-gases. Measures include: labelling of equipment containing f-gases, training and certification of personnel and companies handling these types of gases, containment and proper recovery.

More recently, following a review of existing regulations, the European Parliament reached an agreement on new refrigerant bans to be introduced as early as 2015. A phase-down target of 79% for HFC gases was one of the main decisions reached. As well, a service and maintenance ban on high-GWP refrigerants, over 2500 GWP, will come into effect in 2020.

PRIME time for the RAC sector

Developed by a coalition of key stakeholders from within the Australian HVAC&R industry and facilitated by ARC member The Australian Institute of Refrigeration, Air conditioning and Heating (AIRAH), PRIME is an initiative designed to reduce the industry's environmental impact.

The industry understands that future HVAC&R must be low-impact and low-carbon.

PRIME is an acronym for the five pathways to transition to a low-emission future: **P**rofessionalism, **R**egulation, **I**nformation **M**easurement, and **E**mission abatement. A considerable range of industry-sourced solutions have been allocated into one of these five categories.

The initiative has evolved from a series of cross-industry stakeholder summits and discussions on low-emission strategies for the sector. AIRAH has facilitated the project's evolution to date. This includes the development of a discussion paper proposing more than 200 industry-suggested solutions and actions designed to lead the industry to a low-emission future.

These ideas and actions have been formulated into the PRIME Action Plan. The vision for PRIME is to have an Australian HVAC&R industry that is highly skilled and professional, safe, cost-effective and environmentally effective.

For more information about PRIME, go to www.airah.org.au/PRIME

