

8 December 2015

Dr Richard Chadwick  
General Manager  
Adjudication Branch  
Australian Competition and Consumer Commission  
GPO Box 3131  
Canberra ACT 2601

**RRA response to the submission by the Australian Refrigeration Association**

Dear Dr Chadwick,

We thank you for the opportunity to respond to the submissions made by interested parties regarding our application for the revocation and substitution of Authorisation A91515.

We note there have been eight submissions with seven of those being wholly supportive, and one being supportive albeit somewhat obliquely and with encouragement for an expansion of our role and activities.

We feel it necessary to provide a comprehensive response to the submission made by the Australian Refrigerant Association, and that response is appended.

Please contact us at anytime should you require additional information or clarification of any matter pertaining to our application.

Yours sincerely,




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## Refrigerant Reclaim Australia

### Response to the submission by the ARA

We note the submission by the ARA is something of a rehashed précis of one submitted by its defunct predecessor, the Green Cooling Council (GCC), prior to it morphing into the Green Cooling Association (GCA) and subsequent closure. These organisations all appear to have similar personnel, few members, and opaque structures. The current iteration, the Australian Refrigeration Association, purports to represent the Australian refrigeration industry when it has just sixteen members and, to our understanding, obtains the bulk of its funding from a couple of suppliers of hydrocarbon refrigerants. The major suppliers of natural refrigerants, such as ammonia and carbon dioxide, are neither members nor contributors. We consider the title of the organisation to be a misnomer possibly designed to confuse an audience into thinking it is broadly representative of industry when the reality is they lack the support of all major contracting, manufacturing, importing, and wholesaling industry associations.

It is perhaps unsurprising that in their dogmatic 'Context' the ARA fails to mention the startling success the Australian refrigeration and air conditioning industry has achieved by reducing the emissions of ozone depleting and greenhouse gases by 80% since 1995<sup>(1)</sup>. They also fail to highlight how the global movement to control and phase down high global warming potential (GWP) refrigerants under the Montreal Protocol<sup>(2)</sup> is wholly supported and actively encouraged by the refrigerants industry, including here in Australia as can be seen in various submissions to the current review of the Ozone Protection and Synthetic Greenhouse Gas Management Act<sup>(3)(4)</sup>. Should the Australia government adopt the international proposals and recommendations supported by industry we will achieve a further 85% reduction in emissions of synthetic greenhouse gas refrigerants by 2035<sup>(5)</sup>.

In an outbreak of positivity the ARA does not seek to have our authority revoked and recognises that "RRA has an important role in this context...". We thank them for their support and note their qualifications that, as far as we know, are unrelated to competition and consumer policy. However, we are happy to address their concerns.

### Structural matters

#### Comprehensive and balanced industry representation

RRA has for members the major industry associations and suppliers to the Australian refrigeration and air conditioning. The RRA Board is representative of the broad industry and includes personnel from:

- Air conditioning & Refrigeration Equipment Manufacturers Association: representing the major manufacturers and importers of refrigerant and air conditioning equipment.
- Australian Refrigeration Wholesalers Association: representing the suppliers of more than 90% of refrigerants and refrigeration and air conditioning equipment and parts

- Refrigeration Air Conditioning Contractors Association: the major association representing contractors and technicians in the commercial refrigeration and air conditioning sectors
- Refrigerants Australia: representing all the importers of ODS and SGG refrigerants and the major manufactures and suppliers of the 'natural' refrigerants ammonia and carbon dioxide.
- Vehicle Air Conditioning Specialists of Australasia: the major association representing the contractors and technicians in the automotive air conditioning sector in Australia and New Zealand.

In addition to the regular input we receive from industry from time-to-time we also invite a larger group of industry representatives to discuss and highlight challenges, to consider RRA's performance, and to identify how RRA may meet the growing and changing demands of a dynamic industry, within the context of refrigerant recovery and emission reduction. Such an event occurred in March this year and it was attended by: contractors (12); wholesalers (11); bulk importers (9); and equipment importers/manufacturers (7).

#### Transparent operations

RRA is a transparent organisation that operates with the utmost concern to maintain high standards of corporate governance and compliance with its own Constitution and all relevant legislation. Some of the usual and regular activities RRA undertakes are:

- External auditing<sup>(6)</sup>
- Publishing of annual reports and accounts<sup>(7)</sup>
- Periodic Annual Report distributed to industry<sup>(8)</sup>
- Updates in trade journals<sup>(9)</sup>
- Trade shows and presentations<sup>(10)</sup>

#### Performance criteria

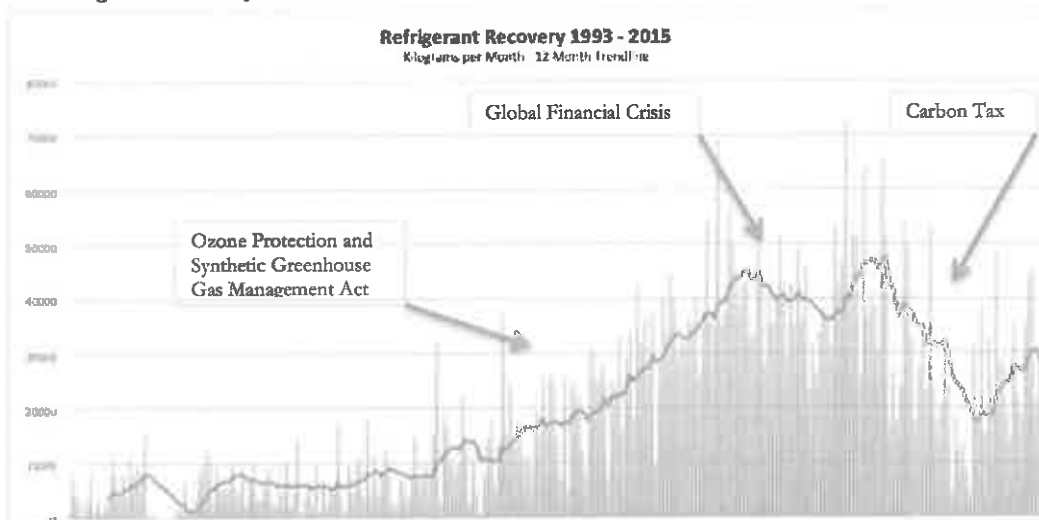
RRA takes back all contaminated and unwanted ODS and SGG refrigerant made available by the industry so there are no limits on the volume, although there are many forces that influence the magnitude of that volume. These forces are quite beyond RRA's control and whilst it may sound reasonable to impose performance criteria it would make no difference to the volume recovered and ultimately destroyed. Some of these forces are explained below.

- Government regulations: prior to 2004 RRA's recovery program for ODS and SGG refrigerants was voluntary. As can be seen in Chart 1, the implementation of the OPSGGMA resulted in sustained growth in the volume of recovered refrigerant collected and destroyed. Conversely, the imposition of a carbon tax on SGGs resulted

in collections plummeting. On an annual rolling twelve-month basis the volume of recovered refrigerant collected reached its maximum of 572 tonnes in March 2012. A little over two years later in April 2014 the amount collected in the preceding twelve months was just 207 tonnes, an annual quantity exceeded a decade before.

- **Economic conditions:** the prevailing state of the Australian economy also has profound implications for the quantity of recovered refrigerant collected. The Global Financial Crisis impacted strongly on the refrigeration and air conditioning industry with a sustained period of lower activity, increased competition, and lower prices. The lower level of activity meant there was less refrigerant to recover, and the pressure on costs and pricing led to increased retention and reuse of recovered refrigerant that would usually have been sent for destruction.

**Chart 1: Refrigerant Recovery 1993-2015**



- **Global impacts:** movements in the global management of refrigerants are reflected in Australian legislation and practises. Australia has responsibilities under various international protocols, some of which have strong effects on the refrigerant and air conditioning industry, effects that lie well beyond RRA's control.



Chart 2: Refrigerant Recovery by Type 2004-2014

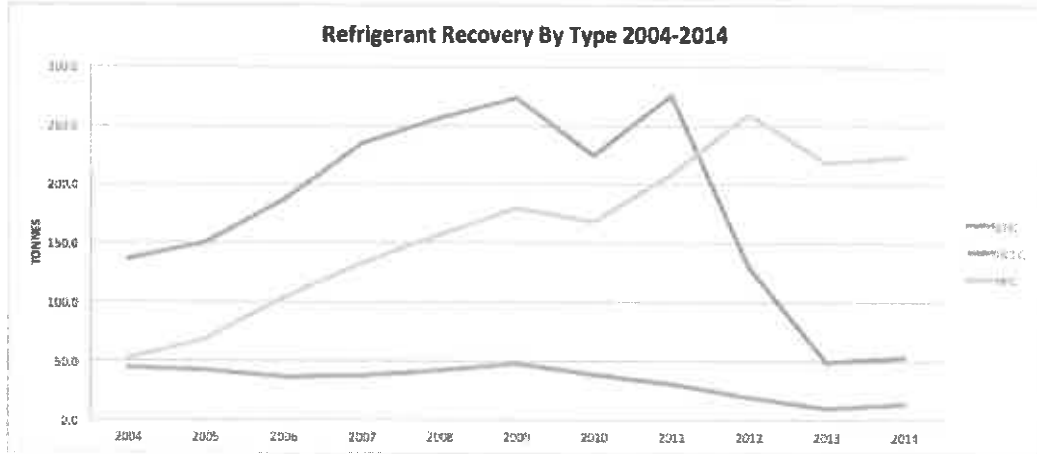


Chart 2 describes the recovery of refrigerants by type: CFCs, HFCs, and HCFCs. Almost all the HCFCs recovered are one product, R22. HCFCs are the last of the ozone depleting refrigerants to be phased out of use in Australia with only a relatively small quantity able to be imported to service installed equipment. This has meant that recovered R22 has become a very valuable commodity and is almost universally retained for reuse by contractors, or reclaimed and resold by wholesalers. Later this decade as the installed R22 equipment is decommissioned this refrigerant will become redundant and larger quantities will be collected and destroyed.

Similarly, the global movement to lower GWP refrigerants will lead to the redundancy of large volumes of R410A, a HFC refrigerant that, at close to 20,000 tonnes, makes up almost half the installed bank of refrigerant in Australia. It is highly likely that this product will become redundant in the 2020's and RRA will collect up to 800 tonnes of this product alone each year.

- Technology: improvements in technology, particularly reclamation plant, can also alter how much contaminated and unwanted refrigerant RRA collects. Recent improvements in reclamation have led to increasing quantities of R22 being returned to new specification and sold. In the future, should large quantities of R410A be recovered, it is feasible that its constituent products will be separated with the R32 component resold and the R125 sent to RRA for destruction.

Assessment by an independent authority

The RRA product stewardship scheme has the endorsement of the Commonwealth Department of Environment. Further, the program has garnered international awards including from the Environment Protection Authority of the USA, and the United Nations Environment Programme.



Comprehensive environmental impact responsibility – most importantly responsibility for synthetic gas leakage through the life of RAC equipment

Australia has a comprehensive response to limiting the emissions of ODS and SGG refrigerants. The components of this response are described below.

- **Import controls:** import controls include the phase-out of ODS refrigerants, quotas for imports, licences, and licence conditions such as the need to take responsibility for imported refrigerant.
- **Authorisations:** all companies trading ODS and SGG refrigerants must be authorised to do so, and must meet the various conditions of the authorisation including:
  - Only employing properly qualified and licensed technicians
  - Owning and maintaining certain equipment including recovery units
  - Maintaining a register of refrigerant purchases, sales, and returns
  - Accepting and safely disposing of recovered refrigerant
- **Licences:** all technicians working with ODS and SGG refrigerants, and equipment designed to contain those refrigerants, must be trade qualified and licensed
- **Mandatory recovery and safe disposal:** it is necessary to recover all ODS and SGG refrigerant during servicing and from end-of-life products. If it is not reused it must be sent for safe disposal.
- **Prohibition on preventable emissions:** all actors in the Australian market operate within a legislative framework that makes it an offence to knowingly emit ODS and SGG refrigerants.

Should the ARA have issues with the implementation of Australian regulations they should address their concerns to the relevant authority.

Design for environmental impact

RRA does not, and cannot, have any control over the design of refrigerants or equipment in which they are contained. Other government programs, such that mandating minimum energy performance standards, do require manufacturers and importers of air conditioning equipment to meet certain standards that are upgraded on a regular basis. This way Australian consumers are assured of purchasing up-to-date energy-efficient systems rather obsolete technology.

## Key Points

1. RRA is wholly unapologetic for its focus on the recovery and safe disposal of refrigerant at end-of-life. This is precisely what it was created to do and has been successfully fulfilling its charter for twenty-two years, during which time more than 5,500 tonnes of ODS and SGG refrigerant have been collected and safely destroyed.

The ARA raises the issue of intentional and unintentional emissions but either fails, ignores, or doesn't know or understand the major improvements achieved by the industry over the past decade. In the mid-2000's approximately 4,000 tonnes of refrigerant was used for service and maintenance in the Australian market, when the installed bank of refrigerant was in the order of 30,000<sup>(11)</sup> tonnes. If all refrigerant used for service was for replacing leaks then the average leakage rate would then have been a little over 13%. Remarkably, the quantity used for service today is a quarter less at 3,000 tonnes while the size of the installed bank has grown to 45,000 tonnes<sup>(12)</sup>. This means the average leakage rate for serviced equipment has fallen to less than 7%, a reduction of 50% over the decade.

2. RRA has accumulated funds to pay for the destruction of ODS and SGG refrigerants well into the future and long past the time when these products will have been phased out or substantially down. The transition to low and no GWP refrigerants is already well underway and, as it progresses, RRA's revenue will decline whereas the liability will have grown. RRA's current contingent liability is considered to be in excess of \$200 million and growing as the bank of installed refrigerant continues to expand.

We would also note that the RRA Environment Trust, in which all industry contributions are secured, has strict requirements on how such funds may be expended. It is incumbent on RRA to ensure funds are only applied to activities consistent with the Trust's objectives.

2a. RRA is not the regulator and cannot prevent unscrupulous people and organisations from breaking the law. The deliberate emission of ODS and SGG refrigerants is an offence under the OPSGGMA and regular audits and inspections are conducted by the Australian Refrigeration Council. However, RRA has been particularly encouraging of the Department of Environment to consider how compliance may be improved in the end-of-life equipment and vehicle sectors. In response, the Department commissioned studies into both sectors with separate consultants providing comprehensive reports<sup>(13)(14)</sup>.

Further consideration is being given to the report into end-of-life vehicles whilst the outcome of the study into end-of-life equipment is as follows:

The Department assessed the feasibility of introducing a product stewardship approach to improve management of end-of-life domestic refrigeration and air conditioning equipment. A cost benefit analysis did not show a net benefit to society and the Department will not pursue further work on end-of-life domestic refrigeration and air conditioning equipment at this time.<sup>(15)</sup>

2b. As described above considerable improvements in maintenance and leak reduction have been made. Sustained improvements have been made in equipment quality, installation quality, maintenance practises and general workmanship due to the requirement for all technicians working on refrigeration and air conditioning equipment to be trade qualified. This has resulted in lower leakage rates, more efficient plant and, consequently, lower indirect emissions.

2c. The ARA states in their submission, "It is our view that there is a high degree of intentional emissions of refrigerants because it is in the commercial interests of RAC contractors to allow and in fact cause unnecessary leakage and emissions." On behalf of the Australian refrigeration and air conditioning industry RRA rejects and takes very strong exception to this baseless accusation. That the ARA should cast such a slur on the industry aptly demonstrates the contempt they have for the vast majority of professional and compliant contractors and technicians.

The ARA continues with a remarkable number of disparaging comments and accusations packed into one paragraph to which we are compelled to respond.

- RRA is "disingenuous": the ARA and its predecessors are of the erroneous opinion that RRA exists only to draw a thin veil of respectability over the refrigerants industry. This patently incorrect accusation fits their 'tin foil hat' global conspiracy theories but is consistently disproven by the efficiency and effectiveness of the RRA program.
- RRA "serves the interests of its participants and board members": RRA serves the needs of the refrigeration and air conditioning industry, and is always seeking to evolve and develop to meet the challenges of its dynamic nature. The directors of RRA are dedicated to the success of the organisation and meeting the needs of industry, and execute their fiduciary duty conscientiously.
- RRA "is funded and controlled exclusively by the synthetic refrigerants industry": that RRA is funded exclusively by the synthetic refrigerants industry is no surprise as our function is to collect and destroy ODS and SGG refrigerants. Unfortunately, in the process of refrigerant recovery, some hydrocarbons enter the waste refrigerant stream as some industry participants install these highly flammable substances into systems not designed for them, and do not affix warning labels. The unfunded cost to RRA for the destruction of hydrocarbons last year was \$75,000.

The second accusation of this statement is plainly wrong; RRA is not controlled exclusively by the synthetic refrigerants industry. RRA members include the suppliers of most natural refrigerants in Australia, industry associations presenting contractors from the refrigeration, air conditioning, and automotive air conditioning sectors, and manufacturers and importers of equipment of various types that contain the full spectrum of refrigerants.





- RRA enables “its participants to sell more synthetic refrigerants than would otherwise be the case”: this accusation suggests that RRA’s directors are not acting in the best interests of the organisation and we reject it, utterly, as more of the ARA’s conspiratorial mutterings. RRA operates with complete regard for and compliance with the highest levels of corporate governance. The Australian Institute of Company Directors undertook a corporate governance ‘Health Check’ this year.
- RRA “serves the commercial interests of the synthetic refrigerants industry – not the national or global interest in synthetic emissions reduction”: RRA does not serve the commercial interest of any industry or organisation. We meet the needs of industry to enable compliance within the Australian regulatory framework. At the international level, RRA has assisted many countries with information and guidance on relevant issues, presented at numerous international conferences, and assisted with UNEP programs. Currently we are working with some Pacific Island nations to enable the collection and destruction of ODS refrigerants. These activities are undertaken at no cost to the participating countries.

3. The ARA rather laments the repeal of the carbon tax on refrigerants. Whilst the merits of that legislative initiative, and just who ultimately bears the costs, are debateable it is a simple fact that ozone depleting substances, including refrigerants, have been effectively phased out without the imposition of high taxes and the concomitant problems that inevitably arise from this form of market distortion. Further, the Australian industry has reduced the emission of synthetic greenhouse gases by 80% since 1995. Should industry recommendations be adopted emissions will be further reduced by 85% by 2035. No other sector in the Australian economy has or will achieve more in emissions abatement in these timeframes.

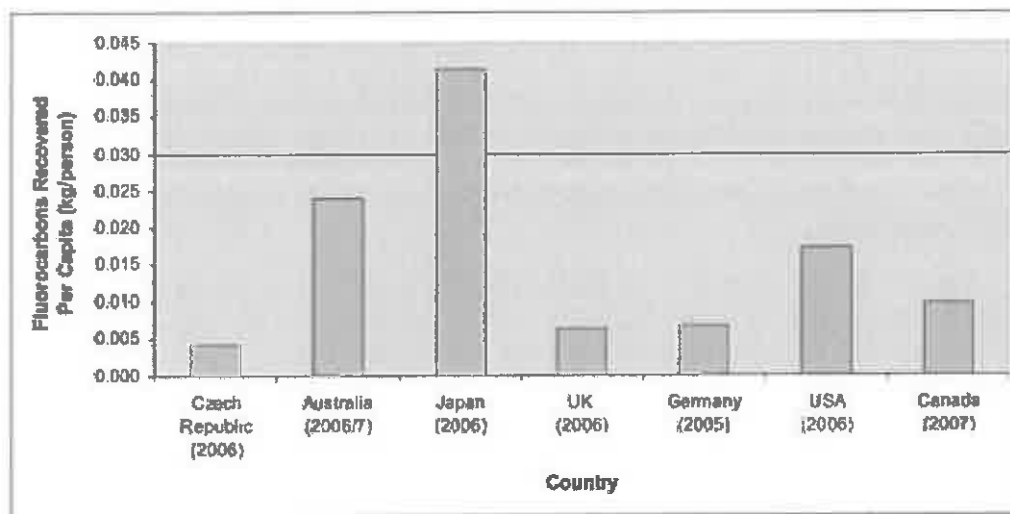
The ARA further suggests that the lack of high costs on HFCs, “has the effect of undermining low GWP, non-ozone depleting technology.” Yet there are no complaints from the suppliers of ammonia, carbon dioxide, or HFO refrigerants. Perhaps the ARA is concerned for the sales of hydrocarbon refrigerants but this concern seems unnecessary. Hydrocarbon refrigerants are by-products of the petroleum refining industry and are produced at low cost, a significant advantage over the fluorocarbons with which they compete.

Finally we would like to address the persistent accusation that RRA does not fulfil its role adequately, that we don’t do a very good job of collecting and destroying contaminated and unwanted ODS and SGG refrigerants. This accusation is also unfounded and untrue. There is little work published comparing national recovery programs but the report prepared for the Multilateral Fund of the Montreal Protocol does just that. The report, Study on the Collection and Treatment of Unwanted Ozone-Depleting Substances in Article 5 and Non-Article 5 Countries<sup>(16)</sup>, was prepared in 2008 by ICF International which consulting firm has completed extensive work for the United Nations Environment Programme and the Environment Protection Agency of the USA.

Below we reproduce Exhibit 4-3 from page 20 of their report. As can be seen Australia's (RRA) performance was superior to all countries with the exception of Japan. We would note also that recovery in Australia was still growing strongly at the time of the study and we would expect the relative performance to have improved further. Recovery in Japan outperforms Australian efforts due to other recycling and waste management regulations that do not exist in Australia.

**Chart 3: Annual Fluorocarbons Recovered Per Capita**

**Exhibit 4-3:  
Annual Fluorocarbons Recovered Per Capita, Based on Latest Data Available<sup>a</sup>**



The ARA submission also includes a section titled Green Cooling Council Recommendations 2008. As suggested at the time these concerns are beyond RRA's operating parameters and would be much better directed to the now Department of Environment.

## References

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4. Air-conditioning and Refrigeration Manufacturers Association: Submission on the Review of the Ozone Protection and Synthetic Greenhouse Gas management Act - Options
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9. Yaffa Publishing Group: Climate Control News June Edition 2015
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11. The Expert Group in association with Thinkwell Australia: Cold hard Facts 2: A study of the refrigeration and air conditioning industry in Australia
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14. KPMG Climate and Sustainability Services: End-of-Life Domestic Refrigeration and Air Conditioning Equipment in Australia
15. Commonwealth Department of Environment:  
<http://www.environment.gov.au/protection/national-waste-policy/product-stewardship/projects>
16. ICF International: Study on the Collection and Treatment of Unwanted Ozone-Depleting Substances in Article 5 and Non-Article 5 Countries