International News Brief - CFC Black Market

At the annual conference of the British Association for the Advancement of Science, a chemical company presented a paper claiming that thousands of illegal CFC imports have been flooding into Europe. This black market is believed to be fed by eastern European or Asian countries and to be supplying the large number of small CFC users who do not want to modify/replace existing equipment. This will have adverse effects on the conversion to less environmentally damaging alternatives and reduces the impact of the Montreal Protocol.

as reported in Environmental Science and Technology

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Monday, January 23, 1995

HIGHLAND COUNTRY CLUB
279 Commissioners Road East • London, Ontario
Social Hour – 5:30 P.M.
Dinner – 6:30 P.M.

Topic: A Review Of The New CCDC-2

Speaker: Mr. James A. Leber

Biographical Commentary

James Leber is a Partner with the Law Firm of Lerner & Associates. He practices construction and commercial litigation with the firm’s London office. He is also a trained mediator. He is active in both speaking and writing on matters of interest to the construction industry. He is the editor and author of The Critical Path, a construction law newsletter of Lerner & Associates. He is also a regular contributing writer to the London and District Construction Magazine, and is an active member of the London and District Construction Association. He has taught Construction Law for the Ontario General Contractors Association and Advocacy for the Law Society of Upper Canada Bar Admission Course.
Happy New Year

Research Donations: The London Chapter had obtained the Society and Chapter goals of 25% by the end of December 1994.

Thank you to HTS Engineering Ltd. and Brenda Stonehouse for recent Chapter contributions.

Full Circle Award

The London Chapter qualified for the Full Circle Award recently. The Award is given when each person on the executive donates $100.00 or more personally to research. A Special Thank You to all those involved.

ASHRAE Schedule of Events

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<td>January 23</td>
<td>New CCDC - 2 form James Leber - Lerner &amp; Associates</td>
<td>MCA &amp; MTA</td>
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<td>February 27</td>
<td>History of the Dew Line Ron de Vries, Defense Cons., Canada</td>
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<td>March 27</td>
<td>Ice Beer Plant Coneneration Tour Howard Titus, Chief Eng., Labatts</td>
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<td>April 24</td>
<td>PLC Control of Refrigeration Systems Mike Colley - CIMCO Refrigeration</td>
<td>Tour of Labatts</td>
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<td>Golf Tournament</td>
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Further to October's article on the CFC phase-out, this article will look closer at the "do nothing" and retrofit options.

Due to the recently introduced refrigerants regulation pertaining to the handling practises for ozone depleting substances, maintaining the status quo cannot really be called the "do nothing" option. There are many things to do if you plan to keep your CFC (and HCFC) chillers in service. By the beginning of Oct. '94, personnel handling refrigerants should have been certified and all equipment containing these refrigerants were to be leak tested and tagged as leak-free. No deliberate venting will be allowed and any equipment that is not tagged, or which appears to be damaged, cannot be retired. There are other requirements for storage and reuse of refrigerant containers. Training is available through HRAI (1-800-861-3369).

Retrofits, on the other hand, can take on three forms. The first type is referred to as a compatible conversion and it will run up 20-30% of the cost of a new chiller. This conversion is relatively simple. Seals and lubricants are examined and/or changed for compatibility with the new refrigerant. A loss of capacity will usually accompany such a change (2% - 15% for conversions from R111). The second type is called an engineered conversion. Mechanical modifications to gears, impellers, orifices, etc., will minimize the impact of the less efficient refrigerant. The cost for this type of conversion is 40 - 60% of a new chiller. The third, and most costly (60 - 80% of a new chiller) option, is the drive line conversion wherein the motor and compressor drive line assembly are replaced with new microprocessor controlled components. Normally, efficiency can be improved slightly in this type of conversion however if the system is currently oversized (and it is estimated that 75% are), savings can be dramatic. By substituting smaller components, a condition is created whereby heat transfer devices are now oversized for the chiller. An energy consumption reduction of 68% is achievable for a corresponding capacity reduction of 40% (a 25% reduction on a kw/ton basis). This raises another possibility. Why not create the condition of having extra chiller capacity by reducing heat gain? Energy efficiency improvements to system components (fans, pumps, etc.) or within the conditioned space (i.e., lighting, etc.) can free up the required capacity.

Next month, the full supplement will explore these "systems" approach more fully and will discuss the option of replacing existing equipment.

Background Info. courtesy of: E Source Tech Memo (6/94) and Ontario Hydro Environmental Profile.