Newsletter for the Refrigeration and Air Conditioning Industry

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COOLCHANGE

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ARC Regional Audits – We've been everywhere man

ARC Field Officers cover a lot of ground. With Field Officers spread throughout the country, it's not uncommon for businesses and technicians in remote areas to think we might not make it to see them.

While we can't be everywhere at once, we make a concerted effort to reach remote places on a regular basis.

Just recently, Perth-based ARC Field Officers Kelvin Sharp and Robert Clark did a 1000km round trip to Albany, WA where they met with many businesses, providing guidance and advice on compliance, as well as conducting investigations into nonlicensed activity.

In general, the ARC found the businesses and people we met during the trip to be courteous and eager to do the right thing.

It was great to see that most businesses had their records in place and had a good grasp of what to do. Some people actually had records of where they had used small amounts of refrigerant, which isn't required for compliance – only bulk (cylinder) amounts of refrigerant need to be recorded.

There were some questions about the use of alternative refrigerants, including flammable hydrocarbons refrigerants, which are not regulated by the ARC under the licence scheme. The ARC advises businesses to check out the AIRAH Flammable Refrigerants Safety Guide 2013 which provides a good basis to learn about how to handle these types of refrigerants. We also advise to contact the work health and safety authority in your state or territory to learn about specific requirements for handling flammable refrigerants in your jurisdiction. The Flammable Refrigerants Safety Guide 2013 is available for download on the AIRAH website - www.airah.org.au



Australian Refrigeration Council www.arctick.org ARC Hotline: 1300 88 44 83



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Trade qualification overhaul for an evolving industry

A group of key refrigeration and air conditioning (RAC) representatives are currently looking at trade qualifications for the RAC industry, with a view to upgrade the approach to training before people enter the industry.

As RAC system designs continue to evolve, there is a need to train technicians to support that evolution. This, in-turn, will ensure the industry continues to grow and puts in place foundations to help sustain that growth.

E-Oz Energy Skills Australia has set up a steering committee to develop revised qualifications and competency standard units for the RAC trade. The steering committee is made up of representatives from AIRAH, AMCA, AREMA, RACCA and ARA – as well as leading training organisations and regulatory bodies, including the ARC.

ARC committee representative George Thompson is keen to see training and qualifications better reflect new and emerging technologies. "We often see new technologies enter the market, but to use them properly, they require additional training which doesn't necessarily fall under the current umbrella of training provided for various RAC qualifications. We want to bridge that gap as much as possible, and make the RAC sector a highly-skilled and desirable sector to work in," Thompson said.

Revised or new qualifications will need to include the latest standards, codes, regulations, practices and technologies such as: new compressor technologies, new refrigerant metering devices, natural and synthetic flammable refrigerants, EC motors and controls, energy saving and efficiency, electronic controls and digital controls. Further areas that will be looked at include:



E-Oz Energy Skills Australia has begun consultation meetings across the country with the RAC industry and training providers. Meetings to come are listed below:

Location	Training Provider Meeting	Industry Meeting
NSW – Sydney	Wed 25 June	Tues 24 June
NSW – Newcastle	Thurs 31 July	Wed 30 July
NT – Darwin	Tues 15 July	
QLD — Brisbane	Wed 23 July	Thurs 24 July
QLD — Cairns	Thurs 10 July	
SA – Adelaide	Fri 4 July	Thurs 3 July
TAS – Hobart	Tues 5 Aug	
VIC – Melbourne	Fri 27 June	Thurs 26 June
WA – Perth	Mon 30 June	Tues 1 July
For more information, visit E-Oz Energy Skills Australia's project website: http://t.co/hGDoo9rN9X		

Ozone and Synthetic Greenhouse Gas Act review Invitation for public submissions

Australia has a long history of success in reducing emissions of ozone depleting substances and synthetic greenhouse gases through working in partnership with businesses that supply and use these gases. While the Ozone Protection and Synthetic Greenhouse Gas legislation has been successful to date, it has not been reviewed since 2001. On 23 May 2014, the Terms of Reference for the Ozone legislation review were released for public comment. The objectives of the review are to:

- Identify opportunities to improve and streamline the operation of the Ozone Acts including reducing regulatory compliance costs for business and the community
- Identify opportunities to reduce emissions of ODS and SGGs in line with international efforts.

The Department of the Environment invites written submissions responding to the Terms of Reference from all interested businesses and members of the community. Submissions on the Terms of Reference are due by 18 July 2014. Further information on the Ozone legislation review, including access to the Terms of Reference and submission cover sheet, is available at: www.environment.gov.au/ protection/ozone/legislation.

For more information, please contact the Ozone and Synthetic Greenhouse Gas Policy Team at: ozone@environment.gov.au







ARC at **ARBS**

The ARC would like to say thank you to all the people who took the time to visit our stand at the recent Air Conditioning, Refrigeration and Building Services trade exhibition (ARBS) in Melbourne.

With over 75,000 RAC professionals Australia-wide either licensed or authorised through the ARC, it was important that we had a presence at ARBS to ensure all questions were answered, and feedback was responded to, directly.

With help from ARC Field Officers Clive Shaw, Rod Cumming and Laurie Rutter – we made sure we had the knowledge and expertise on hand to help with all licence-related enquiries.

Questions regarding R32 refrigerant, licensing of all refrigerants, ARC promo materials and licence entitlements were all popular, as well as guidance on worksite compliance with the regulations.

Projections of HFC use in Australia

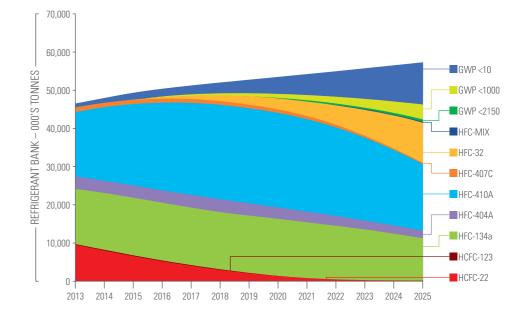
A report for the Australian Government Department of the Environment shows that a major transition away from high global warming temperature refrigerants will happen over the next 10 years. The report concludes there are already a number of lower global warming potential alternatives being introduced to the market that should steadily reduce carbon dioxide emissions over time. There are viable alternatives available now, or are being readied for commercial release in the next few years, within one to three years for the majority of present day uses.

The Department of the Environment engaged the Expert Group to assess the Australian industry's capacity to adapt to a proposed global agreement to phase-down imports of hydrofluorocarbons (HFCs) under the *Montreal Protocol on Substances that Deplete the Ozone Layer.* The phase-down would avoid a very significant increase in use of HFCs, particularly in developing countries. The phase-down would use the same approach that has been so successful in phasing out chlorofluorocarbons and hydrochlorofluorocarbons.

The Expert Group assessed a range of alternatives including, low GWP synthetic refrigerants that are nearing commercialisation or are still under development. While a phase-down of HFCs is in the early stages of negotiation, gas manufacturers report testing of approximately 50 new substances, to deliver replacement gases for all of the main uses of HFCs.

The report develops projections of demand for HFCs across all the major applications out to 2025. Overall the total bank of refrigerant gases is expected to grow at least as fast as the economy. The study predicts that the total bank of gases will grow by more than 23% out to 2025, increasing from 46,500 tonnes to 57,200 tonnes. During this time a significant transition to lower global warming potential alternatives will occur. While there may be a move towards lower global warming potential refrigerants, HFCs will still make up a large proportion of the refrigerant bank over the projected period. Therefore appropriate qualifications, adequate training and a national ARCTick licence will continue to contribute towards reducing emissions of synthetic greenhouse gases. This change is illustrated below. The study concludes that Australian industry would be able to meet a proposed HFC phase-down. The transition to new technologies could be accelerated with a mix of incentives to address technical capacity, industry standards, human resource and economic issues.

The full report is available from the Department's website: www.environment.gov.au/protection/ ozone/publications/hfc-consumptionaustralia-2013



TECHNICAL

R32 – Safety and Fact Sheets

Continuing on with our rolling coverage of R32 refrigerant, Steve Smith from TAFE NSW provided Cool Change with some valuable information on R32, specifically in the areas of safety for the refrigeration and air conditioning (RAC) industry.

Safety

R32 is currently placed in the category of A2 – lower flammability. This is within a scale from A3 (higher flammability) to A1 (no flame propagation), as per ISO and Australian Standards classifications.

With regard to toxicity, R32 is classified as having low-toxicity in its manufactured state, as per ISO and Australian Standards classifications. However, when R32 is exposed to high temperatures (e.g. an oxy-acetylene flame), it decomposes into three toxic substances: Carbon Monoxide, Carbon Dioxide and Hydrogen Fluoride, with Hydrogen Fluoride converting to Hydrofluoric acid on contact with moisture.

HFC refrigerants (e.g. R134a, R404A, R410A) will also decompose to the same three toxic substances too, as they all contain Hydrogen and Fluorine.

Training

R32 is a scheduled substance under the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* and therefore a person must possess a national ARCTick licence if they want to work with RAC systems containing R32. This means, either a Certificate II in Split System installation or the full Certificate III is necessary, depending on what licence-type is required.

The Western Sydney Institute has recently entered into a contract with the Air conditioning & Refrigeration Equipment Manufacturers Association of Australia (AREMA) and the National Electrotechnology Industry Skills Council known as E-Oz Energy Skills Australia to produce a training manual and national course specifically aimed at the introduction of the new range of A2 refrigerants entering our industry.

A great reference for technicians is the industry-endorsed Flammable Refrigerants Safety Guide 2013 produced by AIRAH which outlines the health and safety risks associated with RAC equipment and systems that use flammable refrigerants – including R32. This is available to download on the AIRAH website – www.airah.org.au

Fact Sheets

You can also access useful Fact Sheets – developed by AIRAH and based on the Guide – for the following topics:

- Designing systems for flammable refrigerant
- Installing systems with flammable
 refrigerant
- Operating flammable refrigerant-based systems

These Fact Sheets are available from the ARC website **www.arctick.org/flammable** and the AIRAH website.

ARC supporting RAC businesses at Facility Managers' Expo

Over 4–5 March, the ARC exhibited at the Total Facilities Expo in Melbourne. This Expo is the premier event for Facility Managers in Australia.

The ARC has identified Facility Managers as significant stakeholders in the refrigeration and air conditioning (RAC) chain, as they are responsible for hiring businesses/ technicians to maintain RAC systems in very large and complex scenarios.

Above all, we were promoting the legal obligations and benefits of Facility Managers using licensed technicians and Authorised businesses. Over the two days, the ARC stand had a steady number of visitors from building managers to Local Council representatives and RAC businesses. The main topics the ARC discussed with Facility Managers included:

- R22 phase-out
- Refrigerant Recovery
- Energy Efficiency
- Cost of refrigerant gas
- Use of alternative refrigerants

Image: Guests attending seminar at Total Facilities Expo 2014



What makes a customer choose one 'tradie' over another?

Using online data collected by the ARC, as well as results from a recent NSW Fair Trading survey of homeowners, we have highlighted some key findings which may benefit your business.

Are you doing what you can to attract customers to your business? Find out!

According to the NSW Department of Fair Trading *'Licensing Research: Community Survey, September 2013'* the following consumer trends were identified when it comes to choosing tradespeople.

How do people find tradespeople?

- Word-of-mouth recommendation
- Past experience
- Google/Internet search
- Local Newspaper
- White/Yellow Pages

What makes people choose one tradeperson over another?

When selecting a tradesperson, over three quarters of homeowners rated the following characteristics as either very important or essential (for unplanned repair/service work):

- Whether they are licensed
- Responsiveness/timeliness
- Qualifications

The full survey can be found on the NSW Department of Fair trading website at www.fairtrading.nsw.gov.au

What business attributes do people look for?

When selecting a business, homeowners rated the following characteristics as either very important or essential (for unplanned repair/service work):

- Reputation of the business
- Whether business is local
- Number of year's business has been around
- Whether business has a website
- Website appearance
- Size of business

Online behaviour

What are your customers searching for online?

RAC-related online (Google) search terms in Australia (annual):

- In relation to all RAC key words: "fridge", "fridges" and "refrigerators" are the most searched words
- 'AC' is the most popular term used by consumers to search for things related to air conditioning
- "Portable air conditioner" is the most popular specific *air conditioning* related term. Followed by 'air conditioning service'
- Many people search for the "whirlpool" online customer feedback forum to get customer-to-customer feedback and advice on tradespeople, products and services. If you aren't familiar with this forum, check it out. Reviews of your service can go a long way good and bad!

What devices are people using to search online?

According to data collected by ARC during the online summer campaign 2013/14:

- 72% of people used a PC (home/work computers)
- 16% of people used a tablet device (e.g iPad)
- 12% of people used a Mobile Phone

ARC advertising results

The results of the ARC summer advertising campaigns have demonstrated that now, more than ever, consumers are looking for the ARCTick before they use a licensed technician and authorised business.

- Visits to RTA directory website Up 50%
- Customers accessing licence-related info before purchase/install/service Up 31%
- Online ARC Licence checks Up 14%

These results are particularly encouraging as they highlight the foothold "Look for the Tick" is now getting with the general public, a foothold that the ARC will continue to secure for the 75,000 licence and authorisation holders out there doing the right thing.

ACCC – Proposed carbon tax repeal and your customers

The following article was written by the Australian Competition and Consumer Commission (ACCC) for the Cool Change newsletter

It is time to start thinking about what the possible repeal of the carbon tax from 1 July means for your business in terms of prices and the claims you make to customers.

After the repeal, the equivalent carbon price levy will no longer apply to synthetic greenhouse gases (SGGs). The ACCC believes competition between firms will see that reduced carbon tax costs lead to reduced prices.

The ACCC's role is about ensuring customers are treated fairly. Customers should get the benefit of the repeal as soon as possible no matter where they sit in the supply chain.

We expect all SGG businesses to pass on the cost savings from the carbon tax repeal to customers. This includes the benefit of any equivalent carbon price levy funds collected before repeal which are not ultimately paid to government.

There is little to worry about if you pass on the price benefits of the repeal to customers promptly. However, if you wait to act until you have seen what your competitors are doing, you may attract our interest.

If the repeal becomes law, the ACCC expects:

- prices to come down by at least the equivalent carbon price levy amount
- businesses to be able to explain to the ACCC how its SGG prices are

determined and to provide historical information on stock, purchase/import dates and prices.

In addition to the existing laws banning anti-competitive and unfair trade practices, the repeal bills contain new provisions prohibiting companies from taking advantage of their customers. The new price exploitation provision will prohibit companies from charging 'unreasonably high' prices for regulated goods such as SGGs. The ACCC is already monitoring prices in the SGG sector to assess the general effect of the carbon tax scheme in Australia.

When working out costs and prices, it may be tempting to rely on what competitors are doing. While general industry information may assist you in your calculations, it is important that you understand the actual impact on your own business. As always, be cautious in communicating with competitors and ensure you set your prices independently. Remember that anything you say to customers about prices and the effect of the repeal must be truthful and have a reasonable basis. There are existing provisions prohibiting false or misleading representations and misleading or deceptive conduct. In addition, the repeal bills contain provisions that specifically prohibit corporations from making false or misleading representations about the carbon tax's effect on the price of SGGs.

Some examples of claims that may mislead customers after the proposed repeal include:

- telling customers your prices will not go down upon repeal because you did not pass through any carbon tax in prices when your prices did actually cover equivalent carbon price levy costs
- understating the actual effect of the carbon tax on prices in an attempt to justify not passing on the full cost reduction in prices after repeal.

The ACCC will enforce the law to ensure that consumers of SGGs benefit from expected cost reductions following the carbon tax repeal.

For more information, go to: www.accc.gov.au/business/pricing/carbontax-repeal.





Australian Refrigeration Council www.arctick.org ARC Hotline: 1300 88 44 83



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