

## Company Environmental Impact Review.

### Products & Customer Equipment.

The greatest impact the organisation has on the environment is indirect, if consideration is given to the equipment we propose / install and maintain both in terms of energy efficiency through design of new systems and keeping existing equipment in optimum working condition.

Air Conditioning and Refrigeration equipment consumes a large amount of energy, normally in the form of electricity. Over the operational lifetime of equipment its energy efficiency can have a massive impact on costs both financial and environmental.

Given this, the organisation will promote wherever reasonably practical the use of energy efficient equipment and effective maintenance programmes to its customers. This will include the promotion of the TM 44 scheme relating to the Inspection of Air Conditioning Systems and promotion of drop in and new system refrigerants with low / lower GWP's.

Staff will be suitably trained and experienced to have the necessary product and technical knowledge to ensure they can advise our customers on the best equipment option for any required application and any relevant environmental advice.

The need to ensure that staff are fully aware and up to date with relevant environmental legislation and associated technical development is identified as a key point in ensuring the above goal is achieved. Relevant training will therefore be arranged and provided to meet this goal, in addition updates from our business partners and trade press will be noted and any changes to operation or policy implemented to meet both new regulation and accepted best practice.

### Refrigerant.

Most refrigerants used in Air Conditioning & Refrigeration Systems have an impact on the environment, release of these products into the atmosphere can, depending upon the actual refrigerant, cause stratospheric ozone depletion and or contribute to the greenhouse effect leading to global warming.

Different types of refrigerants (HFC's, HC's and CO<sub>2</sub>) are being used to replace CFC's and HCFC's in order to reduce ozone depletion, however all have some impact on global warming either directly through release or due to the efficiency of the system in which they are used. Moving forward the RAC industry in general and P&R will work to promote the use of refrigerants with a lower GWP.

The correct selection of refrigerant for a particular application is an important factor in ensuring the system works as efficiently as possible and energy use kept to a practical minimum.

To ensure this is done appropriate training and product knowledge is essential for staff involved in system selection and design processes.

The usage and control of refrigerant to minimise leakage is also a function that is required to meet the company's legal requirements and environmental goals.

The use of all new refrigerant and reclamation of used refrigerant will be recorded and monitored.

The criteria used by REFCOM Elite will be adopted as the system under which refrigerant is handled, these criteria include suitable training of operatives handling refrigerant, the use of specialised equipment and an approved record keeping system.

This system also enables the company to meet its requirements under current environmental legislation such as the Ozone Depletion and F-Gas Regulations. The company will maintain its mandatory F-Gas certification requirements alongside the higher level F-Gas Elite voluntary scheme.

The company will be registered with the relevant government body (Environment Agency) to enable it to handle waste refrigerants, which are classed as hazardous waste. The required paperwork will be used and maintained to meet The Hazardous Waste Regulations 16<sup>th</sup> July 2005 and subsequent amendments ie The Waste (England and Wales) Regulations 2011. The registration also covers other Hazardous Waste products such as oil and batteries.

Only suitably registered companies / wholesalers will be used for both the supply and return of waste refrigerant.

The quantity of new and waste refrigerants held on our premises, in our service vehicles and on customer sites (controlled by P&R) will be limited to a practical minimum.

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### **Oil.**

During the course of our normal service and maintenance activities lubricating oil is added to and removed from customers Air Conditioning & Refrigeration systems.

New oil is purchased through specialist wholesalers and limited stocks are maintained on P&R premises / service vehicles. Designated storage areas are allocated and spill containment (granules / packs) kept adjacent to the storage areas and emergency kits on service vehicles.

Where used refrigerant oil is removed from systems, it is returned to P&R premises and stored ready for collection by a specialist waste disposal contractor. As with refrigerant a hazardous waste consignment note is used when the oil is collected and records maintained.

The quantity of new and waste lubricating oil held on our premises, in our service vehicles and on customer sites (controlled by P&R) will be limited to a practical minimum.

### **Other Items Classed as Hazardous Wastes.**

Other items classed as hazardous waste are handled during the course of the organisations business, these include;

**Used refrigeration cabinets / coldroom panels** are removed from customer sites when no longer required or replaced, these are normally returned to the company premises and batched until a suitable amount (5 to 10) are ready for collection.

In some circumstances the old cabinet may be removed by the company supplying the replacement unit, in such circumstances we will ensure this is carried out with full regard to the relevant waste regulations.

A specialist waste contractor is used for the disposal of cabinets / panels. As with refrigerant a hazardous waste consignment note is used when these items are collected and records maintained.

It is anticipated that up to 100 cabinets per year may be disposed of through the three branches of the organisation, actual numbers will fluctuate depending on workloads.

**Small batteries** that are used in equipment such as torches, remote controls, desk calculators etc. These items once used are collected in a dedicated storage bin and disposed of in batches. Note; quantities of these products are reasonably small.

**Fluorescent tubes** that are used in our premises and removed from customers' sites. These items once used / faulty are collected in a dedicated storage area and disposed of in batches. Note; quantities used / disposed of are reasonably small.

**Mobile telephones** are provided and used by most members of staff. Regular upgrades and faulty telephones lead to between 15 and 20 telephones per year requiring disposal, these are batched and once a reasonable number have been collected they are sent to Comm-Tech Voice & Data our mobile phone supplier for recycling / disposal.

**IT equipment** such as computers, printers, plotters, telephones and fax machines are occasionally replaced, these are batched and held at head office until a suitable number have accumulated. A specialist disposal company is used to remove these items from our premises.

### **Cleaning Chemicals.**

During the normal course of our work various cleaning and disinfecting chemicals are used, requirements are identified and product assessments made, wherever possible products are used which are classed as biodegradable or having low environmental impact.

A list / register of the products commonly used is maintained as part of the company C.o.S.H.H. assessment, in addition to this Material Safety Data sheets for these products are held at P&R service offices and copies held in the engineers Health and Safety Folders to ensure availability at point of use for both our staff and customers if required.

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### **Paints.**

Although not extensively used, paint is occasionally used for the maintenance of premises and on site. It is stored in a very small quantity in a purpose made chemical store in each premises or if to be used on site in the relevant service vehicle. In practice any cans are completely used before disposal. Safety Data sheets for these products are held at P&R service offices.

### **Adhesive.**

Adhesives such as superglue and contact adhesive are used in small quantity. It is stored in a very small quantity in a purpose made chemical store in each premises or if to be used on site in the relevant service vehicle. As with paint these products are normally used and not disposed of, other than 'empty' containers. Safety Data sheets for these products are held at P&R service offices and copies held in the engineers Health and Safety Folders to ensure availability at point of use for both our staff and customers if required.

### **Material Data Sheets.**

For all substance commonly used by the company a material data sheet is maintained, this allows direct and fast access to environmental information should it be required.

A library of data sheets is held in each office with a further reduced library held on each service vehicle as part of each engineers Health, Safety & Environmental folder.

### **General Waste.**

General waste products such as plastics, polythene, packaging materials, small items of food waste, floor sweepings etc are collected at each premises in a large container supplied by the waste contractor. These are currently emptied on a weekly basis.

Transfer of this waste from P&R to the relevant waste contractor is carried out under a yearly transfer note, copies of these are held at the head office address in the waste file.

### **Paper / Cardboard.**

At our premises in Bury St Edmunds and Ipswich paper and cardboard waste is separated (pre-processed) from general waste products and placed in a separate container, this is emptied on request when full by the waste contractor used for general waste removal.

At Lowestoft this process is carried out off site by our waste contractor V C Cooke.

The paper / cardboard is then recycled and not sent for landfill as is the general waste.

Transfer of this waste from P&R to the relevant waste contractor is carried out under a yearly transfer note, copies of these are held at the head office address in the waste file.

### **Scrap Metals**

Scrap metals such as steel, copper and aluminium are collected in batches and when suitable quantities collected, are either collected by or taken to local scrap metal dealers, this process is now controlled via waste transfer notes with an advice note and invoice procedure to eliminate cash transactions.

With items such as refrigeration compressors or condensing units, which often contain refrigerant or oil when removed from sites by us, any oil or refrigerant is removed and disposed of as listed above before these items are sent to the scrap merchant.

### **Water Courses.**

Water and sewage services are connected to all three premises, these are only used in small quantity for standard operations such as washing / toilet facilities and testing equipment such as ice machines / water fountains.

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### Energy Use in Premises.

All premises have mains electricity and gas supplies for lighting, IT use and heating. Energy use is kept to a practical minimum by good management of lighting and heating / cooling temperature controls.

Gas driven space heaters are used to heat open workshop areas during the winter months with the use of de-stratification fans to ensure an even temperature distribution within the workspace.

Heat pump air conditioners with high energy efficiency ratings are used to condition office areas.

Heating, cooling and ventilation equipment is regularly maintained.

As and when heating / cooling equipment requires replacement the energy efficiency of any replacement equipment will be a key factor in our selection of replacement equipment.

As and when premises are refurbished the use of low energy LED light fittings will be applied.

### Company Vehicles.

The company operates around 36 vehicles, mostly small vans and cars, these impact upon the environment in terms of fuel and resource use.

As old vehicles are replaced and new vehicles purchased the factors of fuel type, fuel economy and CO<sub>2</sub> emissions are a major consideration in the choice of replacement vehicles. The possibility of using electric or hybrid vehicles is also fully considered during any purchasing decisions, currently one hybrid vehicle is in use within our car fleet.

The possibility of reducing equipment / weight carried and size of vehicle is also considered to minimise overall fuel consumption.

Where possible by the task to be undertaken two persons will travel in one vehicle to reduce both cost and environmental impact.

Servicing and replacement of components such as tyres is carried out by reputable companies to ensure correct disposal of components such as oil, filters and vehicle batteries.

When no longer required vehicles are traded in against new or sold on, records are kept of such transactions.

### Company Registration Details.

To meet our legal requirements the organisation is registered with the Environment Agency as waste carriers and all three premises are registered in accordance with The Hazardous Waste Regulations 16<sup>th</sup> July 2005 – The Waste (England and Wales) Regulations 2011.

Depending on site and job specific conditions we can be classed as the producer of waste (in instances where our actions produce waste such as de-commissioning systems) or just removing customers waste (in instances where we are asked to remove refrigerated cabinets).

### Registration Details.

- Premises are registered as S1 and S2 exempt with the Environment Agency (Premises codes no longer apply)
- Controlled Waste Carrier Reg N° CBDU147738
- SIC Code 43220

## Company Environmental Impact Review.

### Main Business Partners / Waste Contractors.

#### Refrigerant Suppliers (New & Reclaim)

**IDS Refrigeration** (Primary Supplier)

**Dean & Wood**

**HRP**

**Climate Center**

#### Refrigeration Oil Suppliers

**HRP**

**Climate Center**

**Dean & Wood**

#### Waste Oil Disposal

**Safety-Kleen UK Ltd**

#### Old Cabinets / Composite Panel Disposal

**Appliance Care Recycling**

**Sackers Ipswich**

**ECO Synergy (Europe) Ltd**

#### Battery Disposal (Small Units)

**Batteryback PLC**

#### Fluorescent Tubes

**Electrical Wholesaler / Edmundson, CEF or Similar**

#### Mobile Telephones

**Comm-Tech Voice & Data**

#### IT Equipment (Old computers / printers etc)

**eReco**

#### Secure Document Disposal

**PHS Datashred - Norwich**

#### Lowestoft Premises;

**General Waste + Recycle of Paper / Cardboard**

**V. C. Cooke Ltd.**

#### Bury St Edmunds Premises;

**General Waste + Recycle of Paper / Cardboard**

**Biffa (Bury St Edmunds)**

#### Ipswich Premises;

**General Waste + Recycle of Paper / Cardboard**

**Ipswich Borough Council (Wastesaver)**

#### Lowestoft, Scrap Metal


**CR Hales Ltd or Doe Metal Recycling**

#### Bury St Edmunds, Scrap Metal

**Scrapco**

#### Ipswich, Scrap Metal

**Sackers of Claydon**

<b>Review Carried Out By;</b>	<b>Dean Clackett</b> <b>Operations Director</b> <b>Pitkin &amp; Ruddock Ltd</b>	<b>Signed;</b> 
<b>Date;</b>	<b>Jan 2018.</b>	
<b>Immediate Actions Required;</b>	<b>None.</b>	
<b>Next Review Date;</b>	<b>Jan 2019.</b>	