OZONE PROTECTION

Operation of the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989*

This annual report is prepared in accordance with section 68 of the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989*. It covers the operation of the Act from 1 July 2008 until 30 June 2009.

Ozone depletion is a major global environmental problem. Left unchecked, deterioration of the ozone layer will allow higher doses of ultraviolet band B (UVB) radiation to penetrate the earth's atmosphere. This will greatly increase the incidence of skin cancer and eye cataracts, as well as affecting plants, animals and aquatic life.

The international community's response to ozone depletion has been cohesive and effective. Research indicates that the rate of ozone depletion has slowed. Scientists predict a full recovery of the ozone layer in the mid-latitudes by around 2050; and over the Antarctic in the period 2060–75. This predicted recovery depends on full compliance with internationally agreed ozone depleting substances phase out obligations.

Australia meets its international obligations to phase out ozone depleting substances (ODS) and to control the use of synthetic greenhouse gas (SGG) replacements through the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989.*

Montreal Protocol

The 1987 Montreal Protocol on Substances that Deplete the Ozone Layer applies binding obligations to its member countries, to control the consumption and production of ozone depleting substances. Australia ratified the Montreal Protocol in May 1989. The protocol was amended in 1990, 1992, 1995, 1997 and 1999. Australia has ratified all amendments. The protocol establishes total phase out dates for controlled substances. The protocol was also adjusted in September 2007 to accelerate the phase out of hydrochlorofluorocarbons (HCFCs) in developed and developing countries.

Australia has met, or is well in advance of meeting, all reduction obligations. By 2016 Australia will have essentially phased-out the import of HCFCs, five years ahead of our new international obligations. In doing so, Australia will consume around 4600 ozone depleting potential (ODP) tonnes (or 61 per cent) less HCFCs than allowed for under the Montreal Protocol in the period from 1996 to 2020.

United Nations Framework Convention on Climate Change

The United Nations Framework Convention on Climate Change (UNFCCC) provides the basis for global action "to protect the climate system for present and future generations". Australia ratified the convention in December 1992. Three synthetic greenhouse gases are covered under the UNFCCC and the Kyoto Protocol: hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride. Since 2003, HFCs and PFCs have been controlled by the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989.* Unlike the treatment of ozone depleting substances, the Act does not impose any quotas or phase outs on synthetic greenhouse gases.

During 2008 the Australian Government developed, in consultation with the public and industry, the Carbon Pollution Reduction Scheme (CPRS) as the primary policy tool to drive reductions in emissions of greenhouse gases, including HFCs, PFCs and sulphur hexafluoride. In December 2008 the Australian Government released the White Paper entitled Carbon Pollution Reduction Scheme: Australia's Low Pollution Future, which outlined the government's policy position on the scheme's design. Design features of the scheme applying to synthetic greenhouse gases will be primarily delivered through the existing architecture of the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989.*

Purpose of the Act

The purpose of the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* is to:

- implement the provisions of the 1985 Vienna Convention for the Protection of the Ozone Layer and the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer
- institute specific controls on the manufacture, import, export, distribution and use of ozone depleting substances
- encourage Australian industry to replace and achieve a faster and greater reduction in the use of ozone depleting substances
- control the manufacture, import, export and use of synthetic greenhouse gases that are used to replace ozone depleting substances, to give effect to Australia's obligations under the UNFCCC, and
- promote the responsible use of ozone depleting substances and synthetic greenhouse gases, to minimise their effect on the atmosphere.

Operational aspects of the Act

Licensing

The *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* establishes a licensing system to enable Australia to meet its international obligations under the Montreal Protocol and the UNFCCC. The Act manages the phase out of ozone depleting substances. It also applies consistent controls on the use of ozone depleting substances and synthetic greenhouse gases used to replace ozone depleting substances, to minimise the emission of these substances to the atmosphere. The Act:

- prohibits the import, export or manufacture of chlorofluorocarbons (CFCs), halons (halon 1211, 1301 and 2402), carbon tetrachloride, methyl chloroform, bromochloromethane and hydrobromofluorocarbons (HBFCs), without either an essential use licence or a used substance licence
- establishes a system of controlled substance licences and reporting requirements, for the import, export or manufacture of HCFCs, methyl bromide, HFCs and PFCs, consistent with Australia's obligations under the Montreal Protocol and the UNFCCC
- establishes a licensing system for the import of refrigeration and air conditioning equipment that contains an HFC or HCFC refrigerant charge (pre-charged equipment), thereby applying the same conditions and responsibilities for the import of these substances in equipment, as apply to their import in bulk form.

Revenue

The *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* establishes administrative fees for licences issued under the Act, at the levels set under the Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995 (Ozone protection Regulations). The Act also establishes the Ozone Protection and SGG (Synthetic Greenhouse Gas) Account, to allow revenue from the licensing system, import and manufacture levies and the National Halon Bank, to be directed towards: the cost of the Act's administration; ozone depleting substance phase out programs; emission minimisation programs; and the operation of the National Halon Bank.

End-use Regulations

The *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* creates regulation-making powers to allow the Australian Government to develop end-use controls on: acquisition; purchase; sale; handling; use; storage; and disposal of ozone depleting substances and synthetic greenhouse gases.

End-use regulations have been implemented for the use of ozone depleting and synthetic greenhouse gases in the refrigeration and air conditioning and fire protection industries. Regulations also control the use of methyl bromide as a feedstock, its use as a fumigant for approved critical uses, and quarantine and pre-shipment uses.

These regulations assist Australia to meet its phase out obligations under the Montreal Protocol. They will lead to reduced emissions of ozone depleting substances and synthetic greenhouse gases, through the establishment of minimum industry standards.

The Australian Refrigeration Council and the Fire Protection Association of Australia were appointed to administer the permit schemes in the refrigeration and air conditioning industry, and the fire protection industry, respectively.

Product stewardship

Holders of import licences under the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* are required, as a condition of their licence, to meet product stewardship obligations. To date all such licensees have elected to do so by joining Refrigerant Reclaim Australia (RRA). Membership obliges licensees to pay to RRA $2 per kilogram of ODS or SGG refrigerant imported. This money is used to fund collection of used refrigerant at end of life and its subsequent destruction.

RRA collected and destroyed 513 tonnes of ozone depleting substances and synthetic greenhouse gas refrigerants in the 2008–09 financial year. This follows a steady year on year increase, from 200 tonnes in the 2003–04 financial year.

Permits

Licences issued

Four types of licence can be issued under the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989*: controlled substance, essential use, used substance, and pre-charged equipment. There is one type of exemption: section 40 (essential use).

Essential use exemptions and licences for controlled substances, used substances, essential uses and pre-charged equipment are granted for a period of up to two years. The current licensing period ends on 31 December 2009.

As of 30 June 2009 there were 836 active licences for the 2008–09 licensing period.

Table 1: Active licences as at 30 June 2009

Type of licence	*Number*
Import and export HCFC	8
Import and export methyl bromide	7
Import and export HFC and PFC	18
Import refrigeration and air conditioning equipment containing an HCFC or HFC refrigeration charge	802
Import and export used or recycled CFC, halon, carbon tetrachloride and methyl chloroform—used substance licence	1
Section 40 exemptions [1]	10

Note: [1]Section 40 exemptions are issued only to enable the import of certain products and equipment containing, or designed to contain, certain ozone depleting substances that are essential for medical, veterinary, defence, industrial safety and public safety and for which practical alternatives are not available in Australia.

The Ozone Protection and Synthetic Greenhouse Gas Management Regulations permit the use of methyl bromide for quarantine and pre-shipment uses, other critical uses that have been approved by the Parties to the Montreal Protocol, and as a feedstock (i.e. an intermediate substance that is used to manufacture other chemicals). A permit to use methyl bromide as a feedstock is granted where the user demonstrates that it is a genuine feedstock use. Two such permits were issued in 2008–09. These permits are issued on a calendar year basis.

Australia's imports of ozone depleting substances remain below the limits set through the Montreal Protocol. Bulk imports of ozone depleting gases into Australia during the 2008 calendar year, amounted to the equivalent of 128.8 ozone depleting potential (ODP) tonnes, a decrease from 2007. The import of ozone depleting substances for use as refrigerants, solvents and fire extinguishing agents, remained in line with the structured quota reduction system. In addition an estimated 15.56 ODP tonnes of ozone depleting refrigerants were incorporated in pre-charged equipment imported in 2008.

Imports of bulk synthetic greenhouse gases into Australia during the 2008 calendar year totalled 6487 kilotonnes of carbon dioxide equivalent. Imports of synthetic greenhouse gases incorporated in pre-charged equipment increased to 3504 kilotonnes of carbon dioxide equivalent.

Revenue

The Act provides for licence and exemption application fees to be levied.

Table 2: Licence and exemption fees

Type of licence/exemption	*Fee*
Controlled substance	$15,000 per licence period
Essential use	$ 3,000 per licence period
Used substance	$15,000 per licence period
Pre-charged equipment	$ 3,000 per licence period
Section 40	$ 3,000 per exemption period

Levies on imports and manufacturing activity under a controlled substance licence are payable each quarter, under the *Ozone Protection and Synthetic Greenhouse Gas (Import Levy) Act 1995* and the *Ozone Protection and Synthetic Greenhouse Gas (Manufacture Levy) Act 1995*, according to the quantity and ozone depleting potential of HCFCs imported or manufactured; or the quantity of methyl bromide, HFC or PFC imported or manufactured (see Table 3). Australia has not manufactured ozone depleting substances since 1996, and has never manufactured HFCs or PFCs.

Table 3: Activity fees

Licensed activity	*Fee*
Import HCFCs	$3,000 per ODP[1] tonne
Import HFCs and PFCs	$ 165 per metric tonne
Import methyl bromide	$ 135 per metric tonne

Note: [1]Ozone depleting potential is a comparative measure, using CFC as a base level of 1. For example: 1 metric tonne of methyl bromide equals 0.6 ODP tonnes.

Licence fees and levies are set at the level estimated to be the cost to the Australian Government of administering the legislation, and undertaking programs associated with phase out and emission minimisation. These fees are held in the Ozone Protection and SGG Account.

The purpose of the account is to reimburse the Australian Government for the costs associated with:

- administration of the Act and Regulations
- furthering the ODS phase out, and the ODS and SGG emission minimisation programs
- management of the National Halon Bank.

Funds received during 2008–09 from operation of the National Halon Bank and licence fees and levies, are shown in Table 4.

Table 4: Ozone Protection and SGG Account receipts and expenditure

Activity	*Amount received ($) in 2008–09*
Controlled substance licence fees:	0
Methyl bromide licence fees	15,000
HFCs licence fees	0
Pre-charged equipment licence fees	522,000
Section 40 exemption fees	9,000
Levies:	
HCFCs	276,013
Methyl bromide	59,844
HFCs	501,400
Pre-charged equipment	465,359
National Halon Bank:	-
Commercial revenue	1,329,941
Other:	
Refund	
EFT Settlement account adjustment	
Total	***3,178,578***
Account	**Expenditure**
Grants	320,128
Salary and administration	4,485,843
Total minus expenditure	***$1,627,394***

Projects funded from the Ozone Protection and SGG Account

A study defining the use of ODS and SGGs in Australia, was completed in June 2008. The study reviewed the quantity and type of substances used, the industries involved, emission factors and end-of-life treatments. A condensed version of the report was released to the public via the department's website.

A research project to obtain data on emissions of ODS and SGGs from landfill, at the Rye Landfill in Melbourne, is being finalised. The data will help to fill a knowledge gap on emission losses from end-of-life equipment over time. The data will be used to refine existing models, which contribute towards formulating Australia's National Greenhouse Gas Inventory.

A similar research project to obtain data on emissions of ODS and SGGs from motor vehicles while at rest (i.e. stationary), is being finalised. This data will help to further knowledge on the Melbourne road transport fleet, as measured in the Domain Tunnel (a previous study) and in underground car parks. The data will be used to refine existing models, which contribute towards formulating Australia's National Greenhouse Gas Inventory.

Funding was provided for the development of training and assessment materials to support the fire protection industry competencies, which are the basis of the Fire Protection Industry Regulations. Funding of $90,000 was provided in 2008–09 and a further commitment of $143,000 has been made for 2009–10.

Funding for the Experienced Persons' Licence Transition Program (EPLTP) was provided to five organisations across Australia in 2008–09. The program will continue to assess competency against the four national refrigeration and air conditioning licence requirements: full refrigeration and air conditioning; automotive air conditioning; split systems air conditioning; and domestic appliances. Under the EPLTP funding has been provided to improve access to competency assessment for refrigeration and air conditioning technicians who do not hold formal trade qualifications. The program has been particularly focussed on geographic areas that have had limited access to these services.

A strategy to encourage Australian ozone science was developed. Implementation of the strategy has commenced, with the awarding of a top-up scholarship to a student commencing a PhD this year. The top-up scholarship is one way of encouraging new scientists to focus on ozone science. Funding for this scholarship comes from the Ozone Protection and SGG Account. It is intended that this award be made each year to a new student.

Refrigeration and Air Conditioning

The Regulations establish a permit scheme for the refrigeration and air conditioning (RAC) industry in Australia. There are four types of permits issued:

- Refrigerant Handling Licence–allows the holder to handle controlled refrigerants in the RAC industry.
- Refrigerant Trading Authorisation–allows the holder to acquire, possess and dispose of controlled refrigerants.
- Restricted Refrigerant Trading Authorisation–allows the holder to acquire, possess and dispose of controlled refrigerants but only where that refrigerant has been reclaimed from end-of-life RAC equipment, and only where the refrigerant is supplied to the operator of an approved refrigerant destruction facility.
- Refrigeration Equipment Manufacturers Authorisation–allows the holder to acquire and use controlled refrigerants in the manufacture of RAC equipment.

The operation of the permit scheme is contracted to the Australian Refrigeration Council (ARC).

Permit numbers

	1 July 08	*30 June 09*	*Difference*	*% Increase*
Authorisations	16 031	17 482	1451	9.05%
Licences	50 510	53 745	3235	6.4%

Compliance and Enforcement Activities

The ARC conducts a compliance audit program under its contract. A range of audits are conducted, including: on site (planned, scheduled audits); desk top (paper based); drive by (random drop in audits); as well as providing technical assistance to the Australian Customs Service where illegal import is suspected; and following up on complaints about permit holders.

On site audits	2887
Drive by audits	2637
Desk top audits	2587
Assisting Customs	30
Complaint related site visits	2
	8143

Finances

The permit system operated by the ARC collected $3,704,880 to 31 July 2009, in permit application fees. The department paid the ARC $5,536,290 in operating expenses over the same period, which included funding from the Ozone Protection and SGG Account for a number of additional projects.

Montreal Protocol's Multilateral Fund

Australia provides financial assistance through the Montreal Protocol's Multilateral Fund, to assist developing countries to comply with the phase out requirements under the protocol. Australia is one of fourteen members of the Executive Committee of the Multilateral Fund that oversights governance of the funding, including considering project approvals and outcomes.

Australia directs part of its contribution to the Multilateral Fund into providing direct technical and financial assistance to other countries in the region. This year Australia continued to assist Pacific Island countries to meet their obligations under the Montreal Protocol, including: helping them to develop legislation to control imports of ozone depleting substances and to develop training for customs officers. Funding for these projects is provided through Australia's international aid program.

Freedom of information

No requests were received under the *Freedom of Information Act 1982*.

Administrative Appeals Tribunal

There were no applications under section 66 of the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* to the Administrative Appeals Tribunal for review of a decision made by the minister.