

Applicants

1. Provide details of the applicants for revocation and substitution, including:

1.1 name, address (registered office), telephone number, and ACN

Refrigerant Reclaim Australia Limited (RRA)

Unit 1, 4 Lonsdale St
Braddon ACT 2612

GPO Box 753
Canberra ACT 2601

Phone: 02 6230 5244
ACN: 061 197 206

1.2 contact person's name, position, telephone number, and email address

Kylie Farrelley

General Manager

Phone: [REDACTED]

Email: [REDACTED]

1.3 a description of business activities

RRA is the industry funded not-for-profit product stewardship organisation that recovers, reclaims and destroys ozone depleting (ODS) and synthetic greenhouse gas (SGG) refrigerants. The product stewardship program is funded by a levy on the import and sale of new refrigerant that is authorised under ACCC Determination A91515.

1.4 email address for service of documents in Australia.

Email: [REDACTED]

Authorisation to be revoked (the existing authorisation)

2. Provide details of the authorisation sought to be revoked including:

Authorisation was granted to RRA, Determination A91515, to continue to operate a product stewardship scheme to recover ozone depleting and synthetic greenhouse gas refrigerants. The authorisation allowed RRA and its directors and members and those companies and persons that have entered into agreements with RRA to discuss and agree to:

- Set, and for importers to consistently apply, \$2/kg levy in addition to the price of OD and SGG refrigerants imported into, or manufactured and sold in Australia (the current authorisation extends to discussion and agreement to potentially reduce, but not increase the levy).
- Determine the value of rebates to be paid by RRA to wholesalers and to contractors, for the return of recovered refrigerant and
- Determine the process and disposal practices to apply to recovered refrigerant

2.1 the registration number and date of the authorisation which is to be revoked

Authorisation A91515 dated 6 May 2016 is to be revoked.

2.2 other persons and/or classes of persons who are a party to the authorisation which is to be revoked

This application was made on behalf of RRA and its directors and members, and those companies and persons that have entered into agreements with RRA including: 22 bulk refrigerant importers; the 592 importers of equipment containing refrigerant; and 45 wholesalers whose businesses and branches (some 400) take back and handle recovered refrigerant for collection by RRA.

2.3 the basis for seeking revocation, for example because the conduct has changed or because the existing authorisation is due to expire.

Current authorisation A91515 is due to expire on 28 May 2021. The circumstances requiring authorisation remain the same.

Authorisation to be substituted (the new authorisation)

3. If applicable, provide details of any other persons and/or classes of persons who also propose to engage, or become engaged, in the proposed conduct and on whose behalf authorisation is sought. Where relevant provide:

3.1 name, address (registered office), telephone number, and ACN

3.2. contact person's name, telephone number, and email address

3.3 a description of business activities.

The companies and associations noted below are all members of RRA with rights equivalent to those of shareholders; except that RRA does not pay dividends. Should RRA cease operations our Constitution requires that any funds remaining be provided to the CSIRO for atmospheric research. There are other companies and associations that conduct similar operations in the industry that are not members of RRA, but all companies in the industry participate in the product stewardship scheme.

The Directors of RRA are listed separately along with the industry association that nominated them for the Board.

Manufacturers and Importers (Bulk)

Manufacturers and Importers (Bulk) are large international corporations that manufacture ODS and SGG refrigerants offshore and import them in bulk quantities to Australia for sale to distributors, wholesalers and original equipment manufacturers. The last Australian fluorocarbon manufacturing plant ceased operations in 1995.

- Company: The Chemours Company (Australia) Pty Ltd
Registered Address: Level 26, 181 Williams St, Melbourne, VIC 3000
ACN: 169 142 750
Contact Name: Mr. John McCormack
Phone: [REDACTED]
Email: [REDACTED]
- Company: Honeywell Polymers (Australia) Pty Ltd
Address: Level 3, 2 Richardson Place, North Ryde, NSW 2113
ACN: 008 423 096
Contact: Leo Li
Phone: [REDACTED]
Email: [REDACTED]

Manufacturers and Importers (Equipment)

Manufacturers and Importers (Equipment) may be large international corporations, or locally owned firms, that manufacture and/or import refrigeration plant and components, air-conditioning plant and components, motor vehicles, and a range of other equipment types all of which contain either ODS or SGG refrigerants, for sale into the Australian market.

- Company: Daikin Australia Pty Ltd
Address: 66 Governor Macquarie Drive, Chipping Norton, NSW 2170
ACN: 000 172 967
Contact: Mr. Gary Knox
Phone: [REDACTED]
Email: [REDACTED]
- Company: Fujitsu General (Aust) Pty Ltd
Address: Eastern Creek Drive, Eastern Creek, NSW 2148
ACN: 001 229 554
Contact: Mr. Peter Cashel
Phone: [REDACTED]
Email: [REDACTED]
- Company: Mitsubishi Electric Company Australia Pty Ltd
Address: PO Box 11, Rydalmere, NSW 2116
ACN: 001 215 792
Contact: Mr. John Taylor
Phone: [REDACTED]
Email: [REDACTED]

Importers and Distributors

Importers and Distributors may be international corporations or locally owned companies that import and locally purchase ODS and SGG refrigerants in bulk quantities for sale to wholesalers and original equipment manufacturers.

- Company: A-Gas Australia Pty Ltd
Address: 9/11 Oxford Road, Laverton North, VIC 3026
ACN: 066 273 247
Contact: Mr. Brett Ferguson
Phone: [REDACTED]
Email: [REDACTED]
- Company: Atomic Capital Australia Pty Ltd
Address: Level 10, 1 Margaret St, Sydney, NSW 2000
ACN: 155 240 690
Contact: Debbie Cook
Phone: [REDACTED]
Email: [REDACTED]

Importers and Wholesalers

Importers and Wholesalers may be international corporations or locally owned companies that import and locally purchase ODS and SGG refrigerants in bulk quantities for sale to contractors, end users, and original equipment manufacturers. Typically, they will have a number of geographically dispersed outlets dedicated to supplying a range of equipment and refrigerants to the industry.

- Company: Reece Ltd
Address: 118 Burwood Highway, Burwood VIC 3125
ACN: 004 313 133
Contact: Mr. Greg Brooker
Phone: [REDACTED]
Email: [REDACTED]
- Company: BOC Gases Ltd
Address: 10 Julius Avenue, North Ryde, NSW 2113
ACN: 000 029 729
Contact: Mr. Nathan Johns
Phone: [REDACTED]
Email: [REDACTED]
- Company: Kirby HVAC&R Pty Ltd
Address: Locked Bag 6501, Milperra, NSW 1891
ACN: 624 910 041
Contact: Mr. Paul Campbell
Phone: [REDACTED]
Email: [REDACTED]

Industry Associations

The refrigeration and air-conditioning industry has numerous industry associations representing the interests of their various constituencies.

- Association: Air-conditioning Refrigeration Equipment Manufacturers Association of Australia (AREMA)
Address: 20 Kenna Place Gymea NSW 2227
ACN: 126 332 810
Contact: Mr. Mark Padwick
Phone: [REDACTED]
Email: [REDACTED]
- Association: Air-conditioning Refrigeration Wholesalers Association (ARWA)
Address: C/O – Reece Ltd - 118 Burwood Highway, Burwood VIC 3125
ABN: 48 114 879 813
Contact: Mr. Greg Brooker
Phone: [REDACTED]
Email: [REDACTED]

- Association: Refrigerants Australia (RA)
Address: 28 Sydney Avenue Forrest ACT 2603
ACN: 089 445 723
Contact: Dr. Greg Picker
Phone: [REDACTED]
Email: [REDACTED]
- Association: Refrigeration Air Conditioning Contractors Association (RACCA)
Address: 817 Princes Highway, Tempe, NSW 2044
ABN: 35 882 543 205
Contact: Mr. Kevin O'Shea
Phone: [REDACTED]
Email: [REDACTED]
- Association: Vehicle Air-conditioning Specialists of Australasia (VASA)
Address: 14 Motorway Drive, Ormeau, QLD 4208
ACN: 063 969 782
Contact: Mr. Ian Stangroome
Phone: [REDACTED]
Email: [REDACTED]
- Australian Food Cold Chain Council Limited (AFCCC)
Address: 14 Motorway Drive, Ormeau, QLD 4208
ACN: 621 254 448
Contact: Mr. Mark Mitchell
Phone: [REDACTED]
Email: [REDACTED]

Directors of Refrigerant Reclaim Australia Limited

Mr. John McCormack	Chairman
Mr. Peter Cashel	Vice-Chairman
Mr. Kevin O'Shea	Secretary/Treasurer
Mr. Greg Brooker	Director
Mr. Brett Ferguson	Director
Mr. Mark Mitchell	Director
Mr. Mark Padwick	Director

The Proposed Conduct

4. Provide details of the proposed conduct, including:

4.1 a description of the proposed conduct and any documents that detail the terms of the proposed conduct

- Discussion and agreement by various industry participants (RRA Board) to set and for importers to consistently apply a maximum \$2.00/kg levy in addition to the price of ozone depleting and synthetic greenhouse gas refrigerants imported into or manufactured and sold in Australia.
- Discussion and agreement by various industry participants (RRA Board) to determine the value of rebates to be paid by RRA to wholesalers and contractors for the return of recovered refrigerant.
- Discussion and agreement by various industry participants (RRA Board) to determine the processes and disposal practices that will be applied to recovered refrigerant; the main options for such processes and practices being storage, reclamation and sale, and destruction in Australia or offshore.

4.2 an outline of any changes to the conduct between the existing authorisation and the new authorisation.

No changes to conduct have taken place between the existing authorisation and the new authorisation.

4.3 the relevant provisions of the Competition and Consumer Act 2010 (Cth) (the Act) which might apply to the proposed conduct, ie:

- **cartel conduct (Division 1 of Part IV)**
- **contracts, arrangements or understandings that restrict dealings or affect competition (s. 45)**
- **concerted practices (s. 45)** - not applicable
- **secondary boycotts (sections 45D, 45DA, 45DB, 45E, 45EA)** – not applicable
- **misuse of market power (s. 46)** – not applicable
- **exclusive dealing (s.47)** – not applicable
- **resale price maintenance (s. 48) and/or** - not applicable
- **a dual listed company arrangement (s. 49)** – not applicable

The RRA board bring together a number of market participants (RRA board) to discuss and collectively agree to fix part of the price of bulk refrigerant or goods containing refrigerant, by way of a levy, for the purposes of funding the RRA's industry wide product stewardship program in which all industry actors choose to participate.

The fixed part of the price is to be immaterial as the additional cost realised by the levy is relatively minor compared to the total consumer price of each unit and to services where the value of the levy is compared to costs of labour and components.

4.4 the rationale for the proposed conduct

Levies - Importers pay a levy to RRA on the import and sale of new refrigerant in Australia. The value of the levy is recovered by adding the fee to the price of new refrigerant when it is sold into the distribution chain. Some bulk refrigerant importers and suppliers display the levy as a separate line item on the invoice, whilst others include it in their price. Importers of equipment containing refrigerant usually do not display the levy but include it their price.

The levy applied to imported and sold refrigerants is \$2.00 per kilogram. The value of the levy was originally set at \$1.00 when the program commenced in 1993. The expansion of the program to include the take-back of synthetic greenhouse gases and the passing and implementation of the Ozone Protection and Synthetic Greenhouse Management Act, along with other initiatives, caused a strong rise in the amount of refrigerant being recovered and destroyed. To remain sustainable additional funds were required and applications were made, and approved, resulting in the levy increasing to \$1.50 in 2006, and \$2.00 in 2008. RRA does not foresee the requirement for a further increase in the next five (5) year period.

All importers of refrigerant, both in bulk and pre-charged in equipment, must have an import licence issued by the Department of Agriculture, Water and the Environment. A condition of that licence is that they take responsibility for the refrigerant they import by participating in a product stewardship scheme. Thus far all importers have chosen to enter into an agreement with RRA to participate in the industry-wide product stewardship program and to contribute the levy. The agreement provides that RRA may at any time audit the amount of levy payable by the importer.

For ease of administration RRA has a range of reporting and payment periods. Bulk importers report imports and sales on a monthly basis; large equipment importers report on a quarterly basis; and small equipment importers pay annually.

The agreement also allows for suspension and termination of an agreement with an importer. Should an importer fail to report or pay the required levy then they may be suspended from the product stewardship program. Further, the agreement between RRA and the importer may be terminated by either party with 180 days notice, or due to breaches of the agreement or winding up and liquidation.

Rebates. Rebates are fees paid to wholesalers and contractors for the recovery, handling and return of refrigerant. In the case of wholesalers, the rebate is part compensation for the costs they incur. For contractors, the rebate is an incentive to recover and return refrigerant. The values of the rebates are set by RRA and agreements require wholesalers to pay the contractor rebate as a minimum fee for the return of refrigerant.

Rebates are paid to wholesalers to reimburse some of the costs involved in managing the take back recovered refrigerant. Wholesalers provide market access; their branch networks act as the collection points, cylinders, decanting services and administration that enables the product stewardship program to function effectively.

RRA is at the same risk of market and economic fluctuations, faces the same impacts of national regulatory changes, and operates in the same global industry as commercial organisations. To

ensure the long-term viability of the recovery program it is necessary to be able to respond to market conditioning by having flexibility over the quantum of the levy.

Calculating the quantum of the wholesaler rebate has proved problematic in the past. PricewaterhouseCoopers was engaged to survey costs incurred but the data provided by wholesalers varied widely. The current value of the levy, \$7.50, is unchanged since 2008 and was determined through consultation with wholesalers whilst keeping RRA's financial sustainability in mind.

Rebates are paid to contractors to provide an incentive to recover and return used, contaminated and unwanted refrigerant. Contractors are generally able to pass on the costs of recovery to the equipment owner. However, a weak regulatory environment with little or no compliance activity necessitated the provision of a financial incentive. The contractor rebate has remained unchanged at \$3.00 since 2008.

Processes. There are a number of processes that may be applied to recovered refrigerant but ultimately it must be either safely stored for subsequent reclamation (reclaimed to new specification and placed back in the market) or destruction (safely destroyed).

Since the last application all contaminated and unwanted refrigerant collected by RRA has been destroyed. The largest volume was destroyed using the argon plasma-arc facility in Melbourne. At least 247 tonnes of recovered refrigerant was destroyed through an upgraded cement plant in Yarwun, Queensland.

4.5 the term of authorisation sought and reasons for seeking this period.

A term of at least five (5) years is sought for this authorisation

5. Provide the name of persons, or classes of persons, who may be directly impacted by the proposed conduct (e.g. targets of a proposed collective bargaining arrangement; suppliers or acquirers of the relevant goods or services) and detail how or why they might be impacted.

Persons or classes of persons, who may be directly impacted by the proposed conduct have not changed since our previous authorisation.

Companies and persons that have entered into agreements with RRA include: 22 bulk refrigerant importers; the 592 importers of equipment containing refrigerant; and 45 wholesalers whose businesses and branches (some 400) take back and handle recovered refrigerant for collection by RRA.

The impact of the proposed conduct on relevant parties is as follows;

Manufactures and importers of bulk ODS and SGG refrigerant

The imposition of a levy on the import and sale of new refrigerant, and its universal application, may have the effect of increasing the price of services involving the supply of refrigerant. However, the price effect is likely to be small where the value of the levy is minor compared to costs of labour and components.

Manufactures and importers of Equipment

Similarly, the imposition of a levy on the import and sale of goods containing refrigerant, may have the effect of increasing the price of such goods, however the price effect is likely to be low as the additional cost is relatively minor compared to the total consumer price of each unit as quantities of refrigerant contained in each unit are small.

Wholesalers

The wholesalers and distributors who have an agreement with RRA agree to pay a minimum payment (rebate) to contractors returning recovered refrigerant and determines the level of reimbursement of costs provided to wholesalers and distributors for this service.

Processes choices

Should RRA choose to reclaim recovered refrigerant which is effectively the creation of new refrigerant by using distillation or other processes, the effect maybe increased competition to some replacement products such as HFC's, HFO's and HC's that might otherwise have gained higher sales. On the other hand should RRA choose not to reclaim recovered refrigerant such action may be seem as a restriction of the availability of a product that might compete with the alternative products of its contributors and members, thereby potentially reducing competition in the market.

Market information and concentration

6. Describe the products and/or services, and the geographic areas, supplied by the applicants. Identify all products and services in which two or more parties to the proposed conduct overlap (compete with each other) or have a vertical relationship (e.g. supplier-customer).

The market is the market for importation, distribution, sale, use and destruction of ozone depleting and synthetic greenhouse gas refrigerants in Australia.

- Refrigerants are manufactured offshore and imported as bulk or contained in equipment.
- If contained in equipment, such as split air conditioning systems, refrigerators, or motor vehicles, the refrigerant is not handled directly but included in the sale of the product.
- If refrigerant is imported as bulk it is sold to original equipment manufacturers, or decanted into small cylinders for distribution and sale to licenced contractors and technicians.

- Refrigerants are either ozone depleting or synthetic greenhouse gases. However, ozone depleting refrigerants are also powerful greenhouse gases.
- Ozone depleting refrigerants are being phased out of use under the Montreal Protocol. CFCs were banned from import in 1995. Progressively, HCFC imports are being restricted such that only a small quantity will be available from 2015 until 2029.
- Since the 1 January 2018 Synthetic greenhouse gases are being phased down under the amendments made to the Montreal Protocol. The HFC phase-down is a gradual reduction in the maximum amount of HFCs permitted to be imported into Australia. Reduced imports will lead directly to reduced emissions.
- New refrigerants that do not deplete the ozone layer and have significantly lower global warming potential are now commercialised and widely available.
- There is a large volume of installed refrigerant in Australia that will remain and require recovery and destruction to prevent emission after low GWP refrigerants have been introduced. At present the installed bank of refrigerant exceeds 53,500 tonnes and continues to grow. Please see **Appendix 2** for a description of the installed bank of refrigerant.
- RRA anticipates the need to maintain recovery and safe disposal operations until at least 2036.

7. Describe the relevant industry or industries. Where relevant, describe the sales process, the supply chains of any products or services involved, and the manufacturing process.

- ODS and SGG refrigerant is imported into Australia either in bulk or in equipment containing SGG refrigerant by licenced manufactures or importers. The import licence issued by the Department of Agriculture, Water and the Environment.
- A condition of the import licence is that the importer or manufacturer of the ODS and SGG refrigerant take responsibility for the refrigerant they import by participating in a product stewardship program. Thus far all importers have chosen to enter into an agreement with RRA to participate in the industry wide product stewardship program.
- ODS and SGG refrigerants are no longer manufactured in Australia, with the last fluorocarbon manufacturing plant ceasing operations in 1995.

- ODS and SGG refrigerant imported in bulk is either sold in bulk to original equipment manufacturers, wholesalers or distributors or packaged into smaller cylinders for sale by wholesalers or distributors.
- Wholesalers and distributors sell packaged ODS and SGG refrigerant to licenced, Heating, Ventilation, Air Conditioning and Refrigeration (HVAC&R) technicians and motor mechanics.
- When equipment containing ODS and SGG refrigerant reaches end of its useful life, the used and unwanted ODS and SGG refrigerant is recovered into a compliant recovery cylinders by licenced HVAC&R technicians and motor mechanics and returned to their local wholesaler or distributor.
- RRA collects the used and unwanted ODS and SGG refrigerant from the wholesaler or distributor and facilitates the destruction using UNEP approved destruction technology such as argon plasma-arc technology or modified cement kiln.
- A small volume of recovered refrigerant is reclaimed to new specification
- The RRA program uses the established supply chain in reverse for the collection of used and unwanted refrigerant. In doing the cost burden of complying with all government and international obligations is shared across the whole industry.

8. In respect of the overlapping products and/or services identified, provide estimated market shares for each of the parties where readily available.

The levies charged by RRA on the importation and sale of refrigerants and the rebates set by RRA for the recovery, handling and return of refrigerant are applied universally to 100% of industry participants.

9. In assessing an application for authorisation, the ACCC takes into account competition faced by the parties to the proposed conduct. Describe the factors that would limit or prevent any ability for the parties involved to raise prices, reduce quality or choice, reduce innovation, or coordinate rather than compete vigorously. For example, describe:

9.1 existing competitors

9.2 likely entry by new competitors

9.3 any countervailing power of customers and/or suppliers

9.4 any other relevant factors.

All importers of refrigerant, both in bulk and pre-charged in equipment, must have an import licence issued by the Department of Agriculture, Water and the Environment.

A condition of that licence is that they take responsibility for the refrigerant they import by participating in a product stewardship scheme.

Importers of Refrigerant and pre-charged equipment are free to develop their own product stewardship scheme, however thus far all importers have chosen to enter into an agreement with RRA to participate in the industry-wide product stewardship program and to contribute the levy, which is applied to all importers equally.

Rebates are fees paid to wholesalers and contractors for the recovery, handling and return of refrigerant. The values of the rebates are set by RRA and applied equally to all wholesalers.

The agreements require the wholesalers to pay the contractor rebate as a minimum fee for the return of refrigerant.

The wholesaler is free to offer the contractor a higher rebate should they choose to do so, however RRA will only compensate the wholesaler for the value of the rebate set by the RRA board.

Public benefit

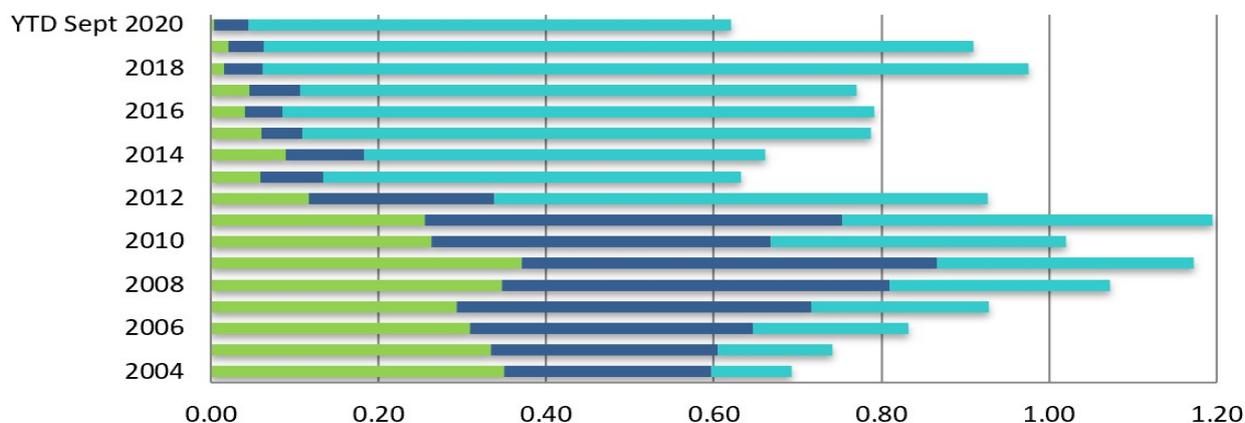
10. Describe the benefits to the public that are likely to result from the proposed conduct. Refer to the public benefit that resulted under the authorisation previously granted. Provide information, data, documents or other evidence relevant to the ACCC's assessment of the public benefits.

The RRA program has facilitated the recovery of approximately 8,000 tonnes of ozone depleting and synthetic greenhouse gas refrigerants since the program began in 1993. In achieving this RRA has provided a significant public benefit as described below.

- RRA takes back between 47% and 67 % of all unwanted recovered refrigerant and the program has been globally recognised through awards from the United Nations Environment programme and the US EPA. Please see **Appendix 1** for a calculation of refrigerant available for recovery and return.
- Assisting Australia meet obligations to control the consumption and production of ozone depleting substances under the Montreal Protocol. The program has so far prevented the emission of sufficient ozone depleting refrigerant to destroy more than ten (10) million tonnes of stratospheric ozone
- Significant contribution to Australia meeting the greenhouse emission reduction targets set out in the Kyoto Protocol. The program has so far prevented the emission of the equivalent of fourteen (14) million tonnes of carbon dioxide through the collection and destruction of synthetic greenhouse gas refrigerants, such as HFCs, HCFCs and CFCs.

Chart 1: Abatement of CO₂e 2004-Sept 20

Abatement of Carbon Dioxide Equivalent Megatonnes CO₂e



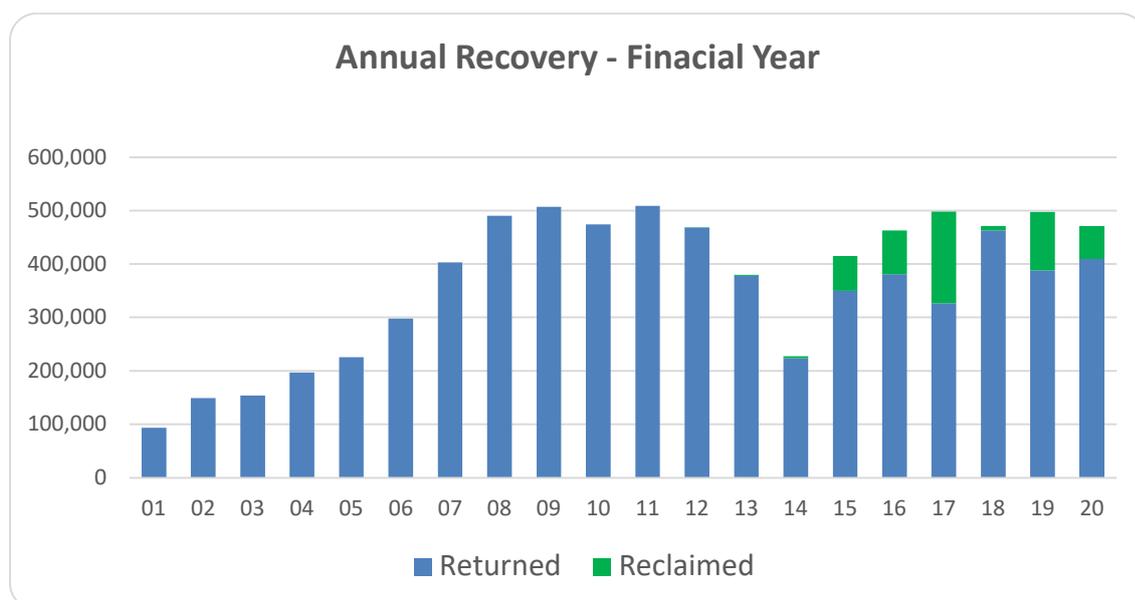
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	YTD Sept 2020
■ CFC	0.35	0.33	0.31	0.29	0.35	0.37	0.26	0.26	0.12	0.06	0.09	0.06	0.04	0.05	0.02	0.02	0.00
■ HCFC	0.25	0.27	0.34	0.42	0.46	0.50	0.40	0.50	0.22	0.08	0.09	0.05	0.04	0.06	0.05	0.04	0.04
■ HFC	0.10	0.14	0.19	0.21	0.26	0.31	0.35	0.44	0.59	0.50	0.48	0.68	0.71	0.66	0.91	0.85	0.58

- Encouraging environmental responsibility by industry through the promotion of sound practises and creating awareness of the impacts from industry activities.
- Providing industry with a proven program that complies with all regulatory requirements and provides the opportunity for all sectors of the industry to meet their environmental and regulatory obligations. RRA is a critical component in a comprehensive industry-wide co-regulatory approach to the reduction of negative environmental impacts. Other components of the program include licensing of importers, sellers, purchasers and technicians, audits of trade contractors, a prohibition on preventable emissions, and the requirement for recovery and safe disposal of ODS and SGG refrigerants.
- Since the granting of the current authorisation in 2010 there has been considerable upheaval in the refrigerant market. The introduction of a carbon price on 1 July 2012 led to the elevation of prices for the hydrofluorocarbon (HFCs) synthetic greenhouse gas refrigerants. The magnitude of the price increases caused behavioural shifts in the market particularly with the level of reuse.
- As can be seen in Chart 2 below, the volume of refrigerant being collected resumed growth in FY11 following the negative impacts of the GFC. However, the rate of recovery declined again in the first half of calendar 2012 and the decline accelerated after

the carbon pricing was introduced. Recovery continued to diminish until the repeal of the carbon pricing legislation in 2014.

- Contractors and wholesalers retained large quantities of recovered refrigerants, particularly HCFC22. Whilst some of the retained refrigerant was reclaimed much was reused despite its quality being highly suspect. The use of impure and contaminated refrigerant leads to plant operating inefficiently, higher indirect emissions of CO₂ due to increased power consumption, higher maintenance costs, and shorter service life.
- The repeal of the carbon pricing legislation resulted in lower refrigerant prices. Collections of recovered refrigerant increased almost immediately as stored poor quality and unwanted types of refrigerant were handed in. Considerable quantities of recovered refrigerant are still being reclaimed.

Chart 2: Annual Volume Recovered Refrigerant



Facts and evidence relied upon in support of these claims:

- All cylinders and drums of recovered refrigerant taken back by RRA are tested using a gas chromatograph mass spectrometer to ascertain their contents, and to identify the type and volume of ODS and SGG refrigerants being returned.
- The resulting chemical analyses are used to calculate the potential reduction in ozone depletion, and the estimated level of abatement of the emission of synthetic greenhouse gases.

- The science of ozone depletion and climate change, and the relationship between the phase-out of ODS refrigerants and the use of SGG refrigerants is well explained in the Intergovernmental Panel on Climate Change (IPCC) / Technical and Economic Assessment Panel (TEAP) Special Report Safeguarding the Ozone Layer and the Global Climate System.

Public detriment including any competition effects

11. Describe any detriments to the public likely to result from the proposed conduct, including those likely to result from any lessening of competition. Refer to the public detriment that may have resulted under the authorisation previously granted. Provide information, data, documents, or other evidence relevant to the ACCC's assessment of the detriments.

Levy. The imposition of a levy on the import and sale of new refrigerant, and its universal application, may have the effect of increasing the price of goods containing refrigerant and services involving the supply of refrigerant. However, the price effect is likely to be low as the additional cost is relatively minor compared to the total consumer price of each unit, and quantities of refrigerant contained in each unit are small. The price impact is also likely to be small with regards to services where the value of the levy is minor compared to costs of labour and components.

Rebates. The setting of the rebates by the RRA Board requires a minimum payment to contractors returning recovered refrigerant and determines the level of reimbursement of costs provided to wholesalers.

Processes. Should RRA choose to reclaim recovered refrigerant which is effectively the creation of new refrigerant by using distillation or other processes, the effect maybe increased competition to some replacement products such as HFC's, HFO's and HC's that might otherwise have gained higher sales. The volume is unlikely to be greater than 220 tonnes in a total bulk market of 3,600 tonnes. On the other hand should RRA choose not to reclaim recovered refrigerant such action may be seem as a restriction of the availability of a product that might compete with the alternative products of its contributors and members, thereby potentially reducing competition in the market.

Table 1: Levy Cost as a Component of Consumer Price

Unit or Service Type	Average charge of refrigerant	Cost of levy per unit @\$2.00 /	Estimated consumer cost of
Split System Air Conditioner	1.5 kg	\$3.00	\$2,000 +
Refrigerator / Freezer	0.2 kg	\$0.40	\$600 +
Motor Vehicle Air Conditioner	0.7 kg	\$1.40	\$26,000 +
Motor Vehicle AC Service	0.7 kg	\$1.40	\$300
Medium Size Supermarket	500 kg	\$1,000	\$500,000

Rebates. RRA has contracts with wholesalers that specify the rebates paid to them and that must be paid to contractors.

Processes. RRA has reclaimed refrigerant for supply back to the market in its earlier years of operations. Where strong demand for phase-out products exists (then CFC12 and now HCFC22) reclamation may be cost effective as the price of the increasingly scarce refrigerant increases.

Contact details of relevant market participants

12. Identify and/or provide names and, where possible, contact details (phone number and email address) for likely interested parties such as actual or potential competitors, customers and suppliers, trade or industry associations and regulators.

Refer to Appendix 3 for a comprehensive list in of names and contact details of interested parties.

Additional information

13. Provide any other information or documents you consider relevant to the ACCC's assessment of the proposed application.

Refer appendix 1 and 2

Declaration by Applicant(s)

Authorised persons of the applicant(s) must complete the following declaration. Where there are multiple applicants, a separate declaration should be completed by each applicant. The undersigned declare that, to the best of their knowledge and belief, the information given in response to questions in this form is true, correct and complete, that complete copies of documents required by this form have been supplied, that all estimates are identified as such and are their best estimates of the underlying facts, and that all the opinions expressed are sincere. The undersigned undertake(s) to advise the ACCC immediately of any material change in circumstances relating to the application. The undersigned are aware that giving false or misleading information is a serious offence and are aware of the provisions of sections 137.1 and 149.1 of the Criminal Code (Cth).



Kylie Farrelley
General Manager

This 2nd day of December 2020

Note: If the Applicant is a corporation, state the position occupied in the corporation by the person signing. If signed by a solicitor on behalf of the Applicant, this fact must be stated.

Appendix 1

Potential Recovery FY20

RRA total collections in 2019/20 totalled 470 tonnes, and was comprised of 409 tonnes collected and destroyed, and a further 61 tonnes that were reclaimed to new specification. This equates to recovery effectiveness between 47% and 67%, depending on the volume available for recovery. This is calculated on the volumetric range of refrigerant available for recovery being between 1,700 and 2,550 tonnes. It is important to note that all potentially recoverable refrigerant is available for retention and reuse by contractors and equipment owners. The table below displays the numbers.

RRA takes back all recovered refrigerant presented to it by the market. To ensure the long-term viability of the recovery program it is necessary for RRA to carefully forecast returns, budget costs, and calculate the required funding. RRA takes advice from and consults within the industry to seek to determine the amount of refrigerant expected to be recovered, and the anticipated growth over time.

However, RRA is at the same risk of market and economic fluctuations, faces the same impacts of national regulatory changes, and operates in the same global industry as commercial organisations. Over the years RRA experienced the marked decline in economic activity due to the global financial crisis, the many and often unintended consequences of carbon pricing, the consequent increase in recovery once the carbon tax was repealed, the growing impacts of phasing down high GWP refrigerants, and the unprecedented upheaval caused by Covid-19. RRA has recently developed a number of initiatives to encourage greater industry participation and improve rates of recovery, the first of which is due to commence on the 1 January 2021.

To understand how much refrigerant is available for recovery it is necessary to first understand the size of the market and the applications to which new refrigerant will be applied. In 2019/20 sales of bulk refrigerant were in the order of 3068 tonnes. Understanding the applications provides a guide as to how much is available for recovery. Industry advice is that 305 tonnes is used for original equipment manufacturing, 588 tonnes for new installations, 677 tonnes for automotive air conditioning service, 350 tonnes for domestic air conditioning service, and 1148 tonnes for commercial, industrial AC and refrigeration. Please note the figures are approximations. The Australian refrigerant market has undergone substantial change over the past decade: original equipment manufacturing has decreased; imports of equipment already charged with refrigerant have increased; new and installed systems leak rates have significantly declined; and recycling and reuse has grown strongly.

It is only during service operations and decommissioning that refrigerant is available for recovery. Yet, much of the refrigerant used in service work is for replacing that which has leaked during operation. In the automotive sector it is estimated that while 677 tonnes are used in the service sector only between 200 and 300 tonnes of refrigerants are available for recovery. The domestic air conditioning sector has grown strongly this century with installed refrigerant now the largest component of the bank. As this type of equipment has very low leakage rates the quantity of refrigerant used for service is relatively small at 350 tonnes, and the volume available for recovery is estimated to be between 100 and 200 tonnes. Of the 1148 tonnes used in the commercial/industrial and refrigeration service sector approximately 300 to 500 tonnes are available for recovery.

The decommissioning and disposal of equipment, such as motor vehicles and air conditioning systems, provides the opportunity for recovering refrigerant. It is difficult to estimate the amount of refrigerant available from decommissioned equipment, and it is the sector where the greatest potential for increased recovery exists. Australia does not have product stewardship schemes for end-of-life motor vehicles or consumer durables such as refrigerators and air conditioners.

Approximately 700,000 motor vehicles are disposed of annually. As these are generally older vehicles about 80% will have air conditioning systems. Research indicates that EOL vehicles contain as much as 250 tonnes that should be available for recovery.

More than 10 million air conditioning systems are installed in Australia with an average charge of 1.6 kilograms. Around half these systems were installed in the last five years and will not be due for retirement for many years due to an average life of fifteen years. Using an annual leakage rate of 3% the amount available for recovery on decommissioning each year may be as much as 900 tonnes.

The amount of refrigerant available for recovery from other refrigeration and air conditioning plant is not known to any certainty but is likely to be in the order of 300 to 500 tonnes per annum based on a fifteen-year equipment life and two thirds of the charge being present when decommissioned.

Most refrigerant recovered in Australia is reused, most usually in the system from which it was extracted. The amount of refrigerant retained and reused by contractors and technicians is unknown. It is known that the volume retained for reuse increases in-line with refrigerant price and scarcity. In recent years, the supply of HCFC R22 has diminished as it is phasing out. Eight years ago, RRA received more than 200 tonnes of R22 a year. As it has become less common the price has increased markedly leading to high levels of retention, reclamation, and reuse, causing the volume received to fall well below 30 tonnes per annum.

Calculating Percentage of Recovery

Applications for new refrigerant (tonnes)

OEM	305
New Installations	588
Automotive Service	677
Dom AC Service	350
Comm/Ind AC & Refrigeration	1148

Total Sales **3068**

Available for Recovery

Range of Estimations

Automotive Service	200	300
Dom AC Service	100	200
Comm/Ind Ac & Refrigeration	300	500
EOL Vehicles	200	250
EOL AC	600	900
EOL Commercial	300	400

Available for Recovery **1700** **2550**

Amount Retained for Reuse -1000 -1550

Amount Available to be Returned 700 1000

Amount Returned to RRA 470 470

Percentage Recovery **67%** **47%**

NB: Based on the volume collected in 2019/20.

Appendix 2

The Australian Installed Refrigerant Bank

Chart 3 displays the projected transition of the installed bank of refrigerant in Australia through to 2025 in tonnes of refrigerant. Chart 4 displays the same transition but expressed at millions of tonnes of carbon dioxide equivalent.

Chart 3

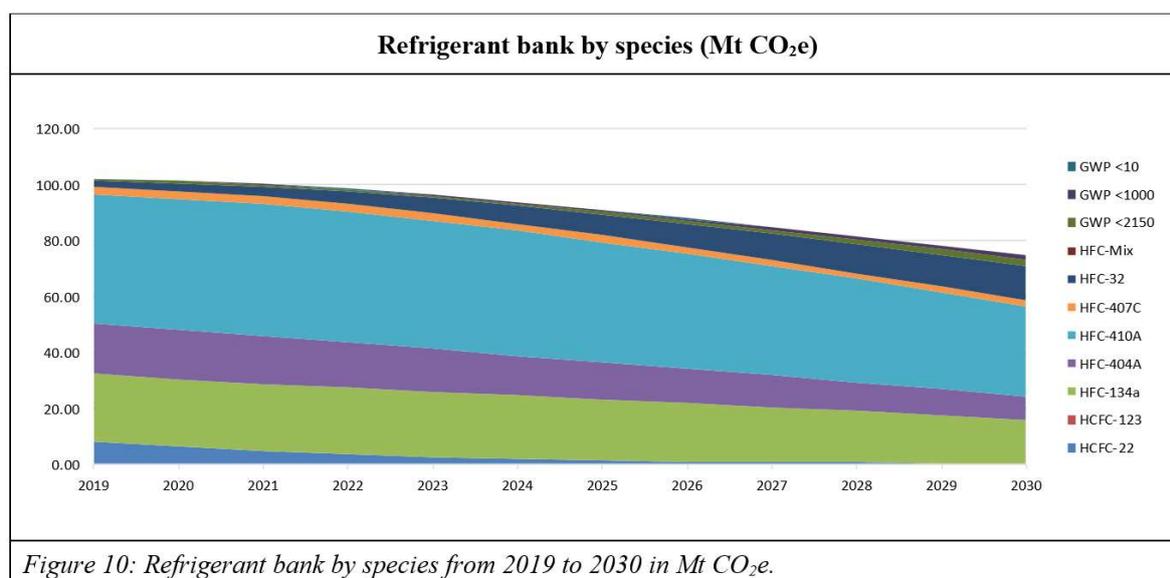


Figure 10: Refrigerant bank by species from 2019 to 2030 in Mt CO₂e.

(Source: CHF 2020 RAC Stock Model)

The quantities and types of refrigerants in use in 2030 and beyond will be markedly different from those used today. The installed bank of refrigerant will migrate to products with lower GWP's and, most likely, increased flammability. The chart immediately above (Chart 3), extracted from the report Cold Hard facts 2020, describes the projected change in refrigerant consumption. The inclusion of products used in other sectors is not material. The projection is a guideline only but it aptly demonstrates the changing shape of consumption and the expected uptake of lower GWP products.

There are many influences on the types and quantities of refrigerants that will be used throughout the next fifteen years. However, it is most likely that governments and international agreements and protocols will have the most profound and far-reaching impacts. Global environment protection actions will ultimately determine the types of refrigerants used, their availability, and thereby price. Such actions will also drive technological change, not just in refrigerants but also for cooling and heating more generally. Unilateral actions by national governments, in the absence of global accords, may have similar effects.

Global accords and country-based initiatives that already impact Australia will be even more influential in the future. These include:

- Montreal Protocol
- United Nations Framework Convention on Climate Change
- Kyoto Protocol (and its successor)
- European F-Gas regulations
- USA SNAP and other program initiatives
- Japanese industry/environment accords on emission reduction

Australian legislation and regulations will also strongly influence the types and quantities of refrigerant consumed, and the amount recovered and ultimately destroyed. Whereas legislation causing the phase out or down of high GWP refrigerants will dictate consumption, regulations that govern the handling and management of EOL equipment have the potential to impact significantly on the volume of refrigerant being recovered.

Appendix 3

Contact Details of Interested Parties

Manufacturers and Importers (Bulk)

- Company: The Chemours Company (Australia) Pty Ltd
Registered Address: Level 26, 181 Williams St, Melbourne, VIC 3000
ACN: 169 142 750
Contact Name: Mr. John McCormack
Phone: [REDACTED]
Email: [REDACTED]
- Company: Honeywell Polymers (Australia) Pty Ltd
Address: Level 3, 2 Richardson Place, North Ryde, NSW 2113
ACN: 008 423 096
Contact: Leo Li
Phone: [REDACTED]
Email: [REDACTED]

Manufacturers and Importers (Equipment)

- Company: Daikin Australia Pty Ltd
Address: 66 Governor Macquarie Drive, Chipping Norton, NSW 2170
ACN: 000 172 967
Contact: Mr. Gary Knox
Phone: [REDACTED]
Email: [REDACTED]
- Company: Fujitsu General (Aust) Pty Ltd
Address: Eastern Creek Drive, Eastern Creek, NSW 2148
ACN: 001 229 554
Contact: Mr. Peter Cashel
Phone: [REDACTED]
Email: [REDACTED]
- Company: Mitsubishi Electric Company Australia Pty Ltd
Address: PO Box 11, Rydalmere, NSW 2116
ACN: 001 215 792
Contact: Mr. John Taylor
Phone: [REDACTED]
Email: [REDACTED]

Importers and Distributors

- Company: A-Gas Australia Pty Ltd
Address: 9/11 Oxford Road, Laverton North, VIC 3026
ACN: 066 273 247
Contact: Mr. Brett Ferguson
Phone: [REDACTED]
Email: [REDACTED]
- Company: Atomic Capital Australia Pty Ltd
Address: Level 10, 1 Margaret St, Sydney, NSW 2000
ACN: 155 240 690
Contact: Debbie Cook
Phone: [REDACTED]
Email: [REDACTED]

Importers and Wholesalers

- Company: Reece Ltd
Address: 118 Burwood Highway, Burwood VIC 3125
ACN: 004 313 133
Contact: Mr. Greg Brooker
Phone: [REDACTED]
Email: [REDACTED]
- Company: BOC Gases Ltd
Address: 10 Julius Avenue, North Ryde, NSW 2113
ACN: 000 029 729
Contact: Mr. Nathan Johns
Phone: [REDACTED]
Email: [REDACTED]
- Company: Kirby HVAC&R Pty Ltd
Address: Locked Bag 6501, Milperra, NSW 1891
ACN: 624 910 041
Contact: Mr. Paul Campbell
Phone: [REDACTED]
Email: [REDACTED]

Industry Associations

- Association: Air-conditioning Refrigeration Equipment Manufacturers Association of Australia (AREMA)
Address: 20 Kenna Place Gympie NSW 2227
ACN: 126 332 810
Contact: Mr. Mark Padwick
Phone: [REDACTED]
Email: [REDACTED]

- Association: Air-conditioning Refrigeration Wholesalers Association (ARWA)
Address: C/O – Reece Ltd - 118 Burwood Highway, Burwood VIC 3125
ABN: 48 114 879 813
Contact: Mr. Greg Brooker
Phone: [REDACTED]
Email: [REDACTED]
- Association: Refrigerants Australia (RA)
Address: 28 Sydney Avenue Forrest ACT 2603
ACN: 089 445 723
Contact: Dr. Greg Picker
Phone: [REDACTED]
Email: [REDACTED]
- Association: Refrigeration Air Conditioning Contractors Association (RACCA)
Address: 817 Princes Highway, Tempe, NSW 2044
ABN: 35 882 543 205
Contact: Mr. Kevin O’Shea
Phone: [REDACTED]
Email: [REDACTED]
- Association: Vehicle Air-conditioning Specialists of Australasia (VASA)
Address: 14 Motorway Drive, Ormeau, QLD 4208
ACN: 063 969 782
Contact: Mr. Ian Stangroome
Phone: [REDACTED]
Email: [REDACTED]
- Australian Food Cold Chain Council Limited (AFCCC)
Address: 14 Motorway Drive, Ormeau, QLD 4208
ACN: 621 254 448
Contact: Mr. Mark Mitchell
Phone: [REDACTED]
Email: [REDACTED]

Government Departments

- Department of Agriculture, Water and the Environment
Contact: Patrick McInerney
Phone: [REDACTED]
Email: [REDACTED]