

Address the phase out of refrigerant R22 now!

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Facilities Managers need to urgently address the implications of the European legislation to phase out the use of ozone depleting substances such as refrigerant R22. There are over 100,000 refrigeration and air conditioning systems currently operating using R22 in the UK. These are a mix of process chillers and freezers, office/hotel/retail/hospital air conditioning systems and supermarket cabinets, many under the control of in-house facilities managers or outsourced for operational management to fm specialists.

Although the phase out date is 31 December 2009, from which time it will be illegal to use new R22, even if stockpiled, availability problems will emerge long before then. The use of second hand or reclaimed R22 can continue beyond the cut off date, but there will be doubts about its availability and in some cases about its quality.

End users and their facilities managers in all sectors need to urgently consider their two options. Either completely rip out and replace the entire system, or take out the R22 from the system and use a drop-in replacement refrigerant like DuPont's(tm) ISCEON® 9 Series. The alternative of keeping fingers crossed that there will be sufficient volume of good quality reclaimed material to go around, isn't one that any responsible organisation should contem-

plate.

In a typical supermarket display cabinet application, the total cost of a complete plant replacement might typically be about £300,000 whereas the drop-in refrigerant option would cost around £30,000. Unless the plant is nearing the end of its useful life, the choice is a no brainer. In other types of application, whether it be air conditioning in a commercial building or chillers operating in an industrial sector, the big cost differential in favour of conversions still applies. However, if the plant is in poor condition, then complete replacement is the route to go down.

The phase out of R22 and HCFC blends can be considered a ticking time bomb. If facilities managers do not act soon, a doomsday scenario could see hospitals closing, food supply chains interrupted and funeral parlours non-operational. So organisations will eventually act, but will they act in time?

The end of 2009 is over three years away, so it is easy to understand why many fm professionals have not twigged the urgency of the situation. The likelihood is that supply difficulties across Europe will arise in early 2008 and escalate in 2009, not least because refrigerant manufacturers have to scale back production of R22 in accordance with Government decree. And whereas it will be legal to use reclaimed R22 to top up existing systems, there is currently insufficient returned product for reclaim and repro-

cessing, and more critically, limited capacity for reprocessing and storage, so product availability will definitely be a problem. End users therefore, need to act now, particularly if their application is process or supply critical.

A side issue will be price. As manufacturers reduce production and availability tightens, it is absolutely inevitable that prices will rise very significantly. It is the natural law of supply and demand.

However, it is the limited timescale in practical terms which is the really critical factor, and this is why facilities managers need to act swiftly. To deal with 100,000 outstanding applications means tackling 125 each and every working day, from today onwards, so the availability of suitable refrigeration engineers to do the work will emerge as a problem early next year. Understandably, most end users have limited time windows when they can allow on-site activity, factor that into the equation and the extent of the challenge becomes starkly apparent.

The direct replacement refrigerant solution is not only far less costly, but causes less on-site disruption and more can be converted in the same timeframe.

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