

Destruction of Ozone Depleting Substances

Historically, many refrigerant gases, such as freon gas, that are now known to be ozone depleting substances (ODSs), were used extensively both in households for refrigeration and air conditioning, and also for commercial refrigeration and industrial cooling. Halon gases have been principally used in fire extinguishers and other fire suppression systems and are now known to be exceptionally damaging to the ozone layer. Knowledge of the involvement of these substances in the partial destruction of the ozone layer came to the forefront of public awareness in the 1980s resulting in the formation in 1987 of a treaty named The Montreal Protocol on Substances that Deplete the Ozone Layer. This treaty focussed on reduction and elimination of ODSs. Most nations, including Australia, are signatories to this agreement and under its terms Australia has prohibited the venting of such substances to the atmosphere, along with a ban on further importation and production.

Since 1996, the BCD Technologies plant in Tottenham has been safely destroying both refrigerants and halon gases using the PLASCON® high temperature plasma process. Halon gases are collected by the Australian National Halon Bank and sent to BCD Technologies for destruction. Used refrigerant gasses are collected from around Australia via Refrigerant Reclaim Australia , for destruction by BCD Technologies. BCD Technologies also provides ODS destruction services to other clients.

During the period since 1996, over 1,000 tons of halon gasses, and over 2,500 tons of used refrigerants, have been destroyed by this facility. Currently this facility destroys over 450 tons of ODS per year.