Fact or Fiction?

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Illegal CFCs

One outcome of the Montreal Protocol, signed in 1987, is an illegal trade between developing and developed countries of over 30,000 tons of CFCs per year.[1] Under this treaty, 155 countries pledged to stop producing CFCs and other chemicals said to be harming the earth's ozone layer. The smuggling problem first emerged in the mid-1990s, when the production ban on CFCs and halons became effective in industrialized countries. By 1996, illegal CFCs worth an estimated $300 million a year were flooding the market, and it has grown ever since.[2–6] At one point, CFCs were second only to cocaine in terms of the value of contraband passing through the port of Miami.

The Russian Mafia and the Chinese are heavy players in this illegal trade. Russia was supposed to have phased out the manufacture of CFCs by 1996, but at that time, it still had at least seven factories producing these chemicals. And as Schwarcz[1] has pointed out, "These days the Russians have bigger problems to deal with than the deteriorating ozone layer." If you doubt this, read *Ecocide in the USSR* by Feshbach and Friendly,[7] or read your newspaper about the recent problems with the Russian naval fleet.

China is now the leading supplier of black market CFCs. They have a cluster of trading companies based in the province of Zhejiang, east of Shanghai, and some of these advertise cheaper CFCs and halons on their Internet homepages. They also make postings to trade bulletin boards. Chinese CFCs and halons were involved in the largest smuggling case of ozone-depleting substances to occur in Europe. This involved an extensive web of middlemen and brokers who had been able to bring in more than 800 tons of material that was subsequently sold to customers in the UK, France, Belgium, Italy, Greece, Hungary, and the U.S.[5]

The almighty dollar is the clear driving force for smuggling. Since some of the chemicals that are still widely sought have been banned from production in industrialized countries, production in certain developing countries has soared. Mexico legally produces freon for roughly two dollars per pound; in the U.S. a pound can gather 10 times that amount.[1] Other examples: a kilo of halon 1301 in the U.S. costs upwards of $25, but sells for just $8 in China, and one kilo of CFC-12 costs around 12 pounds in the UK, but can be bought in China for one pound.[5]

Newman[5] reports that the Environmental Investigation Agency, an international non-governmental organization based in London and Washington, D.C., has been investigating the global black market on these substances for the past three years, and has built up a comprehensive picture of the major smuggling routes, methods used to avoid detection, and the firms involved. It is estimated that 15 percent of the CFCs used in the UK are thought to have come via the black market.

How is the smuggling done? Sometimes containers are mislabeled as legal. In some cases, the gases are hidden inside larger cylinders of another gas—the gaseous equivalent of the false-bottomed suitcase. In some countries, this isn't even needed. For instance, if nitrogen is added to cylinders containing illegal CFC-12, it raises the pressure in the cylinder to match that used for HCFC-22, which is a substitute that is still legal. And if a pressure reading is the only check that is made, the cylinder passes.[3]

So, how serious is the problem? Fraser[6] reports that the illegal trade represents an additional 10 percent of global production of CFCs and halon, but only one percent of the global bank of these materials, and that illegal production of around 20,000 ozone-depleting tons per year of CFCs for the next 10 years will increase ozone depletion over the next 50 years by one percent. So, illegal trade in CFCs and halons at current reported levels is a small threat to ozone layer recovery. However, as Fraser concludes, what the smuggling does threaten is the viability of fledgling effects in CFC and halon recovery, recycling, and destruction.

Schwarcz[1] discloses that the World Bank has called on Western countries to donate $40–50 million to help Russian freon factories switch to alternate products, but currently only about $13 million has been pledged. He suggests one of the reasons the funds may not be forthcoming is that some politicians realize ozone holes may be easier to deal with than bullet holes. On a more serious note, Duncan Brack of the Royal Institute of International Affairs in London suggests that: "If the CFC problem cannot be tackled, this will be a clear signal that environmental crime is not taken seriously."[3] *P&SF*

References

1. J. Schwarcz, *Radar, Hula Hoops and Playful Pigs*, ECW Press (1999).
2. J.E. Halpert, "Freon Smugglers Find Big Market," *New York Times*, L1 (April 30, 1995).
3. F. Pearce, *New Scientist*, 152, 4 (Oct. 26, 1996).
4. D. Rothbard & C. Rucker, *Citizen Outlook*, Vol. 13, 1 (March/April 1998).
5. J. Newman, *Atmospheric Environment*, 34, 3037 (2000).
6. P.J. Fraser, *Atmospheric Environment*, 34, 3038 (2000).
7. M. Feshbach & A. Friendly, Jr., *Ecocide in the USSR*, Basic Books (1992).

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