



ENFORCEMENT STRATEGIES FOR COMBATING THE ILLEGAL TRADE IN HCFCs AND METHYL BROMIDE

UNITED NATIONS ENVIRONMENT PROGRAMME



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Table of Contents

List of Acronyms	3
Preface	4
Introduction & Background	5
How to Use this Booklet	9
Chapter One: Laying the Foundation for Effective Enforcement Strategies	10
Chapter Two: Building Capacity at the Frontlines	14
Chapter Three: Cross-border Collaboration	19
Chapter Four: Cracking Down on Smugglers	24
Chapter Five: Ozone Layer Justice	30
Chapter Six: Involving All Stakeholders	38
Chapter Seven: Using Networks to Combat Illegal Trade	42
Chapter Eight: Targeted Strategies for Methyl Bromide	45
Options for Enforcement Strategies to combat the Illegal Trade in HCFCs and Methyl Bromide	48
References	51
Annex A: General Environmental Enforcement Resources and Guides	57
Annex B: Sample Memorandum of Understanding	58

List of Acronyms

CAP	OzonAction's Compliance Assistance Programme
CFC	Chlorofluorocarbon
CTC	Carbon tetrachloride
EANECE	East African Network for Environmental Compliance and Enforcement
EC	European Commission
EU	European Union
FOKA	Estonian ODS electronic logbook of equipment containing ODS
HCFC	Hydrochlorofluorocarbon
HFC	Hydrofluorocarbon
HPMP	HCFC Phase-out Management Plan
HS	Harmonised Commodity Description and Coding System
IGSD	Institute for Governance & Sustainable Development
INECE	International Network for Environmental Compliance & Enforcement
iPIC	Informal Prior Informed Consent
MLF	Multilateral Fund for the Implementation of the Montreal Protocol
MOU	Memorandum of Understanding
NEMA	Kenya National Environmental Management Authority
NGO	Non-governmental organisation
NOU	National ozone unit
ODP	Ozone-depletion potential
ODS	Ozone-depleting substance
QPS	Quarantine and Pre-shipment
RAC	Refrigeration and air-conditioning
UNEP	United Nations Environment Programme
UNODC	UN Office on Drugs and Crime
US DOJ	United States Department of Justice
US EPA	United States Environmental Protection Agency
WCO	World Customs Organization

Preface

This booklet on *Enforcement Strategies to Combat the Illegal Trade in HCFCs and Methyl Bromide* comes at a crucial time for the Montreal Protocol—a time of both celebration and contemplation.

Last year the world celebrated the Protocol's 25th anniversary and its remarkable success. Parties to this agreement have much to celebrate; through concerted international effort, they phased out 98% of production and consumption of nearly 100 ozone depleting substances (ODS), setting the ozone layer on the path to recovery. Because these chemicals also caused global warming, reducing them has made a significant contribution to climate protection.

All governments know, however, that their job is not yet complete. Continued implementation of commitments and vigilance in enforcement are essential to ensuring that their good work is not undone in the coming years.

A burgeoning illegal trade in ozone-depleting substances regulated under the Montreal Protocol could undermine its success. It is a challenge—and a growing challenge - facing many multilateral environmental agreements and initiatives trying to assist in a transition to a Green Economy and achieve sustainable development including those trying to regulate trade in wildlife, timber and other chemicals and hazardous wastes.

In respect to the Montreal Protocol, as the reduction schedules for HCFCs and methyl bromide draw near, and as worldwide supplies of these chemicals become scarce, the incidence of smuggling is expected to rise. The world faced a similar threat in the early 1990's when a significant black market trade in chlorofluorocarbons (CFCs) and other ODS arose as an unintended result of Montreal Protocol controls. Fortunately, the Parties, together with their partners in industry and civil society rose to the challenge and the illegal trade in CFCs and other ODS declined significantly.

As the Parties confront the challenge of preventing and detecting illegal trade in HCFCs and methyl bromide, much can be learned from how the world responded to the CFC smuggling crisis. Although the rapid globalization of trade and the advent of the Internet have created additional enforcement challenges, the pillars of an effective enforcement program remain the same. Now it is more important than ever that enforcement officers are trained and prepared to effectively address smuggling.

One of UNEP's most important roles is to facilitate the dissemination of practical advice and accessible technical guidance to enforcement practitioners. This booklet is intended to be an easy-to-use resource for ozone officers and others who will be involved in the detection, prevention, and prosecution of smuggling in HCFCs and methyl bromide. Ozone officers and enforcement professionals from both developed and developing countries were interviewed during the preparation of the booklet in order to gain their real-world advice. Through dozens of case studies and examples, the booklet provides enforcement strategies that can be implemented with flexible approaches that maximize the efficient use of scarce human and financial resources.

The complete recovery of the Earth's ozone layer is dependent on full and sustained compliance with Montreal Protocol obligations. In addition, because many ODS are also powerful greenhouse gases, their phase out through the Protocol has also provided critical climate mitigation. This makes compliance with the Montreal Protocol compliance important for protecting the climate system as well. The international community has an obligation to prepare, educate and equip itself to effectively detect, prevent and deter smuggling in ODS. With adequate training and cooperation including with partners like the World Customs Organization and Interpol, the threat posed by the illegal trade in HCFCs and methyl bromide—and across the range of sustainability challenges facing the world can be far more successfully countered. Let history be our guide.

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Introduction & Background

The Path to Ozone Recovery

The Montreal Protocol on Substances that Deplete the Ozone Layer is widely considered to be the most successful international environmental agreement. Working together, the 197 Parties to the Montreal Protocol have reduced global production and consumption of ozone depleting substances (ODS) by over 97%, placing the ozone layer on the path to recovery.¹

In addition to preventing millions of cases of skin cancer, cataracts and other human health, agricultural and ecosystem damage by preventing additional damage to the stratospheric ozone layer, the Montreal Protocol has also made a major contribution to climate protection because most ODS are also potent greenhouse gases with long atmospheric lifetimes.²

The Emergence of Illegal Trade in ODS

However, despite the overall success of the agreement, the path to ozone recovery has not been without bumps along the way. In the early 1990's, a burgeoning black market trade in chlorofluorocarbons (CFCs) and other ODS arose as an unintended result of Montreal Protocol controls. It is estimated that illegal materials accounted for as much as 15% of the world trade in CFCs by the mid-1990s.³

Thanks to the efforts of government, industry, academia and non-government organisations (NGOs), the illegal trade in CFCs and other ODS has declined significantly since the problem was first discovered, and global awareness of the problem of illegal trade in ODS is at an all-time high.

High Risk of Smuggling in HCFCs and Methyl Bromide

As Parties begin to implement phase-out schedules for hydrochlorofluorocarbons (HCFCs), they can work to avoid a similar threat. HCFCs became the first generation of substitute chemicals for CFCs when production and consumption of CFCs were phased out under the Montreal Protocol (the phase-out was completed as of 1 January 2010, with certain exemptions). Current uses of HCFCs include refrigeration, foam, solvent, aerosol and firefighting sectors. They are also used as raw materials, or feedstock, in the production of other chemical products.

The Parties to the Montreal Protocol classified HCFCs, with considerably lower ozone depleting potentials (ODP) than CFCs, as "transitional substances" that could be used to facilitate the prompt phase out of CFCs in applications where non-ODS options were not yet available, but ultimately HCFCs were also scheduled for phase out. Although having considerably lower ODP than CFCs, HCFCs pose a significant threat to the global climate. HCFCs have global warming potentials between 700 and 2,300 times that of carbon dioxide.

Recognising the ozone and climate impact of the continued use of HCFCs, the Parties to the Montreal Protocol agreed in 2007 to accelerate the phase out of these substances. HCFCs are to be completely phased out in developed countries by 2020 and in developing countries by 2030, with an initial freeze in 2013 and a 10% reduction step in 2015 (see table opposite).⁴ A number of countries, both developing and developed, have decided to phase out HCFCs faster than required by the Montreal Protocol and have introduced bans for selected uses. The limited supply creates demand for HCFCs in these countries, which in turn provides incentives for HCFC smuggling.⁵

Group I: HCFCs (consumption)

Non-Article 5(1) Parties: Consumption		Article 5(1) Parties: Consumption	
Base level:	1989 HCFC consumption + 2.8 per cent of 1989 CFC consumption.	Base level:	Average 2009–10.
Freeze:	1996.	Freeze:	January 1, 2013.
35 per cent: reduction	January 1, 2004.	10 per cent: reduction	January 1, 2015.
75 per cent: reduction	January 1, 2010.	35 per cent: reduction	January 1, 2020.
90 per cent: reduction	January 1, 2015.	67.5 per cent: reduction	January 1, 2025.
99.5 per cent: reduction	January 1, 2020, and thereafter, consumption restricted to the servicing of refrigeration and air-conditioning equipment existing at that date.	97.5 per cent: reduction (averaged over ten years 2030–40)	January 1, 2030, and thereafter, consumption restricted to the servicing of refrigeration and air-conditioning equipment existing at that date.
100 per cent: reduction	January 1, 2030.	100 per cent: reduction	January 1, 2040.

Group I: HCFCs (production)

Non-Article 5(1) Parties: Production		Article 5(1) Parties: Production	
Base level:	Average of 1989 HCFC production + 2.8 per cent of 1989 CFC production and 1989 HCFC consumption + 2.8 per cent of 1989 CFC consumption.	Base level:	Average 2009–10.
Freeze:	January 1, 2004, at the base level for production.	Freeze:	January 1, 2013.
75 per cent: reduction	January 1, 2010.	10 per cent: reduction	January 1, 2015.
90 per cent: reduction	January 1, 2015.	35 per cent: reduction	January 1, 2020.
99.5 per cent: reduction	January 1, 2020, and thereafter, production restricted to the servicing of refrigeration and air-conditioning equipment existing at that date.	67.5 per cent: reduction	January 1, 2025.
100 per cent: reduction	January 1, 2030.	97.5 per cent: reduction (averaged over ten years 2030–40)	January 1, 2030, and thereafter, consumption restricted to the servicing of refrigeration and air-conditioning equipment existing at that date.
		100 per cent: reduction	January 1, 2040.

Similarly, with the complete phase out of production and consumption of methyl bromide on the horizon (January 1, 2015), there is concern that smuggling will occur. Over the past fifteen years, extensive work done by the concerted efforts of many stakeholders produced several technically feasible methyl bromide alternatives for agriculture. However, widespread industry adoption of these alternatives has not occurred in all developed and developing countries. Thus, the progress made so far is at risk of being undercut by illegal trade. Of particular concern is the unauthorised diversion of methyl bromide intended for exempted uses (critical use exemptions) or uses not controlled by the Montreal Protocol, such as quarantine and pre-shipment (QPS).

Learning from the Past, Preparing for the Future

Effective enforcement is crucial for ensuring compliance with the initial HCFC phase-out commitments for developing countries and the final phase of the methyl bromide phase-out. As national controls come into place, it is important that countries are prepared to prevent a surge in illegal trade in HCFCs, as was experienced with CFCs in the past.

This booklet provides guidance for establishing and implementing effective enforcement programs for preventing the illegal trade in HCFCs and methyl bromide. Drawing on lessons learned from earlier phase-outs, the booklet provides case studies, short examples and guidance from developed and developing countries. The booklet offers persons involved in enforcement of national law and policies related to the Montreal Protocol recommendations and highlights a variety of strategies, both simple and complex, that can be implemented with flexible approaches that maximise the efficient use of scarce human and financial resources.

Enforcement in the Context of the Montreal Protocol

Over the past twenty five years, the Parties to the Montreal Protocol have made significant progress creating the legislation and institutional structures necessary to translate their international commitments under the Protocol into national law. However, simply having laws in place is not enough to ensure compliance. Enforcement is essential to ensuring that the regulated community meets the requirements set forth in the law.

Enforcement consists of the measures national governments take to compel compliance with the law.⁶ In the context of the Montreal Protocol, enforcement measures usually focus on implementation of ODS trade controls (i.e., the national import/export licensing system, import quota system and/or equipment or ODS bans). However, national environmental regulations associated with ODS storage, recycling, transport, use, emissions, and safety may also be implicated, as well as tax and Customs laws.

Because of the focus on trade controls, ODS enforcement at the national level involves a wide and diverse variety of actors, which can be broadly categorised as: (1) the enforcers (2) the regulated community and (3) the stakeholders. Enforcers are those with the lawful authority to enforce compliance, usually officials from government agencies such as Customs, national ozone unit (NOU), national environment ministry, port police, state or national police, border police, coast guard, national criminal investigative service, justice ministry, judiciary, tax ministry and others. The regulated community are those actors who have a legal responsibility to comply with ODS laws, including ODS producers, importers and exporters, equipment manufacturers, technicians and end-users. Stakeholders, such as industry, NGOs and the general public, are those with an interest in ensuring that ODS laws are complied with, usually for business and environmental or safety reasons. Note that industry and the public are also part of the regulated community.

Chain of Actors involved in Montreal Protocol National Compliance and Enforcement



Seven Pillars of an Effective National Enforcement Program to Prevent Illegal Trade in ODS

1. **LAY THE FOUNDATION FOR EFFECTIVE ENFORCEMENT:** In addition to establishing and improving licensing quota and data management systems, laying a foundation for effective enforcement includes: identifying stakeholders, implementing national legislation to address illegal trade, collecting trade and ODS use data and establishing systems for monitoring compliance.
2. **BUILD CAPACITY AT THE FRONTLINES:** Establishing a good working relationship between the NOU and Customs and other stakeholders working at the frontlines, such as port and police authorities, is an essential early step to building an effective enforcement program.
3. **COLLABORATE ACROSS NATIONAL BORDERS:** International cooperation through the use of informal prior informed consent (iPIC) and other mechanisms can go a long way to preventing illegal trade in ODS thereby saving resources that might otherwise be used for investigation and prosecution. Therefore, early establishment of these processes in an enforcement program is highly recommended.
4. **CRACK DOWN ON SMUGGLERS:** Enforcement operations are a great way of testing enforcement programs by focusing on criminal apprehension. Both well-established and new programs benefit from trying to put their data, laws, and cooperation mechanisms to use.
5. **PROSECUTE ODS CRIMES:** Bringing criminals to justice is crucial to demonstrating the value of an enforcement program and creating a deterrent effect.
6. **WORK WITH INDUSTRY AND OTHER NGOs:** Outreach to all stakeholders, including industry and other NGOs, should be an ongoing activity. Early interaction and regular communication with stakeholders is essential to combating the illegal trade in ODS.
7. **USE NETWORKS AND INTERNATIONAL INFORMATION EXCHANGE TO COMBAT ILLEGAL TRADE:** Similarly, international cooperation to share information and resources should be an early and ongoing activity to improve enforcement capacity. Regional and international organisations, including both formal and informal enforcement networks, the Ozone Secretariat, United Nations Environment Programme (UNEP), Interpol, the World Customs Organization (WCO) and NGOs, such as INECE, all play an important role in sharing information, tools and other resources for ODS enforcement.

How to Use this Booklet

The booklet is organised into seven chapters which represent the seven pillars of an effective national enforcement program to prevent illegal trade in ODS. One additional chapter focuses on the specific challenges associated with enforcing against the illicit trade in, and use of, methyl bromide. Each chapter includes: a brief introduction, case studies of effective illegal trade enforcement strategies from both developed and developing countries, recommendations based on the case studies, and a list of additional resources. A final section provides a summary of enforcement options that can be employed at the national, regional and international levels.

Enforcement officers who are in the initial stages of establishing an enforcement program may find it useful to read the booklet from beginning to end. Those with well-established enforcement programs may prefer to use the table of contents to identify specific enforcement topics.

Chapter One

Laying the Foundation for Effective Enforcement: Strategies for Improving Licensing Systems and ODS Information Management

In 1997, in response to the illegal trade in CFCs and other ODS, the Parties to the Montreal Protocol required the establishment of national licensing systems for the import and export of all controlled ODS, including those contained in mixtures.⁷ National licensing systems, which are now in place in nearly all countries, remain at the heart of national-level efforts to combat illegal trade.

The objective of a national licensing system is to ensure that import and export of controlled ODS does not take place unless the potential importer or exporter first applies for and obtains an import or export license. Thus, licensing systems facilitate the monitoring of imports and exports, the collection of trade data and help Customs and enforcement officers to distinguish between legal and illegal trade. In most countries, the national licensing system goes hand-in-hand with a national ODS quota system, which establishes the quantity of individual substance (or group of substances) that an eligible importer is allocated for a given period of time (usually for one calendar year).⁸ Each Party is free to structure its licensing and quota system in the way it finds most appropriate to facilitate reporting to the Ozone Secretariat, promote compliance, and to prevent illegal trade.

The first two case studies in this section highlight examples of two national ODS licensing systems which contain a number of features that make them particularly useful for preventing smuggling. Both systems are internet-based, which is beneficial, but not prerequisite of an effective system. The type of licensing system a country implements will depend on a number of variables, including volume of trade, cost, technical capacity and other considerations. Low cost adaptations can be made to existing systems to improve their effectiveness for addressing illegal trade. Recommendations for such improvements are made at the end of the section.

Also included in this section is a brief case study that examines Estonia's new internet-based logbook database for equipment containing ODS. A comprehensive national system for preventing illegal trade should also include mechanisms for tracking how these ODS are used, stored and eventually disposed of. In addition to preventing leaks, good oversight of ODS within national borders ensures that ODS are used safely and not stockpiled or diverted for unauthorised purposes. Estonia's logbook is presented as an example of a strategy to prevent the diversion of ODS for improper uses by closely monitoring the quantities of ODS in circulation, how they are used, where they are used, and how they are dealt with when the equipment containing the ODS is no longer serviceable.

Case Study

Argentina's Web-Based Licensing System for ODS^{9,10}

In Argentina, all licensing system procedures are conducted via an internet-based computer system maintained by the NOU. Each user has a unique password to access registration and license data. The NOU has access to all components of the system, while other users, such as importers and exporters, only have access to the parts they need to use.

All ODS use is licensed on a per-shipment basis.¹¹ The licensing process begins when an importer or exporter applies for a license online. Each application is reviewed by the NOU for compliance with applicable regulations and quota limits. If approved, the license is issued via the web system and the applicant is required to later confirm how the ODS was used. If an import permit is not used within twenty days from the estimated date of operation, the system automatically alerts the NOU.

Argentina's system includes a risk profiling feature to assist the NOU in screening shipments (Customs has its own risk profiles). The NOU uses information provided by importers, refrigeration technicians and background information about other countries to create the profiles. Argentine Customs officers categorise ODS imports as either orange (document check only) or red (full documentation and physical check of goods). Imports in the orange category may be re-categorised as red if certain risk profile criteria are triggered. This mechanism has already helped officials detect four cases of illegal trade.

For example, when the NOU discovered that misleading labelling was being used to potentially disguise a mixture containing HCFC-22 as HFC-134a (information received from the market), a risk profile was created and Customs authorities were alerted. The next time that this product was imported, the shipment was interdicted and an investigation was launched.

Argentina's system has received high praise from industry representatives who are pleased with the minimal added costs and are satisfied with the efficiency in processing of permit requests. Licenses are usually issued in one or two days.

Likewise, the NOU has found the system to be extremely beneficial for a number of reasons. For example, it produces extremely detailed real-time data (e.g., number of shipments to date to a particular country/importer) and statistics. This information has been particularly valuable for Argentina's work on its HCFC Phase-out Management Plan (HPMP). The system has also helped facilitate close collaboration with Customs by increasing information sharing and regular contact. In addition, the system has improved the NOU's knowledge of the types and qualities of ODS-containing mixtures entering the country. To manage the licensing system, all that is needed is a computer connected to the Internet. The software and database can be managed by one operator.

Benefits and Features of Argentina's Licensing System

- Facilitates real-time internet-based information exchange between industry and government officials eliminating the delays caused by a paper-based system.
- Permits a wide variety of user types to use the tool without compromising the security of the data.
- Tracks exempted uses, such as critical use exemptions and QPS, in addition to uses of ODS that require a license.
- Requires "information closure" to ensure that once a permit is issued, its use is recorded.
- Collects information that is useful for creating risk profiles and generating statistics to assist in Argentina's reporting to the Montreal Protocol Secretariat.
- Improves communication with Customs by facilitating regular information exchange and contact. Customs officers have a password to access the Licensing System and exercise control over each license.
- Creates risk profiles that are used to channel ODS for further scrutiny.
- Alerts the NOU and Customs of irregularities.
- Requires only one person to manage and operate, which makes it very cost-effective.

Short Example The European Union's Comprehensive Licensing of ODS¹²

Like Argentina, the European Union (EU) also uses a web-based system for licensing ODS. The system, which has been in place since 2002, is accessible online to all authorised users, including: European Commission (EC) officers, Member State competent authorities and Customs authorities, and registered importing and exporting companies. It produces import licenses instantly in accordance with annual quotas set by the EC.

Features of the EU System that Help Prevent Illegal Traffic

The EU licensing system is designed to implement the EU's strict and comprehensive licensing requirements. In the EU, ODS licenses also are issued on a per-shipment basis and are required for:

- All ODS (including mixtures of recycled substances).
- Products and equipment containing or designed to contain ODS.
- All uses (including feedstock and QPS).
- All Customs procedures (including transit, duty free zones, and Customs warehousing procedures, unless the relevant goods remain under those procedures for less than 45 days on the EU Customs territory and are not subsequently presented for release for free circulation in the EU, destroyed, or processed).

The system is also used to:

- Apply for and allocate quotas.
- Authorise production of ODS for essential uses.
- Register the use of ODS for essential laboratory and analytical uses.

Short Example Estonia's Electronic Logbook for ODS-Containing Equipment¹³

As part of its effort to both minimise ODS leaks from equipment and ensure the proper management of ODS-containing equipment as it reaches the end of its useful life, Estonia is preparing a new tool. The electronic logbook for ODS containing equipment (called the FOKA* Registry) will track all equipment containing over 3 kg of an ODS or other fluorinated greenhouse gases. The FOKA* Registry, which will become operational within 2013, is a web-based system to replace the current paper-based logbook system for ODS-containing equipment.¹⁴

The system will be valuable as a tool for combating illegal trade because it will allow inspectors to more closely monitor ODS-containing equipment so they are aware when such equipment reaches the end of its useful life. This way, they can ensure the equipment is properly disposed of or recycled rather than diverted to the black market.

Recommendations for Improving Enforcement of National Licensing Systems to Combat Smuggling

- Licensing systems should have **comprehensive controls on ODS imports and exports**, including licensing requirements for:
 - o mixtures containing ODS
 - o recycled ODS
 - o hydrofluorocarbons (HFCs)
 - o all products and equipment containing or relying on ODS (where feasible)
 - o ODS imported or exported for all uses (including process agent, laboratory and analytical uses, feedstock and QPS, and destruction)
 - o all Customs procedures (including transit, duty free zones and Customs warehousing)
- **Tracking the use and eventual disposal of ODS** is important to ensuring that ODS are used for their intended purpose. Licensing systems or other information management tools should include a means of tracking the use and disposal of ODS and ODS-containing products and equipment.
- **NOU's should work with Customs** to determine how the licensing system can be used to:
 - o collect information to generate risk profiles for targeting enforcement,
 - o increase the efficiency of the screening process, and
 - o complement their existing duties and workload.
- Where appropriate, NOUs should **liaise between Customs and environmental inspection authorities in order to develop a comprehensive ODS tracking system** that can operate both on the borders and within the country's territory.
- Where feasible and helpful, NOUs may wish to consider **conversion to an internet-based system** that facilitates real-time data exchange, improves processing time, provides around-the-clock access and cuts down on administration. While the upfront costs may be high, experience shows that computer-based systems cut down on administrative costs and burdens in the long run.

Additional Resources

UNEP, Establishing an HCFC Import Quota System (2012), available at:

<http://www.unep.org/ozonaction/ecanetwork/Portals/138/ECA%202012/Enforcement%20tools/HCFC%20quota%20system%20booklet.pdf>

UNEP, HCFC Policy & Legislative Options: A Guide for Developing Countries (2010), available at:

http://www.unep.org/dtie/Portals/126/pdf/HCFC_Policy_%20guide_final.pdf

UNEP, MLF, Stockholm Environment Institute, ODS Import/Export Licensing Systems Resource Module (1998), available at:

<http://www.unep.fr/ozonaction/information/mmcfiles/3197-e.pdf>

Chapter Two

Building Capacity at the Frontlines: Strategies for Working More Effectively with Customs

Customs officers are the first line of defence in preventing illegal trade in ODS. Building a strong working relationship between the NOU and the national Customs authority is essential for the prevention and detection of illegal traffic. In addition to support and cooperation from the NOU, training and the provision of some basic resources and information can significantly improve the capacity of Customs personnel to monitor and facilitate legal trade and to detect and prevent illegal trade in ODS.

Cooperation with Customs, the NOU, and other relevant government agencies is often best achieved through a combination of formal and informal approaches. A memorandum of understanding (MOU) executed by senior officials can be an important first step to initiate cooperation. These agreements can provide the necessary authority to exchange sensitive information and delegate human and/or financial resources in cooperative initiatives.

NOUs also provide technical support to Customs officials and enforcement agencies. This support may help improve Customs' capacity to target shipments, perform inspections, and carry out enforcement follow up through the provision of training, tools, and assistance with risk profiling and intelligence gathering. Support can include formal training in targeting, inspection and detection techniques for ODS, but it can also include less costly alternatives, such as the distribution of Customs manuals, posters and readily available training DVDs and webinars.

The following section includes examples of how several countries have improved cooperation with Customs through both formal and informal approaches. It also includes a checklist covering the essential elements of an ODS manual for Customs officers based on examples used in a number of different countries. UNEP's Training Manual for Customs Officers, Third Edition (2013) is also a useful guide for countries that wish to develop training manuals for their Customs officers. Annex B includes a sample MOU.

Case Study Enforcement Cooperation in Kenya¹⁵

In Kenya, officials in the NOU, National Environmental Management Authority (NEMA), the Police Service, and the Kenya Customs Services Department work closely together to implement the country's ODS import/export laws. In addition to cooperating in conventional ways, for example by offering training for Customs officers on ODS and supplying them with refrigerant identifiers that can be used to screen suspect shipments, NEMA promotes informal cooperation by hosting the Kenyan Chapter of the East African Network for Environmental Compliance and Enforcement (EANECE).

EANECE is a forum that brings together enforcement officials from all relevant government ministries to collaborate with and assist each other in the enforcement of environmental legislations that falls within their mandates and responsibilities. The group meets regularly and has established an annual Action Plan that prioritises activities and initiatives. The regular meetings create valuable opportunities for officials to develop personal relationships with colleagues and discuss collaboration challenges and opportunities in detail. In many cases, personal relationships have eliminated the need for formal letters and requests for information or assistance. Instead, colleagues pick up the phone or send an email with their concern or request.

In May 2010, following a routine analysis through random sampling of imported refrigerants, Customs officers at Mombasa port intercepted two tonnes of CFCs. The consignment originated from China and was destined for Nairobi, Kenya. Through coordination with colleagues at NEMA, the Customs officers determined that the shipment was unauthorised. The shipment was stopped at the port and returned to the country of origin at the cost of the importer. Officials involved in intercepting the shipment attribute their success to a high level of awareness among Customs officers about ODS smuggling and a good working relationship among agencies, particularly as a result of informal networking described above.



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Customs officers receive training on ODS identification.

Short Example How Estonian Officials Cooperate to Combat Illegal Trade in ODS¹⁶

Estonia's NOU has implemented a highly effective program for combating the illegal trade in ODS that is focused on close coordination with Customs. Their approach includes a combination of simple and inexpensive strategies for enhancing the technical capacity of Customs officers, as well as more sophisticated tools and approaches for working with Customs to target shipments. For example, refrigerant identifiers have been supplied to Customs and are used, but Customs is primarily focused on a close examination of import and export documentation.¹⁷ One of the benefits of being a low-volume consuming country is that it is not overly burdensome for officials to thoroughly check the documentation for all ODS shipments. In addition, two mobile x-ray machines are available which can be moved between the border points relatively easily, so that contraband goods can be detected even in densely packed containers.¹⁸ These and other strategies, in conjunction with adequate legislation, have helped Estonian officials to successfully interdict illegal ODS shipments and penalise violators.

Features of Estonia's Program

- Training of Customs officers and environmental inspectors.
- Thorough check of documentation for all ODS shipments.
- Use of refrigerant identifiers.
- Development of computer software for risk profiling and targeting of shipments.¹⁹
- Use of mobile x-ray machines.
- Regular meetings and exchange of data between Customs and the NOU.

Training of Customs officers and environmental inspectors is also an important component of Estonia's program to stop the illegal trade in ODS. A poster for Customs officers complements live training.²⁰ The poster is an important tool for raising awareness of inspection considerations.

Frequent interaction between the NOU and the Tax and Customs Board is also a key feature of Estonia's program. The two ministries meet three to four times per year to discuss ODS-related issues.²¹ The Tax and Customs Board also works closely with the NOU to draft ODS-related legislation.²² The two agencies jointly review ODS import and export data and compare it with permit data on an annual basis.²³ This simple act of collaboration alone has led to the detection of several violations and the collection of associated fines.²⁴

Case Study: Vanuatu's Experience as a Low-Volume Consuming Country²⁵

In 2010, the Parliament of Vanuatu passed the Ozone Layer Protection Act (the OLP Act) to develop and strengthen Vanuatu's environmental laws, to prohibit certain ODS such as CFCs, to restrict the import and use of other ODS, such as HCFCs, and to restrict the import of equipment containing such ODS.

In Vanuatu, ODS are predominantly used in the refrigeration and air-conditioning (RAC) servicing sector, i.e., for the servicing of RAC components and systems in domestic, commercial and industrial premises. Methyl bromide is used by Vanuatu's Department of Livestock and Quarantine Services for quarantine, fumigation and pre-shipment services.

In addition to establishing a licensing regime, the OLP Act requires all ODS importers to apply for an import permit. The Act also levies a fee of 100vt per kg (about USD 1.00 per kg) for each ODS imports.

To implement the OLP Act, in May 2011, an MOU was signed by Vanuatu's Department of Customs and the Department of Environment's NOU. The purpose of the MOU is to strengthen the NOU's capacity to enforce and implement the OLP Act by requiring Customs Border Control Officers to work with the NOU to monitor the movement of ODS. Because the quantity of ODS imports into Vanuatu is relatively small, all shipments of equipment and refrigerants that are potentially ODS or potentially contain ODS are checked. Manual checks are carried out predominantly by the NOU, and at the moment, to a lesser extent by Customs Border Control Officers.

The MOU also obliges the NOU to provide regular ODS training to the Customs Border Control officers, which is conducted annually. Customs Border Control is kept abreast of any changes to Vanuatu's obligations under the Montreal Protocol.

Short Example

How the EU Integrated ODS Codes and Requirements into Customs Databases²⁶

EU Customs officials use a simple database to process shipment documents, which includes all existing Customs codes and the requirements associated with each code. ODS codes are included in the database with their import and export requirements. Thus, when a Customs officer enters the Customs code for an ODS into the database, the ODS licensing requirement appears and the official is prompted to verify that there is a license. The incorporation of the ODS requirements into the EU's Customs system has led to a significant increase in inquiries from Customs regarding ODS licenses.

The Importance of Customs Codes

The Harmonised Commodity Description and Coding System (HS) of tariff nomenclature is an internationally standardised system of names and numbers for classifying traded products developed and maintained by the World WCO. These codes are extremely useful for tracking the import and export of ODS and should be integrated into every national licensing system. However, checking the Customs code is not sufficient to identify ODS. Other indicators such as chemical names and formulas or unique numbers assigned to chemical substances should also be examined.

Starting in January 2012, the five most commonly used HCFCs were assigned individual HS codes. NOUs and Customs authorities should update their ODS management programs to incorporate the new codes. For more information, visit: http://www.unep.fr/ozonaction/information/mmcfiles/6228-e-Customs_Quick_Tool.pdf

The Negotiation Process for the Memorandum of Understanding between Customs and Environment Officials in The Philippines²⁷

On 24 July 2002, the Department of Environment and Natural Resources (DENR) and Bureau of Customs (BOC) established an MOU on the implementation of the Montreal Protocol on Substances that Deplete the Ozone Layer in The Philippines, specifically for the effective monitoring and control of the import/export of ODS. This MOU

strengthened the legal working platform between the two governmental agencies to support trade controls of ODS.

To prepare the MOU, a joint interagency Technical Working Group (TWG) was established that included staff from legal, personnel and training divisions. This TWG met regularly, identifying needs, priorities and challenges to strengthen the implementation and enforcement of the Montreal Protocol. The TWG, together with a Legal Consultant of the National Ozone Desk, prepared and managed the processes of finalising the MOU. The MOU was signed by the heads of the two agencies, represented by the Secretary of the DENR and Commissioner of BOC, with the Ambassador of Sweden as the witness.

The MOU has proven to be a very effective enforcement and compliance tool to help the National Ozone Office fulfil its Montreal Protocol implementation obligations. Improved cooperation with the BOC has strengthened The Philippines' first line of defence against smugglers by increasing the level of responsibility, dedication and commitment of Customs officers. The BOC has, in turn, benefitted from additional training resources and monitoring equipment which has enhanced their targeting and inspections capacity, not only in the capital city, but also at regional and provincial levels.

NOU Checklist: Key Components of National Customs Manuals

A national ODS Customs manual, prepared by the NOU, is a valuable resource for frontline Customs inspectors. The purpose of a manual is to provide a comprehensive reference tool for Customs officers with all of the information that will likely be needed in order to target and inspect ODS shipments. The manual should provide practical advice and guidance based on country-specific information. While the manual should be comprehensive, it is important that it also be light enough for Customs and enforcement officers to easily carry and refer to while on the job. If possible, it may be helpful to have both a comprehensive manual as well as a quick-reference pocket manual, poster, or checklist containing the most important and relevant information for everyday use. The following is a list of recommended components of a national ODS Customs manual.

- Include a **very brief overview of the Montreal Protocol**, the obligations it creates and the human health and environmental concerns surrounding depletion of the ozone layer. Keep this brief and as non-technical as possible.
- Provide an **overview of the country's licensing system** and associated import/export requirements.
- Consider including a **discussion of observed trends in illegal trade in ODS in the country** and region. Is illegal trade expected to increase or decrease? Where do most ODS come from and where do they go? What ODS is mostly likely to be smuggled and what affects this?
- Provide a list of **common smuggling techniques** observed in the country or region with pictures.
- Include an explanation of various **Customs screening methods** that may be used for ODS, such as what to look for when **reviewing documents** for shipments of ODS and how to develop **risk profiles**.
- Include a **list of companies of concern** with a history of illegal import/export in the country.
- Include a **list of countries of concern** with history of illegal import/export in the country.
- Include a **list of countries that agreed to cooperate in the iPIC framework**.
- Include **the rules of how iPIC operates** (see Chapter 3 for details).
- Include any other **information on bilateral or multilateral cooperation** related to monitoring of ODS trade in which the country is involved.
- Include **HS codes of concern** for ODS and mixtures containing ODS.
- Include the **chemical names and formulas**, and unique numbers (ASHRAE, UN, CAS) of ODS.
- Discuss the **available inspection methods** for ODS, such as: x-ray machines, refrigerant identifiers, weight/pressure tests, and labelling.
- Include **pictures** as much as possible to illustrate concepts.
- Include a discussion of **safety considerations** for inspecting and handling ODS.
- Provide **points of contact for the NOU** in the country and in trading partner countries.

- Include a section on **international and regional networks**, the training and other resources they provide, and how they may be used in cooperative efforts to interdict smugglers.

Recommendations for Improving Cooperation with Customs

- **Engage in a dialogue** with Customs colleagues and create frequent opportunities to meet and network, both formally and informally.
- Consider whether a formal agreement between environment and Customs ministries, such as an **MOU**, would help secure lasting cooperation.
- **Solicit the input of Customs officers** on legislation and licensing systems. Involve Customs officers in the development of policies and the implementation of new information management systems, especially ones that they will be using.
- **Create a Customs manual** that contains comprehensive information for Customs officers. Tailor the guide to the country's needs and experiences as much as possible.
- Make sure Customs receives **credit and recognition** for interdicting shipments and collecting evidence in support of cases of illegal trade in ODS.
- Fully integrate Customs training in **HPMPs**.

Additional Resources:

UNEP, Training Manual for Customs Officer – Saving the Ozone Layer: Phasing Out Ozone Depleting Substances in Developing Countries (2013), available at:

http://www.unep.fr/ozonaction/information/mmcfiles/7571-e-CTM_Third_Edition.pdf

Republic of Macedonia Ministry of Environment and Physical Planning Ozone Unit, Manual for Customs Officers for Control of the Ozone Depleting Substances (2006), available at:

http://www.ozoneunit.gov.mk/eng/doc/Traning_manal_for_Customs.pdf

UNEP DTIE OzonAction Programme and the MLF, Customs Checklist and Customs Quick Tool for Screening ODS, available at

http://www.unep.fr/ozonaction/information/mmcfiles/6227-e-Customs_poster.pdf

UNEP DTIE OzonAction Branch, Database of the Trade Names of Chemicals containing ozone depleting substances and their alternatives, available at: http://www.unep.fr/ozonaction/information/tradenames/trade_help.htm

UNEP CAP Regional Office for West Asia, Custom Officer's Quick Tool for Screening ODS, available at: http://www.unep.fr/ozonaction/information/mmcfiles/6228-e-Customs_Quick_Tool.pdf

UNEP and WCO, Customs and enforcement officers quick guide: Changes in the 2012 HS Nomenclature for HCFCs and certain other Ozone Depleting Substances, available at:

http://www.unep.fr/ozonaction/information/mmcfiles/7532-e-2012_HS_Codes_for_ODS.pdf

UNEP DTIE OzonAction and the WCO, Customs and Enforcement Officers Information Note: Monitoring Trade in HCFCs (2012), available at:

http://www.unep.fr/ozonaction/information/mmcfiles/7559-e-Monitoring_trade_in_HCFCs.pdf

The Green Customs Initiative, available at: <http://www.greenCustoms.org/index.htm>

UNEP and Department of Industry Works, Thailand, Fact Sheet No. 15: Limitation of Application of Refrigerant Identifiers, available at: <http://www.unep.fr/ozonaction/information/mmcfiles/4766-e-15identifiers.pdf>

Chapter Three

Cross-Border Collaboration: Using Informal Prior Informed Consent to Prevent ODS Smuggling

One of the most effective tools in combating illegal trade in ODS is informal Prior Informed Consent (iPIC), a voluntary agreement between countries to exchange information on import and export licenses prior to export.²⁸ Most countries that engage in iPIC do so through the mechanism established by UNEP DTIE OzonAction.²⁹ This initiative began in 2006 as a means for countries in the Asia and Pacific region to prevent illegal and unwanted trade in ODS by improving implementation of their national licensing systems.³⁰ In 2007, the European Community also participated in the UNEP iPIC program, increasing significantly the effectiveness of the system. As of December 2012, over 75 countries are participating in the UNEP OzonAction iPIC mechanism.³¹

Some countries engage in their own versions of iPIC through bilateral agreements with trade partners, for example, Argentina and Paraguay (see case study below). Although not all iPIC trade consultations are reported to UNEP, general statistics reveal an increase in participating countries' reliance on iPIC to help prevent illegal trade and facilitate legal trade.³² In 2012, iPIC has successfully prevented at least 41 unauthorised shipments of ODS, totalling at least 980 MT.³³

Recent statistics demonstrate the value of iPIC for preventing illegal trade in HCFCs. Between 2009 and 2010, the number of queries for HCFC trades increased dramatically. According to one source, less than 10 queries for consultations regarding proposed trade in HCFCs occurred in 2009, while more than 60 such queries occurred in 2010.³⁴

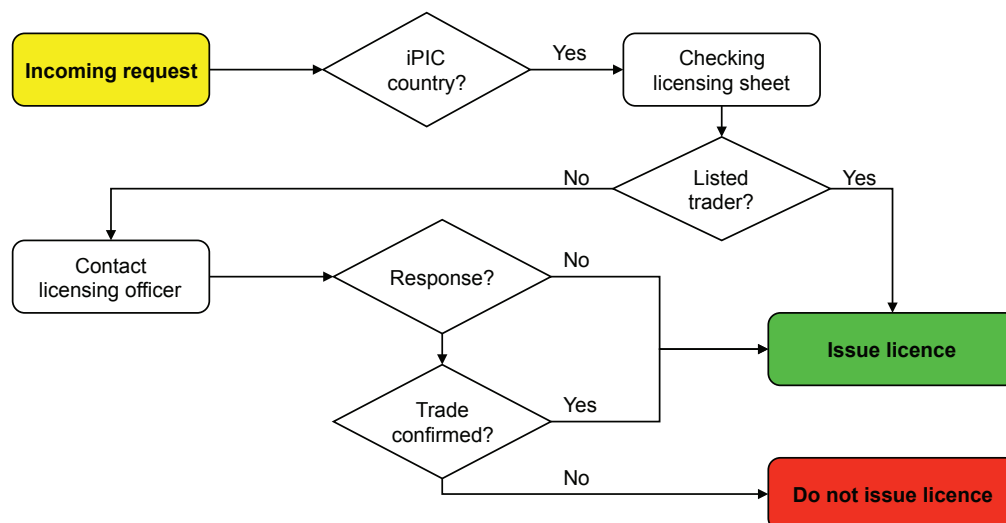
Although the original purpose of iPIC was to prevent illegal and unwanted ODS trade, in practice, many of the ODS trades prevented through iPIC do not involve criminal activity but rather importers or exporters not aware of the trade restrictions or license requirements.³⁵ The Party whose trade is denied for such reasons may legalise their trade by, for example, applying for and receiving a license, and then making a new trade request.³⁶ Similarly, iPIC has proven a useful tool for Parties to prevent trade that is not illegal but that would be counterproductive to the implementation of the Montreal Protocol and the phase-out of ODS.³⁷ Another result of iPIC is that participating countries exchange information not only on licenses, but also on eligible importers and exporters. This allows Customs to stop imported or exported ODS if it was not shipped by or to an eligible Party. However, because companies or people engaged in illegal trade of ODS may bypass the licensing system altogether,³⁸ iPIC should not be relied on as an exclusive strategy for preventing smuggling.

In May 2012, UNEP introduced the iPIC online system, which provides participating countries with real-time, 24 hour, seven days a week, personalised access to key licensing system data in other participating countries.³⁹ Currently, the iPIC online system contains complete contact details of iPIC focal points of each country and information from more than 1800 companies licensed to trade in ODS, as well as information about trade restrictions on equipment or products.⁴⁰ Benefits of the iPIC online system include: the ability to search for specific items on information sheets, an interactive question and information sharing forum, the ability to easily and rapidly generate various reports and statistics and update iPIC information sheets, FAQ and Help sections to assist users in implementing iPIC, multi-lingual capability, and an interactive map displaying country iPIC information status.⁴¹

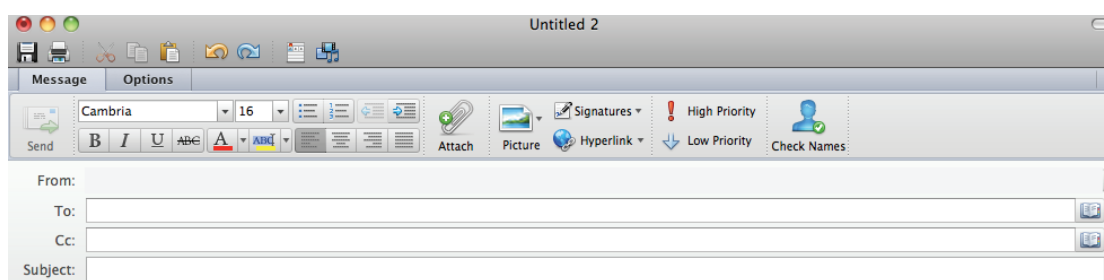
UNEP's iPIC Online Process

1. The national authority in each participating country submits an iPIC information sheet to UNEP.⁴² The information sheet includes:⁴³
 - A list of registered importers and exporters of ODS and equipment containing ODS.
 - Each importer or exporter's permitted quota (if applicable), use of the substance (e.g., feedstock, exempted, laboratory use, re-export, destruction, reclaim), and quality of the substance (new, recovered, recycled, reclaimed, or any).
 - Trade bans and exemptions related to ODS and equipment containing ODS.
 - Destruction and reclaim facilities for ODS.
 - Contact information of national iPIC focal points.
 - Existing regulations to control import and export of ODS (optional).
 - Trade names of most commonly traded ODS in the country (optional).
 - National Customs codes for ODS (optional).
 - Restrictions on trade in HFCs (optional).
2. UNEP enters the information from the information sheet into the iPIC online system.⁴⁴ The iPIC online system is password protected and only available to registered iPIC focal points in countries that have submitted an iPIC information sheet. After UNEP reviews the iPIC information sheet and enters the information into the iPIC online system, it will send an invitation email to the focal point in participating countries, inviting them to register for the iPIC online system.
2. When a country receives an ODS import or export request from an iPIC-participating Party, it will check the iPIC sheet in the iPIC online system for the requesting country.⁴⁵ If the importing or exporting Party is listed on the requesting country's iPIC sheet as a registered trader for the substance, use, purpose, and/or amount involved in the trade, then the receiving country will issue the license.⁴⁶
3. If the trader is not listed on the requesting country's iPIC sheet, or if the iPIC sheet does not provide enough information to determine the legality of the trade, then the importing country will contact the requesting country to inquire whether the importing/exporting trader is authorised to engage in the trade.⁴⁷ This contact between countries is called a consultation.
4. If the requesting country responds that the trade is not acceptable, then the importing country will not issue the license.⁴⁸ If the requesting country does not respond to the inquiry, then the importing country will grant the import/export license (after 10 days in the Asia-Pacific region and after 5 days in Europe and Central Asia).⁴⁹

The iPIC Procedure⁵⁰



Sample EU iPIC Notification⁵¹



Dear Sir or Madam,

We are the competent body of the European Union issuing import and export licences for Ozone Depleting Substances for all 27 Member States of the Union. We received a request for an export to your country as described below. In the context of the informal Prior Informed Consent procedure (iPIC) we kindly would like to ask you to confirm that you consider this import to your country as acceptable and in compliance with your provisions under the Montreal Protocol. We are asking in particular that the company concerned is not mentioned in your Info Sheet ODS licensing for 2009.

Exporter from EC: Company X (GERMANY)
Importer in your country: Company Y, Street Z, City A
Substance to be exported: Methyl Bromide
Use: QPS

Short Examples

iPIC: Short Examples from Developing Countries

- In April 2010, China and Trinidad and Tobago engaged in an iPIC consultation that led to the prevention of an illegal trade of 16 tonnes of methyl bromide. After receiving an export license application for the ODS, the Chinese authority asked the Trinidad and Tobago authority to verify that the intended importer listed on the export license application held a valid license to import methyl bromide into the country. After checking their licensing records, the Trinidad and Tobago authority notified the Chinese authority that the importer was not licensed to import the ODS. Thus, the Chinese authority did not issue the license to export the methyl bromide to Trinidad and Tobago.⁵²
- Vietnam and the Republic of Korea engaged in an iPIC consultation in February 2011. A Vietnamese company requested a license to import carbon tetrachloride (CTC) for cleaning purposes from its affiliated company in the Republic of Korea. The Montreal Protocol phased out CTC production and consumption on 1 January 2010. The iPIC focal points in Vietnam and the Republic of Korea determined that the company was not aware of the phase out, and UNEP recommended that the company notified its overseas facilities that the use of ODS for cleaning purposes was no longer permitted.⁵³
- In March 2007, Chinese authorities initiated iPIC consultations with The Philippines, Indonesia, and Lebanon after receiving applications for the export of methyl bromide to those countries. The Chinese authorities asked the authorities in The Philippines, Indonesia, and Lebanon to verify that the importing companies named on the export license applications were authorised to import methyl bromide. The Philippines notified China that the company was authorised to import methyl bromide. However, Indonesia responded that the Indonesian importer was “suspicious” and the Lebanese responded that the importer was not registered to import methyl bromide.⁵⁴

Short Examples

iPIC Short Examples from the EU of iPIC Halting Unauthorised Trade

- In March 2010, a Spanish company requested a license to export approximately 10 metric tonnes of HCFC-22 to China. The designated use of the HCFC-22 was for refrigeration onboard a ship. The EU authority

sent the Chinese authority a message to confirm whether the importer was licensed and allowed to legally import the ODS. In response, the Chinese authority notified the EU authority that the importer was not registered and held no license. The EU authority did not issue the export license to the Spanish company. Since the first consultation, the Chinese authority has informed the EU authority that the importer has registered and that such trade would not require a license under Chinese law.⁵⁵

- In April 2011, Denmark and China engaged in an iPIC consultation regarding the potential trade of 300 kg of HCFC-22. The EU authority contacted the Chinese authority after becoming aware of the potential import of the ODS into Denmark without an import license. Because of the lack of an import license, the EU authority requested that the Chinese authority not grant a license to the exporter for the trade. The Chinese authority had not yet received an application for the export, but agreed that if they did receive an application, they would not grant the export license until after the EU authority issued a license for the import of the substance.⁵⁶
- In April 2011, a Belgian company requested a license to export 18 metric tonnes of methyl bromide to Vietnam for QPS purposes. The EU authority sent an email to the Vietnam authority seeking confirmation that the Party in Vietnam was permitted to import the methyl bromide. The Vietnam authority replied that the importer was unknown and thus the EU authority did not issue the export license to the Belgian company.⁵⁷
- In July 2011, the Singapore authority received a request to import fire extinguishers containing halon from a company in the United Kingdom. The Singapore authority sent an email to the EU authority seeking confirmation that the exporter was licensed to export the ODS. The EU authority informed Singapore that the United Kingdom exporter was not authorised to export the fire extinguishers containing halon. The EU authority requested that the United Kingdom investigate.⁵⁸ The investigation concluded that unlicensed exports took place in the past as the company was unaware of the restrictions and obligations.⁵⁹
- In October 2011, an iPIC consultation was conducted for a trade in ODS between Spain and St. Vincent and the Grenadines. A Spanish company requested a license to export 3,600 kilograms of HCFC to St. Vincent and the Grenadines for refrigeration purposes. The EU authority sent an email to the St. Vincent and the Grenadines authority seeking confirmation that the import was valid. St. Vincent and the Grenadines responded that the importer was unknown. The EU did not issue the export license to the Spanish company.⁶⁰

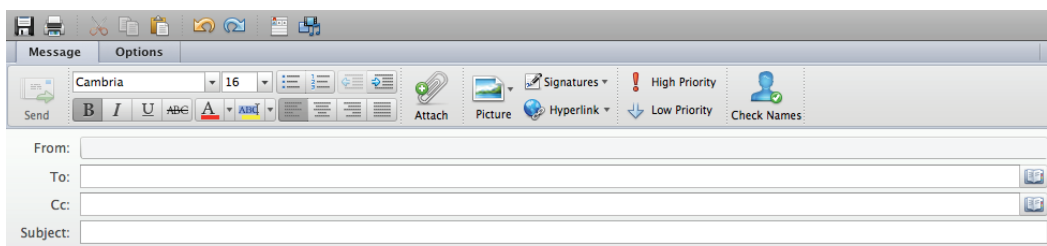
Case Study

Argentina's Informal Prior Informed Consent Procedure

Argentina engages in iPIC at the request of other countries or its own importers.⁶¹ For example, Argentina has agreed to alert Paraguayan officials when an export of ODS from Argentina is destined for Paraguay. As part of its risk profiling function, Argentina's web-based licensing system is designed to send an alert to the NOU when an export license is requested for Paraguay and certain other countries. The NOU then sends an email containing information about the shipment to a designated contact point in the receiving county. The email includes:

- a description of the substance
- quantities
- type of container (cylinders, drum)
- approximate day of arrival

Similarly, some of Argentina's importers have requested copies of licenses for shipments from certain countries. The licensing system also sends a reminder to the NOU to provide the importer with the requested information.



The purpose of this email is to inform you that we have authorized an export of ODS that is destined for your country.

Buyer in Paraguay:	Name of buyer
Exporter in Argentina:	Name of exporter
Product/substance:	HCFC-123
Harmonized Tariff Code:	2903.72.00
Quantity:	181.6 kg in two drums
Country of Manufacture:	Canada
Estimated Date of Export:	15/09/2011
Place of Export:	Clorinda, Argentina

Recommendations for Using iPIC to Prevent and Improve Enforcement Against Illegal Trade

- Countries should **participate in UNEP's iPIC online program**. If this is not feasible, they should consider how they can work bilaterally with important ODS trade partners to implement a notification and consent procedure.
- Countries participating in UNEP's iPIC online program should **update their information sheets frequently**, and at least annually.
- National licensing systems that **grant licenses for each shipment** (import/export) of ODS, rather than grant bulk licenses, facilitate better oversight and make iPIC easier to implement.
- Where feasible, **integrate iPIC into licensing systems and procedures**, for example, to create alerts that remind the NOU to send a notification when a license is requested to export ODS to iPIC countries.
- Generally, countries employing a bilateral iPIC mechanism should send consultation requests **via email for faster response** times.
- iPIC procedures should **be included in Customs training courses** and other government initiatives aimed at educating producers and traders in ODS.

Additional Resources

UNEP DTIE OzonAction Branch, iPIC Online User Guide: Steps to Access iPIC Online (2012), available at: <http://www.unep.org/ozonaction/Portals/105/documents/publications/ipic-online-user-guide-access.pdf>

UNEP, HCFC Policy and Legislative Options: A Guide for Developing Countries (2010), available at: http://www.unep.org/dtie/Portals/126/pdf/HCFC_Policy_%20guide_final.pdf

UNEP, The Multilateral Environmental Agreements Regional Enforcement Network, iPIC Network Background, available at: http://mea-ren.org/ipic_network.php

UNEP, Compliance through Informal Prior Informed Consent on Trade of Ozone Depleting Substances- iPIC (2011), available at: <http://www.unep.org/ozonaction/Portals/105/documents/publications/publication-ipic.pdf>

UNEP, Formal Compliance Through Informal Consent: Informal Prior Informed Consent (iPIC) for import and export: A tool to strengthen enforcement of Licensing system for Ozone Depleting Substances (2010), available at: <http://www.unep.fr/ozonaction/information/mmcfiles/7458-e-IPIC.pdf>

Aléxandros Kiriazis, Policy Officer, European Commission, DG Climate Action, Unit C2 – Transport and Ozone, iPIC-Recent Cases in the European Union (Nov. 2011), available at: <http://www.unep.org/ozonaction/Portals/105/documents/events/111124-kiriazis.pdf>

Chapter Four

Cracking Down On Smugglers: The Value Of Enforcement Operations

Enforcement operations are an excellent strategy for improving national capacity for detecting and preventing illegal trade in ODS through a 'learning-by-doing' approach. ODS enforcement operations can take many forms, but generally the goal is to achieve a crackdown on smugglers during a set period of time through the focused attention and close coordination of enforcement officials from environment, Customs, police and prosecutorial agencies. The benefits are largely derived from the practical knowledge and skills gained by these officials who may have little to no previous experience in targeting ODS shipments, conducting inspections, leading investigations and bringing criminal cases against smugglers. Enforcement operations are also beneficial because they often stimulate regional and international cooperation and create deterrent value.

The scale of an enforcement operation can be national, regional or international and their goals can be quite different. For example, "Operation Cool Breeze" in the US was a national effort focused on successful criminal prosecution, while "Operation Sky-Hole Patching" was a regional initiative, in Asia and the Pacific, aimed at identifying smugglers using Customs intelligence networks. The following case studies present examples of several types of operations, how they were planned and their benefits.

Case Study

Operation Cool Breeze: How the US Targeted CFC Smugglers

The US was one of the first countries to deal with ODS smuggling on a large scale. Illegal trade in ODS, in particular CFCs, took off in the US soon after the phase-out of CFC production began in 1995.⁶² The US Environmental Protection Agency (US EPA) estimates that 7,500 to 15,500 tonnes of illegal CFC-12 were imported into the US between 1994 and 1995.⁶³ Once the scale of the problem became apparent, US authorities took immediate measures to address it, including launching “Operation Cool Breeze,” an aggressive crack-down on smuggling aimed at seizures and prosecutions.⁶⁴ This highly successful operation demonstrates the value of a multipronged approach to combating ODS smuggling, including: (1) national coordination, (2) information sharing among enforcement agencies, (3) Customs training and awareness, (4) criminal prosecution, (5) and international cooperation.

National Coordination and Information Sharing

Operation Cool Breeze began at the port of Miami, Florida, where early cases of CFC smuggling were detected.⁶⁵ However, it soon became apparent that ODS smuggling was a nationwide concern requiring national coordination.⁶⁶ An inter-agency task force comprised of government agents and attorneys from the United States Department of Justice (US DOJ), US EPA, Federal Bureau of Investigation (FBI), Internal Revenue Service (IRS), and Customs Service (Customs) was formed to improve cooperation and facilitate the exchange of ODS data.⁶⁷ The task force met on a monthly basis to coordinate their efforts and share information.⁶⁸ Cooperation among these agencies was largely informal.⁶⁹ However, in 1996, US EPA and Customs signed an MOU to coordinate investigations and share information on imports of suspected illegal ODS.⁷⁰

Previous to the Operation, US EPA focused their compliance monitoring efforts on ensuring that companies did not exceed their ODS import allocations. The agency did not closely monitor overall imports of ODS.⁷¹ On the other hand, Customs tracked most imports of ODS, but was not aware of the allowance requirement.⁷² By combining and cross-referencing datasets and analysing them jointly, the agencies were able to identify which companies were importing without an allowance and other inconsistencies that might indicate smuggling.

The Inside Story

Operation Cool Breeze began when a Customs officer in Miami was having the refrigerant in her car recharged.⁸⁸ Dismayed at the high price of the service, she questioned her auto mechanic who informed her about the new import restrictions on CFCs as a result of the Montreal Protocol.⁸⁹ Certain that she had seen hundreds of CFC cylinders in the port where she was an inspector, she returned to work and investigated the shipments, discovering that many of them lacked the appropriate import permits.⁹⁰

Customs Training and Awareness

In addition to improving national coordination, enhancing the capacity of Customs officers was an important goal of the Operation. In support of this objective, the interagency task force developed an ODS deskbook for Customs officers.⁷³ The document, which helped sensitise Customs agents to the problem of illegal trade in ODS, was one of the first of its kind and served as a model for later Customs manuals by UNEP and other Montreal Protocol Parties.⁷⁴ In addition to serving as an alert to Customs officers, it contained detailed guidance on identifying ODS, including: how to review Customs paperwork, what to look for during physical inspections, common Customs codes and labelling requirements used for ODS and examples of common smuggling schemes.⁷⁵ It also included recommended screening criteria and lists of suspicious companies—all based on experience in the US.⁷⁶

Criminal Prosecution

Of course, a primary focus of the Operation was investigation and prosecution of smugglers. Close coordination between investigators in US EPA and Customs and prosecutors within the US DOJ was critical to the ultimate success of the Operation, which resulted in 44 prosecutions and the seizure of more than 1.9 million pounds of CFCs valued at over USD 30 million.⁷⁷ Chapter five includes a detailed discussion of the prosecution process for ODS in the US, including examples from past and current enforcement operations.

Dealing with Small-Scale Smuggling Across Land Borders

During Operation Cool Breeze in the 1990s, US officials discovered that, in addition to the smuggling of large quantities of ODS via seaports, smaller-scale smuggling was occurring over the US-Mexico land border.⁹¹ Often these operations involved passenger cars crossing the border with one or two cylinders of illegal CFCs and then aggregating the product in an organised manner at distribution centres, such as car dealerships.⁹² In addition to working with authorities in Mexico to raise the awareness of border agents, US officials contacted the dealerships where the illegal product was being aggregated.⁹³ Once the dealers became aware of the illegal nature of the chemicals, many of them cooperated with authorities to identify smugglers.



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Smuggled CFCs in Miami, Florida, USA.

International Cooperation

In addition to stepping up domestic enforcement efforts, the US also sought the assistance of law enforcement officials and authorities from foreign governments in its efforts to stop illegal imports of CFCs.⁷⁸ During the Operation, US officials worked closely with their counterparts in Mexico, Canada, China, and Russia to share information, train Customs officers and target suspect shipments.⁷⁹

Operation Catch-22

An extension of Operation Cool Breeze, Operation Catch-22 is an ongoing inter-agency campaign to aggressively identify and convict those found to be illegally smuggling HCFCs into the United States.⁸⁰ Under US regulations, an importer must hold an unexpended consumption allowance to legally import specified ODS in the US.⁸¹

Building on the lessons learned from Operation Cool Breeze, Operation Catch-22 encourages information sharing, including information from: US EPA Stratospheric Protection Division, Customs entry inspections, Customs review of suspicious entry paperwork, intelligence from industry groups, international intelligence data and anonymous tips (for example from competitors, former employees, freight forwarders).⁸² Thus far, the Operation has resulted in several prosecutions, particularly by prosecutors in Miami, Florida.⁸³

Recent Examples of HCFC Prosecutions in the US

- On 29 July 2011, Brendan Clery was sentenced to 18 months in prison for illegally importing HCFC-22, contrary to the provisions of the Clean Air Act (CAA). In addition, he was ordered to pay a USD 10,000 criminal fine and forfeit illegal proceeds in the amount of USD 935,240. Between June and August 2007, Clery illegally smuggled into the United States approximately 278,256 kilograms, or 20,460 cylinders, of restricted HCFC-22, with a market value of USD 1,438,270. At no time did Clery or his company Lateral Investments hold unexpended consumption allowances that would have allowed them to legally import the refrigerant.⁸⁴
- On 11 February 2011, Harp USA Inc., a Florida corporation, pled guilty and was sentenced in connection with false statements made in entry documents for the importation of HCFC-22 refrigerant. Harp's plea included admittance to importing approximately 1,874 cylinders (approximately 25,000 kg) into the U.S., using false invoices and statements resulting in three years of probation and a USD 206,140 criminal fine. Harp was also ordered to perform community service by making a USD 25,000 payment to the Southern Environmental Enforcement Training Fund, a not-for-profit training organisation. In addition, as a special condition of probation, Harp was ordered to implement and enforce an Environmental Compliance Plan and to reimburse the government for costs associated with the storage and handling of the merchandise.⁸⁵
- On 11 February 2010, James Garrido and Kroy Corporation were each sentenced on charges related to smuggling HCFC-22 into the U.S. Between March 2007 and April 2009, Garrido and Kroy illegally imported approximately 29,107 cylinders (418,654 kilograms) of HCFC-22 by using false documentation, declaring the illegal HCFC-22 as legal substances or declaring the goods as "United States Goods Return." Garrido was sentenced to 30 months imprisonment, to be followed by three years of supervised release. Kroy Corporation was sentenced to five years of probation. Additionally, Garrido and Kroy were sentenced, jointly and severally, to pay a criminal fine of USD 40,000, and were further ordered to forfeit USD 1,356,160 to the United States. An associate of Kroy and Garrido also pled guilty to making false statements and declarations on Customs entry forms in order to disguise the illegal HCFC-22.⁸⁶
- On 11 April 2012, Carlos A. Garcia pled guilty in connection with the illegal receipt, purchase, and sale of HCFC-22. Garcia was the Senior Vice-President of Mar-Cone Appliance Parts Co. Heating and Cooling Division, and was responsible for executing legal purchases and sales of refrigerant gas. Instead, Garcia engaged in a pattern of conduct to purchase and sell black market HCFC-22. The investigation revealed that Garcia would routinely seek out and arrange the purchase of HCFC-22 from various importers who did not hold the required unexpended consumption allowances, totalling approximately 55,488 kilograms of restricted HCFC-22, with a fair market value of approximately USD 639,458. The refrigerant gas was distributed by Mar-Cone throughout the United States. Mar-Cone was previously convicted and sentenced for its related conduct. Mar-Cone was ordered to pay a USD 500,000 criminal fine, a USD 400,000 community service payment, and forfeit to the United States USD 190,534.70 in illegal proceeds.⁸⁷

Recommendations for Organising a National Enforcement Operation

- Identify all agencies with the authority to regulate ODS, for example: the environment ministry, Customs ministry, tax authority, coast guard, port police, national criminal investigative services, prosecutors and local authorities.
- Organise a task force with officials from each agency that meets regularly to strategise, exchange information and develop working relationships and protocols.
- Establish a primary point of contact from each agency for the operation.
- Combine, cross-reference and analyse datasets among relevant government agencies on a regular basis. Consider development of a joint database and/or ways that data can be harmonised in order to facilitate analysis.
- Develop a manual for use in training of frontline enforcement officials, such as Customs agents. Components of the manual should include: known smuggling techniques, shipment targeting criteria, investigative techniques and technologies for ODS, considerations for preserving evidence, lists of suspect companies, points of contact within the NOU, and safety considerations. Information in the manual should be as country-specific as possible and include real examples from the field, including pictures where possible.
- Secure field test equipment, such as refrigerant screening devices, to allow immediate identification of ODS.
- Investigate the entire supply chain. In low volume smuggling situations, concentrating enforcement efforts on distribution centres or other points down the supply chain may be more effective than at the border.

- Work with enforcement officials in trade partner and neighbouring countries to share information and conduct training and awareness-raising activities.
- Criminally prosecute offenders to the full extent of the law.
- Publicise the results to create a deterrent effect.
- Check the Internet regularly for offers of illegal ODS sales in the country.
- Conduct spot physical inspections of workshops and marketplaces where ODS is stored or used.
- Solicit tips from industry about illegal trade of ODS.
- Maintain a hotline (via telephone and email) for people to call in and notify authorities about potential ODS violations or other enforcement-related tips.

Short Example Project Sky-Hole Patching

Project Sky-Hole Patching was a project launched in 2006 in the Asia and Pacific to fight illegal trade in ODS.⁹⁴ Customs and environmental authorities from 18 countries worked together to implement this important project.⁹⁵ WCO's Regional Intelligence Liaison Office (RILO) for Asia and the Pacific and UNEP's Compliance Assistance Programme (CAP) for the Asia and Pacific Region facilitated the project in consultation with other regional and international institutions.⁹⁶ Recognising the important role that Customs authorities play in detecting and stopping illegal trade, Project Sky-Hole Patching established a system to monitor suspicious shipments of ODS and notify countries about the movements of suspicious ODS shipments.⁹⁷ The project also included an "immediate seizure notification system," which was intended to facilitate cooperation and assistance for investigating and prosecuting ODS crimes.⁹⁸ The countries hoped that, by working together through Project Sky-Hole Patching, they would be better able to ensure ODS shipments were delivered to the final destinations provided to Customs authorities and take immediate enforcement action on any shipments discovered or suspected to have diverted from their routes.⁹⁹

Due to the success of Project Sky-Hole Patching, in 2010 the WCO and UNEP's DTIE OzonAction Programme launched Project Sky-Hole Patching II.¹⁰⁰ Customs authorities in over 80 countries strengthened their activities to identify shipments at high-risk of involving illegal ODS and notified each other of suspicious shipments.¹⁰¹ As a result of the six month long project, Customs officers seized 108 tonnes of ODS and more than 660 pieces of equipment containing ODS.¹⁰²



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Recommendations for Regional or International Enforcement Operations

- National Ozone Officers should **work closely with their national WCO focal point and Regional Intelligence Liaison Office (RILO)** to share intelligence and coordinate enforcement efforts.
- **Organise training workshops and meetings** for Customs officers and ozone officers assist in the implementation of enforcement operations.
- Consider ways to **streamline communications between different authorities**, both domestically and internationally.

Additional Links and Resources

WCO and UNEP, Project Sky-Hole Patching II (2010), available at:
http://www.greenCustoms.org/docs/Sky_Hole_Patching_BKK.pdf

INECE, Joint WCO/UNEP Operation Nets Large Haul of Ozone Depleting Substances (2010), available at:
<http://inece.org/2010/11/15/joint-wcounep-operation-nets-large-haul-of-ozone-depleting-substances/>

Chapter Five

Ozone Layer Justice: Strategies for Investigating and Prosecuting ODS Smuggling Crimes

Prosecuting ODS smugglers to the full extent of the law is perhaps the most effective way of deterring illegal trade. Active pursuit of ODS cases demonstrates governmental commitment to ozone layer protection and rewards and encourages vigilance by frontline enforcement officers. The following case studies demonstrate how different countries pursue criminal smugglers.

Although the overarching legal system in place in each country may be different, there are many common challenges that prosecutors face when dealing with environmental crime such as ODS smuggling. These challenges include, for example: how to work with other agencies, how to collect and preserve evidence, what charges to press and how to raise awareness amongst the judiciary about ODS smuggling.

Case Study

Fiji Case Highlights Good Practices for Prosecuting ODS Crimes

In 2005, prosecutors in Fiji won a lawsuit against an individual and a corporation for violating the Ozone Depleting Substances Act of 1998, the implementing legislation for the Montreal Protocol in Fiji.¹⁰³ The Act prohibits the import, export, or manufacture of controlled substances (listed in a Schedule to the Act).¹⁰⁴ The Act also restricts the import, storage, and sale of all substances listed under the Schedule by imposing a permitting system on these ODS activities.¹⁰⁵ The convicted individual disconnected a container of CFC-12 at the Fiji Reserve Bank and took the container to the premises of a company and stored it in violation of Fijian law.¹⁰⁶

A case was filed with the Public Prosecutor's Office in 2001 and with the Fijian High Court in 2002 against the individual and the company.¹⁰⁷ Witness statements were collected in 2003 and the gas was tested using a refrigerant identifier in 2004.¹⁰⁸ Ultimately, in 2005, the individual was found guilty of handling a controlled substance without authorisation in violation of the Ozone Depleting Substances Act of 1998 and sentenced to a USD 200 fine or, upon default, 10 days imprisonment.¹⁰⁹ The corporation was convicted of unlawful storage of a controlled substance in violation of the Ozone Depleting Substances Regulations of 2000 and was fined USD 1,000 or, upon default, subject to committal.¹¹⁰ While this was a ground-breaking prosecution in Fiji, the experience highlighted several issues that low volume consuming and developing countries may want to consider to decrease the cost associated with prosecuting ODS cases and increase the likelihood of success (see recommendations below).

Recommendations for Prosecuting ODS Crimes Based on Fiji's Experience

- **Countries should have the infrastructure and laboratories available** to easily, reliably, and inexpensively test the suspect ODS and prepare evidence for court.¹¹¹ In the Fiji case, the Judge made clear that the state must prove the allegations of ODS violations by providing documentary evidence or test results confirming that the accused was dealing in prohibited ODS.¹¹² Thus, Fiji spent USD 14,000 to collect the ODS sample, send it abroad for gas chromatography testing, and fly an expert witness to Fiji to provide evidence in court regarding the ODS.¹¹³ For Fiji and other countries, this can be prohibitively expensive and may be an obstacle for many countries to prosecuting ODS crimes.¹¹⁴ In some cases, universities and private companies may have laboratory equipment and technicians suitable for evaluation of evidence. **Where laboratories are not available in-country, it is particularly important to identify reliable and cost-effective testing facilities in advance of a case.**
- **Refrigerant identifiers should be certified** so that their test results can be used as evidence in court.¹¹⁵ Fijian Customs used a refrigerant identifier but because the identifier was not certified, the burden of proving that the machine was reliable, properly calibrated and in working condition, fell on the state.¹¹⁶ Thus, Fiji had to spend a significant amount of money for a gas chromatography test and chemist report

from abroad.¹¹⁷ If a country has a certified refrigerant identifier available, it may be able to avoid these investigative costs.¹¹⁸

- **Evidence should be carefully collected and stored in a safe location.**¹¹⁹ Evidence preservation is key to ensuring that there is sufficient proof to find a person or company guilty of violating the ODS legislation. Countries should identify proper storage facilities for dangerous or hazardous materials seized as exhibits by police. Countries that do not have proper storage facilities may rely on other countries for safe keeping and destruction of hazardous materials.¹²⁰
- **The penalties for violating the law must be significant** enough to deter potential smugglers from breaking the law.¹²¹ In the 2005 Fijian case, the maximum penalty for an individual convicted of handling a controlled substance without authorisation was a USD 400 fine or up to six months imprisonment and the maximum penalty for the corporation convicted of unlawful storage of a controlled substance was a fine of USD 100,000.¹²² It is not clear whether these penalties are stiff enough to deter smugglers. A comparative analysis of the penalties for ODS violations in different jurisdictions might be helpful to lawmakers when they are considering whether or not to amend the penalties.¹²³
- **Judges should be briefed about the seriousness of ODS crimes and the importance of deterring future illegal ODS trade.** In the Fiji case, despite the availability of significant penalties, the judge used discretion to lower the fines to amounts that may have eliminated their deterrent effect.¹²⁴ Thus, although a USD 100,000 maximum penalty could have been imposed on the company for unlawfully storing ODS, the judge sentenced the company to only a USD 1,000 fine.¹²⁵ The individual charged with handling a controlled substance without authorisation was only fined USD 200 out of a possible USD 400, or ten days out of a possible six months in prison.¹²⁶ This choice of a low fine or a short prison sentence may not be enough to dissuade individuals or corporations from engaging in illegal ODS trade. The prosecution should also be permitted and prepared to provide examples of sentencing penalties from other jurisdictions to assist the Judge in arriving at a correct and just sentence.¹²⁷
- **The ODS laws should have minimum fines or prison terms** to ensure that Judges impose sentences that will deter potential offenders from violating ODS and environmental laws in the future.¹²⁸ In Fiji, this issue has been addressed through the Sentencing and Penalties Decree of 2009 and by Prosecutors proactively submitting potential sentences.¹²⁹
- **There should be a mechanism in place to lower or reimburse the prosecutors' investigative costs,** including the costs of having the ODS samples analysed by an accredited laboratory.¹³⁰ The Fijian judge did not grant court costs to the prosecution because the judge believed that, because the prosecution had the burden of proving the crime beyond a reasonable doubt, it should also bear the burden of its own costs.¹³¹

Short Example

Prosecution by Customs: ODS Crimes in India¹³²

In India, Customs is often responsible for taking action against the illegal import and export of ODS where Customs laws are implicated. India's environmental legislation governs the phase-out of ODS, including regulations on the production, consumption, sale and storage of ODS. This law also identifies and defines illegal activities with regard to the import and export of ODS. India's environmental law is complemented by Customs legislation which empowers Customs officers to take action against imports or exports that are illegal under any existing Indian law.

When Customs decides to take action against an alleged offender, the goods, if available, may be physically examined and samples drawn and tested. If required, they may be detained or seized. Investigation may also involve the recording of statements and collecting of other evidence. In some cases, premises may also be searched for evidence. On completion of investigation, Customs issues a 'Show Cause Notice' to the offender. The Show Cause Notice lists the actions that Customs is proposing to take against the offender. Possible actions that Customs could take include confiscating the ODS and imposing fines and penalties. The legal authority for these actions is derived from the Customs Act, 1962. The offender is given the opportunity to be heard before a quasi-judicial authority who is also a Customs officer before the case is decided. The decision-making powers of Customs officers in quasi-judicial capacity are determined by the magnitude of the Customs duty involvement in monetary terms. There is a well-defined mechanism for appealing a decision which can be used by either the alleged violator or Customs.

If the violation is serious enough, Customs officers may prosecute the offender under the Customs Act, 1962 in a court of law. The conditions in which prosecution can be launched are laid down by both the Customs legislation and the administrative guidelines issued by the Customs. These include the monetary magnitude of the offence and recidivism. The role of the environmental law in these prosecutions is usually limited to the declaration that the import or export of ODS was *per se* illegal.



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Case Study

Investigation and Prosecution of ODS Smuggling in the US

The US government has actively prosecuted ODS smugglers since the mid-1990s. Close collaboration between investigators and prosecutors and tough penalties are the hallmarks of this highly successful program.

In the US, Customs officers, together with US EPA investigators, perform investigations related to illegal trade in ODS.¹³³ Other agencies, such as port police, may become involved as well.¹³⁴ These enforcement officials are trained in criminal investigation techniques and may also have specialised training in environmental crime investigation.¹³⁵ Their main role is to identify smugglers and to collect evidence in support of civil or criminal enforcement.¹³⁶

An investigation usually begins when an officer receives a “tip” from a source about a suspicious shipment.¹³⁷ Other times, investigations are the result of a proactive effort to target smugglers using risk profiling based on Customs documents, trade data, and other information.¹³⁸ Port or Customs inspectors may perform targeting work as part of their regular duties or in furtherance of an enforcement operation.¹³⁹ For example, during “Operation Cool Breeze” (see Chapter four), an inter-agency task force composed of officials from US Customs, environment and justice agencies met regularly to share and cross-reference data to target ODS shipments for investigation.

Inspecting

Once an investigator determines that a shipment warrants further investigation, a variety of inspection options may be employed, including use of refrigerant identifiers, x-ray machines, and physical examination.¹⁴⁰ The paperwork associated with the shipment is also carefully scrutinised.¹⁴¹ Paper work is scrutinised for “badges of fraud” that suggest illegal activity, such as:

- Shipping routes that involve excessive handling and/or do not appear to be cost-effective.
- Use of free trade zones and ports for transit/trans-shipment.
- Consignment to a “new” company with no previous Customs records.

Collecting Physical Evidence

During the investigation phase of ODS cases, physical evidence (e.g., chemical samples of the ODS) necessary to support prosecution is collected. Therefore, it is important that investigators understand how to collect and preserve physical evidence.¹⁴² Important considerations for collecting ODS samples are:

- **Timing:** Evidence samples must be taken within a reasonable amount of time to ensure authenticity and accuracy.
- **Chain of Custody:** Evidence must pass through a satisfactory chain of custody, documenting seizure, custody, control, transfer, analysis, and disposition.
- **Laboratory Standards:** Laboratories must meet high standards in terms of quality control and chain of custody management.¹⁴³
- **Statistical Significance:** It is important to make sure that sufficient samples are collected to provide statistically significant results.
- **Duplicate Samples:** Duplicate samples can be provided to the defence for independent testing in a criminal case.

Environmental investigators tend to rely on certain laboratories that have demonstrated experience in analysing ODS and know how to carefully manage documentation and paperwork.¹⁴⁴ US EPA has specialised laboratories that employ scientists, engineers, analysts, technicians, and environmental and computer specialists with extensive experience analysing samples in support of environmental investigations.¹⁴⁵

Collecting Documentary Evidence

In addition to investigating the ODS itself, investigators will also want to know more about the companies involved in the import or export of the materials. Investigators in each of the agencies have a number of research tools available, including criminal and legal databases. However, a search warrant or subpoena may be necessary in order to obtain documentary evidence or witness testimony from the companies or people under investigation, or other outside sources.¹⁴⁶ In this situation, the investigator, alone or in collaboration with the prosecutor, must request the warrant or subpoena from the appropriate judicial or administrative authority.

Documents that may be useful in an ODS investigation include:¹⁴⁷

- Business transaction records
- Invoices
- Environment, health and safety inspection records
- Aerial photographs
- Hazardous materials and waste storage permits
- ODS license applications and associated documentation
- Bank records
- E-mail correspondence
- Marine and trucking bills of lading
- Hazardous materials manifests
- Vessel manifests

Prosecution

While it is the investigator's job to identify smugglers and collect evidence, it is the prosecutor's job to bring smugglers to justice within the US court system. Depending on the case and other factors, such as the experience of the investigator and the magnitude of the potential crime, prosecutors may become involved in an ODS case very early on in the investigative process.¹⁴⁸ The prosecutor is also likely to do their own additional investigatory work in support of the case. The prosecutorial process for ODS crimes in the US is the same as for any other crime. There are no special "green courts." Judges that preside over ODS cases usually do not have special training in environmental law, and part of the prosecution's job is to raise the awareness of the Court through pleadings, memoranda and expert witnesses.

The progress of each case is unique and depends on a wide variety of factors.¹⁴⁹ Most ODS cases (approximately 90%) do not make it to trial, but are settled beforehand through a plea bargaining process where the defendant agrees to plea to the charges in a specific way in exchange for reduced charges and/or penalties.¹⁵⁰ However, an ODS case that does go to trial will generally proceed as follows:

Grand Jury Investigation and Indictment

Depending on the jurisdiction, a grand jury of approximately 20 individuals will hear the evidence presented by the prosecutor and assess whether there is enough evidence to charge the suspected smugglers and issue an indictment.¹⁵¹ In some jurisdictions, an “information” which lays out the charges, may be used in lieu of a grand jury indictment. This typically occurs where the Parties have negotiated a plea resolution of the case in advance of filing formal charges.

Where the prosecution presents sufficient evidence, suspects are indicted by the grand jury. The indictment consists of a short and plain statement of where, when, and how the defendant allegedly committed the offense. Each offense is usually set out in a separate count. In ODS cases, common criminal charges are:

- Clean Air Act violations
- Mail or wire fraud (for example, if a company had billed for “recycled” though the transaction was newly manufactured ODS)¹⁵²
- Money laundering
- False statements¹⁵³
- Conspiracy
- Aiding and abetting
- Perjury

When determining who to prosecute and what charges to assert, US prosecutors take many strategic and practical factors into consideration. For example, they will evaluate the quantity of ODS smuggled, the intent of the smugglers, and whether the crime was a first-time offense.¹⁵⁴ In evaluating corporate wrongdoing, prosecutors evaluate whether the crime was undertaken by a rogue employee or part of a systemic problem.¹⁵⁵ In the case of a rogue employee, the prosecutor’s focus may be more on imprisonment for the specific employee.¹⁵⁶ Whereas, if the criminal activity is part of a systemic problem within the corporation, emphasis may be placed on securing a substantial fine and forfeiture of any proceeds made from the illegal activity.¹⁵⁷

If there is not enough evidence to secure a criminal indictment, or if the prosecutor does not think that criminal prosecution is the best strategy for pursuing the smuggler, they may refer the case back to the US EPA to proceed as a civil matter.¹⁵⁸

Discovery

During the discovery phase, both sides collect evidence they will try to use at trial in support of their case. US EPA and Customs investigators are often involved in this part of the litigation. The US government prosecutors are obliged by statute and the rules of practice to disclose the bulk of their probative evidence to the defence during this stage of the proceeding.

Pre-trial Motions and Rulings

During the pre-trial phase, the prosecution and the defence have the opportunity to make a wide variety of motions, or requests, from the judge, in furtherance of their case strategy.

Pleas

The defendant is required to respond (“plea”) to each of the counts listed in the indictment.

Trial

At trial, the government, bearing burden of proof, presents the judge and jury with its evidence and arguments. The defence may then counter, if it chooses, with an evidentiary case of its own. This may, but not often, include testimony by defendants. The jury will then deliberate and make a decision about each charge.

Conviction and Sentencing

Where the jury returns with a finding of guilt, the judge must determine the appropriate sentence. The maximum penalty is USD 25,000 for each kilogram of ODS produced or imported in excess of what is allowable under the Clean Air Act.¹⁵⁹ Other crimes that ODS smugglers may be convicted of carry widely different penalties. Some carry a minimum sentence or fine, which the judge must follow, that is greater than a Clean Air Act violation.¹⁶⁰ Therefore, prosecutors seeking to maximise penalties for ODS smuggling may wish to pursue convictions based on other laws. Judges must use the United States Sentencing Guidelines as an advisory guide in determining how to apply penalties.¹⁶¹ The guidelines include a section on “Offenses Involving the Environment.” However, deciding whether or not to apply the sentencing guidelines is within the judge’s discretion.¹⁶²

Creating Deterrent Value

Each seizure and prosecution creates a strong deterrent against continued smuggling.¹⁶³ The US DOJ and US EPA capitalise on the deterrent value of a successful prosecution by issuing a press release for each conviction.¹⁶⁴

Example: Portion of Press Release from the United States Attorney’s Office for the Southern District of Florida¹⁶⁵

The United States Attorney's Office
Southern District of Florida

USAO Home Page

Press Release

INTERNATIONAL REFRIGERANT GAS SUPPLIER PLEADS GUILTY AND IS SENTENCED FOR FALSE STATEMENTS IN THE IMPORTATION OF OZONE DEPLETING HCFC-22

February 11, 2011

FOR IMMEDIATE RELEASE

Wifredo A. Ferrer, United States Attorney for the Southern District of Florida, Maureen O'Mara, Special Agent in Charge, U.S. Environmental Protection Agency (EPA), Criminal Investigation Division, Atlanta Area Office, and Anthony V. Mangione, Special Agent in Charge, U.S. Immigration and Customs Enforcement (ICE), Homeland Security Investigations (HSI), Miami Field Office, announced that defendant **Harp USA Inc. (Harp)**, a Florida corporation, pled guilty and was sentenced today in connection with false statements made in entry documents for the importation of ozone depleting refrigerant gas, in violation of Title 18, United States Code, Section 542.

Harp pled guilty before U.S. District Judge Jose E. Martinez to a one count Information that charged Harp with knowingly and intentionally introducing into the United States approximately 1,874 cylinders of the ozone-depleting substance hydrochlorofluorocarbon-22 ("HCFC-22") using false invoices and statements. HCFC-22 is a widely used refrigerant for residential heat pump and air-conditioning systems.

Immediately following the guilty plea, Harp was sentenced to three years of probation and ordered to pay a \$206,140 criminal fine. Harp was also ordered to perform community service by making a \$25,000 payment to the Southern Environmental Enforcement Training Fund, a not-for-profit training organization. In addition, as a special condition of probation, Harp was ordered to implement and enforce an Environmental Compliance Plan and to reimburse the government for costs associated with the storage and handling of the merchandise. Finally, Harp was ordered to forfeit to the United States \$206,140, which represents proceeds received as a result of the crime.

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Tips for Effective Prosecution of ODS Cases Based on the US Experience:

- **Encourage formal coordination of agency staff.** In the US, the US DOJ has the authority to grant certain officials from US EPA and other agencies “Special Assistant US Attorney” status, giving them the authority to pursue criminal cases. This relationship leads to more effective enforcement coordination. In Miami, for example, a US EPA attorney has been designated for more than ten years with Special Assistant US Attorney status.
- **Use ODS screening equipment in ports.** The use of ODS screening equipment in ports allows Customs officials to perform a quick and cursory inspection of a suspect shipment to determine whether further investigation is warranted.

- **Identify an experienced laboratory for analysing samples.** Laboratories that are used to analyse samples of ODS should have experience analysing these substances and managing documentation to ensure proper chain-of-custody protocols are followed so that the evidence can be used in court.
- **Consider ways for agencies to recoup their enforcement costs.** Storage costs associated with detaining and/or seizing ODS can be very high. In the US, Customs may auction off seized goods (to licensed users within quota limits) to recover some of these costs. Additionally, in some cases, as part of its court order, a guilty company or individual may be ordered to pay back agency costs in investigating and prosecuting the case.
- **Think creatively about what charges can be brought against violators and the strategic advantages of each.** Prosecutors may secure better outcomes in terms of punishing smugglers by charging them with violations of ODS laws as well as other criminal laws. Also, in some situations other offenses may be easier to prove.
- **Publicise successful prosecutions to create a deterrent effect.** Issuing a press release immediately after a successful conviction that names the smuggler and the consequences of his crime is an extremely valuable deterrent.

US EPA's Office of Criminal Enforcement

The US EPA's Office of Criminal Enforcement is the nation's environmental police, providing investigative, scientific, and technical expertise to support environmental crimes prosecutions. The organisation is composed of 350 professionals, including 200 US EPA special agents in more than 40 offices nationwide, who work closely with scientists, attorneys, and others to uncover and investigate environmental crimes. US EPA special agents are Federal law enforcement officers with the full authority to conduct investigations, carry firearms, make arrests for any Federal crime, and execute search and arrest warrants.

Short Example ODS Prosecution in the Netherlands

In The Netherlands, both the police and a number of special offices are responsible for investigating environmental offenses.¹⁶⁶ ODS violations are investigated by specialised officers of the Inspectorate for the Environment and Transport. These officers have a dual authority; they are both administrative inspectors and investigators competent for criminal law enforcement.

The Financial, Environmental, and Food Safety Offences Office is the specialised national service responsible for prosecuting environmental offenses, including ODS crimes in The Netherlands.¹⁶⁷ This office brings its cases before 19 district courts; however, in the future the judiciary may appoint four district courts to exclusively hear environmental crime cases.¹⁶⁸ In the Dutch system, all criminal investigations are carried out under the responsibility of the prosecutor's office, whether the police are the investigating authority or any other office. In addition to prosecution for violation of environmental laws, prosecutors frequently prosecute for forgery in environmental cases. Prosecutors are trained in environmental crime and it has been suggested that prosecutors would benefit from specialised training in the sub-fields of environmental law (e.g. ODS, wildlife law, pollution crimes, etc.)

Penalties

The maximum penalty for smuggling crimes varies depending on whether the violator is a natural person or a legal person. For natural persons, the maximum penalty under the Economic Offenses Act is six years in prison and a EUR 78,000 fine.¹⁶⁹ For legal persons, the maximum fine is EUR 780,000.¹⁷⁰ Other possible penalties for legal persons include closure of a company for one year or confiscation of illegal profits.¹⁷¹ The prosecutor requests a penalty and the court makes the final decision. In the well-known Trafigura case involving hazardous waste dumping, the penalty imposed was near the legal maximum fine.¹⁷²

Recent Cases

In the course of 2011, the Dutch government prosecuted two cases concerning the sale of HCFCs to ships of which the flag belonged to a state not a Party to the Montreal Protocol. The defendants were traders in ship

commodities and chemical substances. One case was settled out of court for EUR 40,000, the other for EUR 50,000. This settlement is more than double the sales price of the HCFCs.

In May 2012, the Dutch government pursued a case against a company which is part of a multinational chemical products conglomerate, for export of HCFCs to Kazakhstan (which has not yet ratified the Beijing Amendment to the Montreal Protocol) and for surpassing the company's permitted export limits to Indonesia and Malaysia. All these infractions occurred in 2009. Prosecutors demanded a fine based on the principles outlined in the EU-Directive 2008/99 on the Protection of the Environment through Criminal Law in the amount of EUR 200,000, and the court agreed.

Additional Resources

UNEP Compliance Assistance Programme, Fact Sheet No. 11: Necessary steps and issues to address during conviction trials of illegal ODS trade, available at: <http://www.unep.fr/ozonaction/information/mmcfiles/4766-e-11illegaltrade.pdf>

Chapter Six

Involving All Stakeholders: The Role of Industry and Other Non-Government Organisations in Combating Illegal Trade

Cooperation with industry, including producers, importers, exporters and distributors of ODS, is an important component of any national strategy to address illegal trade. Smuggling ODS can significantly damage the environment and undermines the good work of legitimate companies that have invested significant time and resources in developing their products, establishing their brands and ensuring compliance with both environmental and safety laws. Illegal trade also harms the public through loss of tax revenue and by increase in crime. Therefore, government officials, the public, and companies have a shared interest in preventing the illegal trade in ODS.

Companies and industry groups can contribute valuable information to government officials about smuggling methods and trends. Large producers of ODS often have offices and representatives all over the world and collect detailed information about the movement, price and distribution of the products they deal with. Their unique perspective can be important to ground-truthing government proposals designed to address illegal trade. Obtaining industry input on policies and keeping industry informed about changes to regulatory requirements is essential to facilitating legal trade in ODS. Companies that are offered illegal ODS from unlikely suppliers and at reduced price will be suspicious and may be willing to help with enforcement rather than taking the chance of being caught and prosecuted.

Tips For Improving Cooperation with Industry

- Meet with industry representatives on a regular basis to exchange information, understand their concerns, develop trust and form personal relationships.
- Provide industry with the opportunity to comment on policy proposals aimed at addressing illegal trade.
- Establish a reliable means of communicating regulatory changes and new legal requirements to industry. Examples include: website updates, email lists and industry bulletins. Consider whether different segments of industry might benefit from different formats for communication.
- Develop methods to confidentially receive information on illegal trade and to offer rewards for informants in successful prosecutions.

Case Study

Working with Industry Coalitions to Raise Awareness: How the Alliance for Responsible Atmospheric Policy Works with Government¹⁷³

Based in the US, the Alliance for Responsible Atmospheric Policy (the Alliance) is an industry coalition that was organised in 1980 to address the issue of stratospheric ozone depletion. It is composed of approximately 100 manufacturers and businesses which rely on CFCs, HCFCs and HFCs. The Alliance has a long history of collaborating with government to combat the illegal trade in ODS. For example, the Alliance:

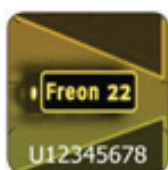
- Meets regularly with government officials to discuss their concerns related to illegal trade, and provide input on government enforcement initiatives.
- Issues press releases publicising cases of successful prosecution of ODS cases to increase the deterrent value of the government's work.
- Educates industry and consumers about changes in government regulations, including the legality or illegality of certain ODS-related activities, taxes imposed on legally imported ODS, and the dangers of illegal ODS.
- Facilitates compliance by maintaining a list of HCFC regulations in developed countries, which helps companies determine whether a shipment of HCFCs is permissible based on its origin or destination.

Short Example

Labelling to Prevent Fraud: DuPont Refrigerants Anti-counterfeit Initiative^{174*}

Labelling to prevent fraud is a rather simple strategy that companies have used successfully to help prevent the sale of counterfeit products. Counterfeit ODS is a concern for companies working to protect its brand. However, government officials should also be aware of counterfeit products, as they may pose safety risks. The DuPont anti-counterfeit initiative is to use DuPont™ Izon® security label to assure that product is authentic DuPont™ Freon®, Suva®, or ISCEON® refrigerant. The Izon® label was developed and patented by DuPont, and enables consumers to quickly verify that the product they have purchased is a genuine DuPont product. What makes this security label unique is that the ten dots that comprise the label cannot be viewed at the same time. To ensure that the container is genuine, the purchaser tilts the security label to view one dot on the left edge, two on the right, three on the top, and four on the bottom. Dots should appear and disappear on each side of the security label as it is tilted.

Examples of Izon® Security Label for DuPont refrigerants



Counterfeit label:



Short Example

Honeywell Helps Law Enforcement Crack Down on Counterfeit ODS¹⁷⁵

Over the past 10 years, Honeywell has assisted law enforcement departments in over 20 countries in stopping illegal manufacturing and selling of counterfeit Honeywell ODS. In mainland China alone, Honeywell has helped local governments seize around 300,000 counterfeit products in the past two years. To assist consumers and law enforcement in identifying counterfeit Honeywell ODS, all cylinders of Honeywell's Genetron® refrigerant sold in China are marked with a unique code, as well as an anti-counterfeit verification prompting message which can be accessed via telephone, SMS, and the internet.

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News Release

HONEYWELL STOPS CHINESE COMPANY FROM SELLING COUNTERFEIT GENETRON® BRAND REFRIGERANTS

Honeywell continues to promote its aftermarket verification program in China

SHANGHAI, China, April. 6, 2012 – Honeywell (NYSE: HON) announced today that Chinese authorities have stopped a Chinese manufacturer from counterfeiting refrigerant and infringing on Honeywell brands names.

In June 2010, Honeywell became aware that Shanghai Changzhi Industry and Trading Company (Changzhi) was using Honeywell's logo and Genetron trademark without authorization on its refrigerant cylinders and packaging which it sold in China.

Honeywell reported the suspected infringement to Shanghai Administration for Industry and Commerce Putuo Branch, which set up a task force to investigate. Because use of counterfeit refrigerants can create life-threatening safety risks, the task force acted immediately, seizing and recovering a total of 633 counterfeit products which had been sold in five provinces.

In Sept. 2011, Shanghai Putuo District People's Court ruled that Changzhi committed the crime of counterfeiting a registered trademark, and fined the company RMB 200,000 yuan. A defendant was sentenced to 3 years' probation under a suspended sentence of 3 years' imprisonment, and fined RMB 30,000 yuan.

"Honeywell has invested substantial resources to develop and commercialize our innovative refrigerant technology. We take infringement of our intellectual property and trademark very seriously," said Terry Mo, Asia General Manager, Honeywell Fluorine Products. "In addition to intensifying legal efforts to fight counterfeit refrigerants, we have launched an aftermarket verification program in China to ensure that users get the high-quality and safe product they need."

Short Example Cambodia's Labelling System Focuses on Retailers and End Users in Order to Prevent Illegal Trade¹⁷⁷

In Cambodia, the NOU has implemented a labelling system that helps retailers and end-users differentiate between legal and illegal ODS. It also serves as a reminder to these stakeholders of the consequences of possessing and/or distributing illegally imported ODS.

Cambodian ODS importing licenses include a warning paragraph that any company importing ODS into Cambodia must immediately inform the NOU before releasing the ODS into the market.

Upon receiving notification of an ODS import, the NOU will send staff to attach a sticker to the container or cylinders containing the ODS indicating that the ODS has been imported legally. Retailers and end users are

advised to only buy ODS containers or cylinders that have this sticker. ODS containers and cylinders that do not have this sticker are considered illegal and retailers and end users who are found to possess ODS containers or cylinders without a sticker are fined.

Below is an example of Cambodia's ODS labels. The number on the top left is the sequence number, a specific number given to each ODS container or cylinder; the text in the middle states "CFC 12 Destroy the Ozone Layer" and the text at the bottom includes the day, month, and year that the refrigerant was imported. The picture on the right depicts ODS containers with the labels applied.



© Cambodia NOU

Stickers used in Cambodia to indicate legally imported ODS.

NGOs as Partners In Combating the Illegal Trade in ODS

NGOs have historically played an important role in combating the illegal trade in ODS by focusing attention on the problem, educating the public and media and gathering intelligence to assist enforcement officers in targeting and detecting illegal shipments and operations.

The Environmental Investigation Agency (EIA), an NGO based in London, UK and Washington, DC, is an NGO that has been investigating the illegal trade in ODS since the early 1990s. Their exposés and informative reports were important in focusing international attention on the problem of illegal trade. EIA remains actively involved in Montreal Protocol enforcement issues today. For example, EIA supported Operation Sky-Hole Patching by providing enforcement officials from RILO Asia Pacific (RILO AP) with a list of 13 suspicious ODS suppliers.¹⁷⁸

Additional Resources:

The Alliance for Responsible Atmospheric Policy, available at: www.arap.org

The Environmental Investigation Agency, available at: <http://www.eia-international.org/>

DuPont Anti-Counterfeit Solutions, available at: http://www2.dupont.com/Authentication/en_US/index.html

Honeywell, available at: www.honeywell.com

Chapter Seven

Using Networks and International Information Exchange to Combat Illegal Trade

Enforcement networks play a critically important role in fighting illegal trade in ODS. Whether national, regional or international in scope, networks provide a regular, interactive forum for enforcement practitioners to exchange experiences, develop skills, share knowledge and develop personal relationships. Through regular meetings, e-mail communications and other forms of dialogue, networking helps ensure that officials have the information, skills and contacts they need to detect and target illegal shipments and prosecute smugglers.

Similarly, effective communication across national borders is essential to detecting, preventing and reacting to illegal shipments of ODS and other environmentally-sensitive goods. This section contains a list of enforcement networks working on ODS enforcement issues and a summary of available international communication tools and platforms to assist NOUs in their efforts to work at the regional and international level to address the problem of illegal trade in ODS.

Existing Enforcement Networks Involved in ODS Enforcement Issues

Montreal Protocol Regional Networks: Regional networking of officers responsible for ODS provides a regular, interactive forum for Montreal Protocol focal points to exchange experiences, develop skills, and share knowledge and ideas with counterparts from both developing and developed countries. The Montreal Protocol networks are managed by UNEP and supported by the Multilateral Fund for the Implementation of the Montreal Protocol (MLF).

Regional Enforcement Networks (MEA-REN): UNEP's MEA-REN project is an integrated regional cooperation network consisting of countries in North East, South and South East Asia. The goal of the network is to help participating countries gain better control over their import and export of chemicals (ODS, POPs, chemical waste) by promoting regional co-operation for the control of trans-boundary movement of those chemicals.

Partnership Against Transnational-crime Through Regional Organized Law-enforcement (PATROL): Initiated in 1993 in the six countries of the Greater Mekong Sub-region (Cambodia, China, Lao PDR, Myanmar, Thailand and Vietnam), PATROL is a project of the United Nations Office on Drugs and Crime (UNODC). PATROL uses border Liaison Offices (BLO) to facilitate and promote greater cross-border cooperation. Located close to recognised border crossings, the BLO on each side of the national border acts as a centralised clearing house for information received from the vicinity of border areas.

World Customs Organization's Regional Intelligence Liaison Offices (RILOs): As information and intelligence exchange is one of the pillars of the WCO's enforcement strategy, the Organization has set up a global network of Regional Intelligence Liaison Offices (RILOs) to facilitate information sharing. The RILO is a regional centre for collecting, analysing and supplementing data as well as disseminating information on trends, modus operandi, routes and significant cases of fraud. The RILO network has 11 Liaison Offices in WCO's six regions.

Recommendations for Using Networks to Combat Smuggling

- **Establish a network contact list for ODS** smuggling with one dedicated point person from each country.
- **Survey network participants about their needs** in terms of combating illegal trade in ODS. Use the survey results to identify key training areas.
- Pool resources for **joint training**.
- **Share real case examples** of illegal trade in ODS with network members.
- **Collect ODS smuggling data and use it to identify smuggling trends.** This is particularly helpful for regional networks.

Tools for International Information Exchange¹⁷⁹

I-24/7: Interpol's Secure Global Communications and Support System¹⁸⁰

INTERPOL facilitates the widest possible mutual assistance between all law enforcement authorities, in particular by enabling every law enforcement professional to securely communicate with their colleagues around the globe. The central core of the INTERPOL network is the General Secretariat in Lyon, France, and it also has seven regional bureaux across the world. Each of the 190 INTERPOL member countries maintains a National Central Bureau (NCB) staffed by national law enforcement officers. The NCB is the dedicated and mandated contact point for international police matters, and supports all national law enforcement agencies.

The entire INTERPOL network is connected through the I-24/7 secure global police communications system which enables law enforcement in all member countries to request, submit and access vital data instantly.

Interpol Ecomessage¹⁸¹

INTERPOL promotes the use of the Ecomessage format for sharing information related to environmental crime. This efficient format facilitates officials, agencies, NCBs and the General Secretariat in the speedy and methodical gathering, exchange, cross-referencing, recording and analysis of environmental law enforcement information

Ecomessages can be drafted by any law enforcement official. To ensure that the information is securely transmitted in accordance with all national legal requirements and procedures for the exchange of international enforcement information, the official must forward the message through the national intelligence structure to his country's INTERPOL NCB. The NCB is usually hosted by the international relations department of the national police or department of justice. If necessary, the INTERPOL Environmental Crime Programme can assist to make first contact between enforcement agencies and their NCB.

WCO Customs Enforcement Network (CEN): CENComm¹⁸²

CENcomm is a secure messaging system designed by the WCO Secretariat specifically for use in cross-border operations. CENcomm facilitates the exchange and use of data in a timely, reliable, and secure manner with direct access available 24 hours a day. Email management and information storage are two of its key features. The application is hosted by the WCO Secretariat and users can access it via the internet. As a web-based communication system, it permits a closed user group of officers to communicate via encrypted channels for the duration of any Customs operation or joint Customs operation involving other law enforcement agencies.

CENcomm enables users to create and transmit inquiries and replies to those enquiries quickly. It uses pre-formatted messages designed during the preparation stage of the operation and according to operational requirements. Warning, feedback and seizure messages are the three pre-formatted message types. The warning messages allow the user to send a profile of shipments to be controlled, while the feedback messages are used to report on the action that was undertaken after receiving the warning, and the seizure message reports details of the seizure.

WCO ContainerCOMM

ContainerCOMM is a multilingual communication system developed by the WCO Secretariat under the framework of the UNODC - WCO Container Control Programme (CCP) for the purpose of facilitating the exchange of information between Port Control Units created under the CCP and other authorised users. The overall concept of the CCP was initiated in 2003 by the then Secretary General of the WCO and the then Executive Director of UNODC. Information can be sent by using the standard Email function or by way of three distinct types of pre-formatted messages:

- WARNING messages concerning the movement of suspicious containers,
- FEEDBACK messages detailing the action taken, and
- SEIZURE messages providing the type and quantity of illicit goods seized, including additional information of relevance.

By using pre-formatted messages information can be exchanged in English, French, German, Portuguese, Russian and Spanish, which means that information can be sent in a different language than that being read by the addressee.

ContainerCOMM includes a library as well as a 'container number checker', a tool to verify the general correctness of container numbers.

Additional Resources

UNEP, Networking Counts: Combating Illegal Trade in Ozone Depleting Substances (2007), available at: <http://www.unep.fr/ozonaction/information/mmcfiles/6076-e-networkingcounts.pdf>

UNEP DTIE OzonAction, available at: <http://www.unep.org/ozonaction/Home/tabid/5467/Default.aspx/>

UNEP, The Multilateral Environmental Agreements Regional Enforcement Network, available at: <http://www.mea-ren.org/>

UNODC, PATROL Training Helps Combat Border Crimes in Cambodia and Vietnam (Sept. 22, 2011), available at: <http://www.unodc.org/eastasiaandpacific/en/2011/09/patrol-fft/story.html>.

INECE, available at: <http://inece.org/>

The Network for Environmental Compliance and Enforcement in the Maghreb (NECEMA), available at: <http://inece.org/regions/middle-east-north-africa/maghreb-region/>

East African Network for Environmental Compliance and Enforcement (EANECE), available at: <http://www.eanece.org/index.php>

Asian Environmental Compliance and Enforcement Network (AECEN) available at: <http://www.aecen.org/>

Australasian Environmental Law Enforcement and Regulators network (AELERT), available at: <http://www.aelert.com.au/>

Arab Region Network for Environmental Compliance and Enforcement (ANECE), available at: <http://inece.org/regions/middle-east-north-africa/arab-region/>

The European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL), available at: <http://impel.eu/>

The Central-American Commission on Environment and Development (CCAD), available at: <http://www.sica.int/ccad/>

The North American Commission on Environmental Cooperation Enforcement Working Group, available at: <http://www.cec.org/Page.asp?PageID=1226&SiteNodeID=533>

Ozone Layer Protection in CARICOM Countries, available at: <http://www.caricom.org/jsp/communications/Ozone%20Layer%20Fact%20Sheet%20new.pdf>

WCO, RILO...Processing Information for More Effective Intelligence: A Global Customs Intelligence Network (2012), available at: http://www.wcoomd.org/en/topics/enforcement-and-compliance/instruments-and-tools/~/_media/WCO/Public/Global/PDF/Topics/Enforcement%20and%20Compliance/Tools%20and%20Instruments/RILO/RILO_09EN.ashx

WCO Customs Enforcement Network, Sharing Information for a More Effective Network: A Global Customs Enforcement System (2012), available at: http://www.wcoomd.org/en/topics/enforcement-and-compliance/instruments-and-tools/~/_media/WCO/Public/Global/PDF/Topics/Enforcement%20and%20Compliance/Activities%20and%20Programmes/CEN/CEN_Brochure020709.ashx

WCO, Enforcement and Compliance, available at: http://www.wcoomd.org/en/about-us/wco-working-bodies/enforcement_and_compliance.aspx

INTERPOL, Environmental Crime, available at: <http://www.interpol.int/Crime-areas/Environmental-crime/Environmental-crime>

Chapter Eight

Targeted Strategies for Preventing the Illegal Trade in Methyl Bromide

Methyl bromide is a highly toxic fumigant and a potent ODS that is used as an agricultural pesticide and in QPS processes to control the spread of pests. In 1992, the Parties to the Montreal Protocol agreed to phase out the use of this substance in agricultural applications.

Since 1992, many countries have completely phased out the use of methyl bromide and many have significantly reduced its use in agriculture. However, the use of methyl bromide for QPS is exempt from the Montreal Protocol phase out and is still legally used in significant quantities.

Illegal trade in methyl bromide usually occurs when either the amount of methyl bromide imported into a country or by a particular user exceeds the authorised amount or when methyl bromide that is intended for use in QPS or other exempted uses is diverted to unauthorised agriculture use.

Another concern is the import of mixtures containing methyl bromide which may be illegally imported under the Customs codes of pesticides, insecticides, or other chemicals which are usually not on the list of codes checked by the Customs against ODS. While according to HS rules a commonly traded mixture containing 98% of methyl bromide and 2% chloropicrin should be traded under a code of pure methyl bromide, other commonly traded mixtures which contain much more chloropicrin (e.g., 50%) are classified under the Customs code of pesticides or insecticides.

While most of the enforcement strategies discussed in this booklet are useful for preventing illegal trade in methyl bromide, additional precautions may be necessary to prevent the illegal trade/diversion of methyl bromide. Illegal diversion is also a problem for HCFCs. For full discussion of the illegal diversion of HCFCs, please see:

http://www.unep.fr/ozonaction/information/mmcfiles/7507-e-risk_assessment.pdf.

The following case studies and examples address the problem of the illegal diversion of methyl bromide.

Case Study

How Turkey Ensures Methyl Bromide Is Only Used for QPS¹⁸³

To ensure that none of the methyl bromide permitted for use in QPS applications is illegally diverted for use in agriculture, Turkey maintains strict limits on importers and users of the product:

- The Turkish Ministry of Food, Agriculture and Livestock licenses only 5-6 companies to import methyl bromide.
- Turkish law only permits the use of methyl bromide for QPS, all other uses are banned.
- Imports are strictly limited to 40 tonnes/year or less.
- Companies that use methyl bromide can only use it under direct supervision by officials from the Ministry of Food, Agriculture and Livestock.
- Methyl bromide may only be used in four locations in Turkey (Izmir, Istanbul, Ankara, and Mersin), which makes it easier for officials to supervise activities and ensure compliance.

Case Study

Coordination of Methyl Bromide Permitting in Kenya¹⁸⁴

In Kenya, two institutions are involved in the processing of applications for methyl bromide importation licenses. The National Environment Management Authority (NEMA) under the Ministry of Environment and Mineral Resources is responsible for issuing importation licenses for all ODS including methyl bromide, with approval from the Pest Control Products Board (PCPB) under the Ministry of Agriculture.

There is concern that unauthorised use of methyl bromide may occur if: (1) importers bypass PCPB and obtain a license from NEMA or (2) if they import methyl bromide without a license altogether, either because the

license is denied or never applied for in the first place. Although there have not yet been any reported cases of unauthorised imports/exports or use of methyl bromide in Kenya, authorities are working together to take preventive measures. These include:

- Stationing NEMA officers at ports of entry.
- Training enforcement agencies.
- Sourcing funds to build capacity for enforcement bodies.
- Building intelligence networks with neighbouring countries.
- Considering case studies of illegal trade in methyl bromide

Short Examples

Other Methyl Bromide Enforcement Strategies

- In 1997, Japan introduced a system of colour-coding methyl bromide cylinders based on use (including QPS applications and critical-use exemptions for soil fumigation and for the treatment of chestnuts).¹⁸⁵ This makes it easier to define the appropriate usage and to prevent improper use by producers, distributors, and users such as farmers and pest controllers. It is now also easier to check the amount of production and shipment in any given period.¹⁸⁶
- In Kenya, the NEMA has banned the movement of methyl bromide while it takes count of existing stockpiles in advance of the final phase-out in order to prevent unauthorised use of the chemical.¹⁸⁷
- Costa Rica and Brazil have both banned the import of one-pound (0.45 Kg) canisters of methyl bromide after discovering that they were commonly smuggled and then used in an unauthorised manner by small growers. This has helped to reduce illegal trade and encourage adoption of alternatives.¹⁸⁸
- In Zambia, it was discovered that many importers of methyl bromide were using their approved permits to import methyl bromide through different border posts since the permits did not specify the exact entry points. To address this, the NOU revised the permits to specify one point of entry.¹⁸⁹
- In 2005, after seizing 220x13.6 kg cylinders of methyl bromide which had been falsely declared as containers for compressed or liquefied gas, Zimbabwe stepped up its efforts to prevent illegal trade. This included training Customs officers on how to identify and control imports of methyl bromide as well as other ODS. Inspectors learned about the chemical properties of methyl bromide, typical colour and size of cylinders, and characteristics of suspicious shipments. In addition, users of methyl bromide were made aware of the dangers associated with its continued use. With assistance from the MLF, Zimbabwe has made a significant transition away from methyl bromide use to alternatives, which has reduced threat of smuggling.¹⁹⁰
- In the Seychelles, coordination among various enforcement authorities is an important strategy for reducing illegal trade where, in the past, importers have tried using several different HS codes to import methyl bromide. When importers use the wrong HS code for methyl bromide, the import permit may be turned in to the incorrect authority for approval.¹⁹¹

Recommendations to Improve Enforcement Against and Reduce the Illegal Trade in Methyl Bromide

- Consider the use of a colour-coding system for methyl bromide cylinders based on use (including QPS applications and critical-use exemptions for soil fumigation (pre-harvest uses) and for the treatment of products and structures (post-harvest uses).
- In the National Customs Manuals referred to in Chapter 2, include a list of the trade names used for methyl bromide and mixtures containing methyl bromide and a list of the most common suppliers.
- Require a permit for each treatment of methyl bromide for QPS.
- Ban the use of one-pound (0.45 Kg) cylinders if there is concern that they are commonly smuggled or used in an unauthorised manner.

- Foster close cooperation with other ministries or authorities that oversee methyl bromide use, such as agricultural and health agencies.
- Establish stricter control of companies whose main business is fumigation and disinfestations.
- Establish a system of special permits for companies which use methyl bromide or any preparation containing methyl bromide in order to track imports and subsequent use of such mixtures. Such permit systems should especially be in place in countries which are Parties to the International Plant Protection Convention.

Additional Resources

UNEP, Illegal Trade in Ozone Depleting Substances: Asia and Pacific Region (2007), available at:

<http://www.mea-ren.org/files/publications/Illegal%20Trade%20in%20ODS.pdf>

TEAP Study and Recommendations on QPS, 2012, available at:

<http://conf.montreal-protocol.org/meeting/oewg/oewg-32/presession/Background%20Documents/teap-progress-report-may2012.pdf>

Options for Enforcement Strategies to combat the Illegal Trade in HCFCs and Methyl Bromide

The following recommendations are based on the good practices and lessons provided in the case studies and short examples presented in this booklet. For ease of use, they are organised into two different categories: strategies that countries can employ at the national level and strategies that can be employed at the regional and international level. Not all strategies will make sense for all countries. For example, smaller countries with a low volume of trade in ODS would probably not find much added value in establishing a comprehensive web-based ODS tracking system. On the other hand, they may find it more important to focus time and resources on training Customs and developing a detailed Customs manual.

Options for Strategies that Can Be Employed at the National Level

Options for National Ozone Officers:

To improve licensing systems:

- Review ODS licensing system and consider how it can be improved to more effectively prevent illegal trade. For example, the system should:
 - o Include comprehensive controls on ODS, including licensing requirements for mixtures containing ODS, recycled ODS, all products and equipment containing or relying on ODS, ODS imported or exported for all uses (including process agent, laboratory and analytical uses, feedstock and QPS), destruction, and all Customs procedures (including transit, duty free zones and Customs warehousing).
 - o Track the use and eventual disposal of ODS and products and equipment containing ODS.
 - o Include HFCs
- Work with Customs to consider how the licensing system can be used to:
 - o Collect information to generate risk profiles for targeting enforcement.
 - o Increase the efficiency of the screening process.
 - o Integrate with their existing duties and workload.
- Liaise between Customs and environmental inspection authorities to develop a comprehensive ODS tracking system operating on and within the nation's borders.
- Where feasible and helpful, consider conversion to an internet-based system that facilitates real-time data exchange, improves processing time, provides round-the-clock access and cuts down on administration.

To improve cooperation with Customs:

- Engage in a dialogue with Customs colleagues and create frequent opportunities to meet and network, both formally and informally.
- Consider whether a formal agreement between environment and Customs ministries, such as an MOU, would help secure lasting cooperation.
- Solicit the input of Customs officers on legislation and licensing systems.
- Create a Customs manual that contains comprehensive information for Customs officers.
- Ensure that Customs receives credit for interdicting shipments and collecting evidence in support of cases of illegal trade in ODS.

To improve cross-border collaboration:

- Encourage participation in UNEP's iPIC online program. If this is not feasible, consider working bilaterally with important ODS trade partners to implement a mechanism and consent procedure.
- If the country participates in UNEP's iPIC program, be sure to update its information sheets frequently, and at least annually.
- Consider granting licenses for each shipment (import/export) of ODS, rather than bulk licenses, to facilitate better oversight and make iPIC easier to implement.
- Where feasible, integrate iPIC into licensing systems and procedures, for example, to create alerts that remind the NOU to send a notification when a license is requested to export ODS to iPIC countries.

- Include iPIC procedures in Customs training courses and other government initiatives aimed at educating producers and traders in ODS.
- Become active in regional and international enforcement networks.
- Become familiar with international communication tools, such as EcoMessage, CENcomm, and CONTAINERcomm, and use them regularly.

To improve national enforcement operations:

- Identify all agencies with the authority to regulate ODS.
- Organise a task force with officials from each agency that meets regularly to strategise, exchange information and develop working relationships and protocols.
- Establish a primary point of contact from each agency for the operation.
- Combine, cross-reference and analyse datasets among relevant government agencies on a regular basis.
- Compare Customs statistics with data generated by the licensing system or from other relevant reports to help detect discrepancies in ODS trade.
- Secure field test equipment, such as refrigerant screening devices, to allow immediate identification of ODS.
- Investigate the entire supply chain.
- Work with enforcement officials in trade partner and neighbouring countries to share information and conduct training and awareness raising activities.
- Establish good working relationships with prosecutors to ensure that smugglers are prosecuted to the full extent of the law.
- Publicise the results to create a deterrent effect.
- Check media and internet regularly for offers of illegal ODS sales.
- Conduct spot physical inspections of workshops and marketplaces where ODS are found.
- Solicit tips from industry about illegal trade of ODS.
- Maintain a hotline (via telephone and email) for people to call in and notify about potential ODS violations or other enforcement-related tips.

To improve cooperation with industry:

- Meet with industry representatives on a regular basis to exchange information, understand their concerns, develop trust and form personal relationships.
- Provide industry with the opportunity to comment on policy proposals aimed at addressing illegal trade.
- Establish a reliable means of communicating regulatory changes and new legal requirements to industry.

Options for National Customs Officers

- Familiarise yourself with your country's ODS licensing system and its requirements.
- Discuss with the National Ozone Officer or NOU how the licensing system can:
 - o collect information to generate risk profiles for targeting enforcement,
 - o increase the efficiency of the screening process, and
 - o be integrated into existing duties.
- Consider whether a formal agreement between environment and Customs ministries, such as an MOU, would help secure lasting cooperation.
- Provide input on ODS legislation and licensing systems.
- Decide with the NOU what components of an ODS Customs manual would be most helpful for the country.
- Participate in enforcement operations by meeting regularly with officials from other agencies to strategise, exchange information and develop working relationships and protocols.
- Establish a primary point of contact for ODS issues.
- Combine, cross-reference and analyse datasets among relevant government agencies on a regular basis.

Options for Prosecutors

- Identify laboratories that can easily, reliably, and inexpensively test suspect ODS and prepare evidence for court.
- Seek penalties for violating the law that are significant enough to deter illegal activity.
- Remember that part of your job is to raise awareness among judges about the seriousness of ODS crimes and the importance of deterring future illegal ODS trade.
- Encourage staff of different agencies and departments to work together.
- Consider ways for agencies to recoup their enforcement costs through court decisions.
- Think creatively about what charges can be brought against violators and the strategic advantages of each.
- Publicise successful prosecutions to create a deterrent effect.

Options for Strategies that Can Be Employed at the Regional and International Levels

Options for NOUs

- Participate in an existing regional or international ODS enforcement network, create a new network or use an existing network to focus attention on ODS enforcement issues.
- Establish a network contact list for ODS smuggling with one dedicated point person from each country.
- Become familiar with international crime and intelligence communication tools, their uses and limitations.

Options for Enforcement Network Participants

- Survey network participants about their needs in combating illegal trade in ODS. Use the survey results to identify key training areas.
- Pool resources for joint training.
- Share real case examples of illegal trade in ODS with network members.
- Collect ODS smuggling data and use it to identify smuggling trends. This is particularly helpful for regional networks.
- Become familiar with international crime and intelligence communication tools, their uses and limitations.

Options for Strategies to Combat Illegal Trade in Methyl Bromide

- Consider the use of a colour-coding system for methyl bromide cylinders based on use (including QPS applications and critical-use exemptions for soil fumigation (pre-harvest uses) and for the treatment of products and structures (post-harvest uses).
- Include in Customs National Manuals a list of the trade names under which methyl bromide and mixtures containing methyl bromide are supplied, and a list of the most common suppliers.
- Consider requiring a permit for each treatment of methyl bromide for QPS.
- Consider banning the use of one-pound cylinders if there is concern that they are commonly smuggled or used in an unauthorised manner.
- Establish stricter control of companies whose main business is fumigation and disinfestations.
- Establish a system of special permits for companies which use methyl bromide or any mixtures containing methyl bromide in order to track imports and subsequent use of such mixtures.

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- ¹⁸² For more information, see http://www.wcoomd.org/en/topics/enforcement-and-compliance/instruments-and-tools/~media/WCO/Public/Global/PDF/Topics/Enforcement%20and%20Compliance/Activities%20and%20Programmes/CEN/CEN_Brochure020709.ashx 5.
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- ¹⁸⁹ Email correspondence with Florence Asher, UNEP (13 June 2012) (on file with the author).
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Annex A:

General Environmental Compliance and Enforcement Resources and Guides

UNEP Ozone Secretariat, Handbook for the Montreal Protocol on Substances that Deplete the Ozone Layer, Ninth Edition (2012), available at: http://ozone.unep.org/Publications/MP_Handbook/MP-Handbook-2012.pdf.

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Jutta Brunnee, Enforcement Mechanisms in International Law and International Environmental Law, available at: http://www.law.utoronto.ca/documents/brunnee/BrunneeEnforcementMechanismsInt_ILaw.pdf.

Annex B: Sample Memorandum of Understanding

INTERINSTITUTIONAL COOPERATIVE AGREEMENT [OF EL SALVADOR]

TO CONTROL IMPORTS, EXPORTS AND TRAFFIC RELATED WITH MULTILATERAL ENVIRONMENTAL ACCORDS

[translated from the Spanish original and slightly edited where bracketed]

The Ministry of the Environment and Natural Resources, henceforth “MARN” (as its initials in Spanish)[...]; the Ministry of Agriculture and Livestock, henceforth “MAG” (as its initials in Spanish)[...]; the Ministry of Public Health and Social Assistance, henceforth “MSPAS” (as its initials in Spanish)[...]; and the General Customs Office, henceforth “DGA” (as its initials in Spanish)[...]; and when referred to all of the aforementioned as a group they will be named “the Parties”.

CONSIDERING:

- I. That the Constitution of El Salvador, establishes in its article 117 that is the State’s duty to protect all natural resources, as well as the diversity and integrity of the environment in order to guarantee a sustainable development, and declares as a social interest the protection, conservation, rational use, restoration or substitution of all natural resources in terms established by law.
- II. That El Salvador as signer of Multilateral Environmental Agreements (AMUMAs as its initials in Spanish [MEAs in English]) is responsible of the compliance and enforcement of all commitments in those acquired.
- III. That El Salvador has ratified the Central American Free Trade Agreement (CAFTA) signed between all Central American countries, Dominican Republic and the United States of America, and is responsible for the compliance and enforcement of Chapter 17 related to Environmental topics.
- IV. That control and authorization of imports, exports and traffic of all dangerous materials, wild flora and fauna species in danger of extinction, products or others contemplated in MEAs, is a shared responsibility between the Ministry of the Environment and Natural Resources and the Ministry of Agriculture and Livestock in coordination with the General Customs Office and with the cooperation of the Ministry of Public Health and Social Assistance to assure the effective protection of health of all habitants and the environment.
- V. That International commerce through Customs Offices requires fast and timely actions regarding the application of specific controls, meaning all Institutions involved acknowledge the need to gather efforts to respond to those requirements.
- VI. That is a need to create instruments and mechanisms of understanding that facilitate the communication and improve coordination between the aforementioned Institutions to assure the compliance of MEAs.

Therefore,

Based on the above, we agree to subscribe the following:

**“INTERINSTITUTIONAL COOPERATIVE AGREEMENT TO CONTROL IMPORTS, EXPORTS AND
TRAFFIC RELATED WITH MULTILATERAL ENVIRONMENTAL ACCORDS”**

The agreement includes the following clauses:

FIRST CLAUSE

OBJECT.

The Object of the present Agreement is to facilitate the coordination between the Parties and to strengthen control over imports, exports and traffic of international commerce, regarding duty compliance and environmental law through activity organization for an effective application of MEAs.

SECOND CLAUSE

APPLICABLE LAW

To achieve the object mentioned above, the effective applicable Law at the moment this Agreement was executed was the following:

1. Customs Laws:

- Central American Uniform Customs Code.
- Bylaws of the Central American Uniform Customs Code.
- Customs Simplification Law
- Storage Law.
- Industrial Duty Free and Trade Law

2. Environmental Laws:

- Environmental Law
- Wild Life Preservation Law
- Bylaws on the Secure control of genetically modified organisms.
- General Bylaws of the Environmental Law
- Special Bylaws regarding hazardous substances, residuals and wastes

3. International Treaties Including Environmental Multilateral Agreements (MEAs):

- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal

- Convention on the International Trade in Endangered Species of Wild Flora and Fauna
- Montreal Protocol on Substances that Deplete the Ozone Layer
- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
- Stockholm Convention on Persistent Organic Pollutants
- Kyoto Convention on the Simplification and Harmonization of Customs Proceedings.
- Cartagena Protocol on the Security of Biotechnology from the Biological Diversity Agreement.

THIRD CLAUSE

RESPONSIBLE INSTITUTIONS AND FOCAL POINTS

The Ministries with the responsibility to comply and apply each one of the Environmental Multilateral Agreements or MEAs, or in other words, the ones with national and international legal responsibility are the following:

- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal: Ministry of the Environment and Natural Resources, General Office for Environmental Management.
- Montreal Protocol on Substances that Deplete the Ozone Layer: Ministry of the Environment and Natural Resources, Ozone Protection Office.
- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade: Ministry of the Environment and Natural Resources, General Office for Environmental Management.
- Stockholm Convention on Persistent Organic Pollutants: Ministry of the Environment and Natural Resources, General Office for Environmental Management.
- Convention on the International Trade in Endangered Species of Wild Flora and Fauna: Administrative Authority - Ministry of Agriculture and Livestock, General Office of Vegetal and Animal Sanitary and Scientific Authority - Ministry of the Environment and Natural Resources, General Office of Natural Patrimony.
- Cartagena Protocol on Bio-safety of the Convention on Biological Diversity: Ministry of the Environment and Natural Resources, General Office of Natural Patrimony.

FOURTH CLAUSE

COORDINATION AGREEMENT AND LIAISONS

To assure the fulfillment of the objectives established in this Agreement, the authorities involved in the compliance and execution of the Environmental Multilateral Agreements agree to appoint the Ministry of the Environment and Natural Resources (MARN) as Coordinator of

Monitoring Activities that will be executed by institutional liaisons officially designated that will be included in an Attachment to this Agreement.

FIFTH CLAUSE

OBLIGATIONS BY THE PARTIES

- A) The Ministry of the Environment and Natural Resources [com^{1*}]promises to:
- To handle or propose environmental regulations or amendments to the already existing ones in coordination with the Ministry of Agriculture and Livestock and the General Customs Office, looking to facilitate the enforcement and compliance of the Environmental Multilateral Agreements (MEAs) ratified by El Salvador.
 - To share direct and timely information with the General Customs Office by means of electronic devices regarding the granting of environmental permits to import or export hazardous materials and data for the elaboration of risk profiles.
 - To timely notify and monitor along with the General Customs Office shipments of interest that need documental or physical verification.
 - To share and update lists of hazardous substances, species and specimens or others regulated by the Multilateral Environmental Agreements along with the General Customs Office.
 - To train employees, Officials and assistances of public customs duty, over environmental law and Multilateral Environmental Agreements.
 - To elaborate manuals or guidelines to facilitate control by the General Customs Office.
- B) The Ministry of Agriculture and Livestock [com*]promises to:
- To handle or propose environmental regulations or amendments to the already existing ones in coordination with the Ministry of Agriculture and Livestock and the General Customs Office, looking to facilitate the enforcement and compliance of the Environmental Multilateral Agreements (MEAs) ratified by El Salvador.

¹ Here and several places following where asterisked, the English translation should be “promises” (n the sense to commit or agree fully) and this change is shown. To explain, the Spanish text use the verb *comprometerse*, a word that includes this but also has a more limited meaning. The Parties did not intend to us the limited meaning of *comprometerse*, to concede or jeopardize. These are found in the English “compromise,” a word with the limited meaning that was not intended. So “promise” must be substituted to correct the English translation.

- To share direct and timely information with the General Customs Office by means of electronic devices regarding the granting of environmental permits to import or export hazardous materials and data for the elaboration of risk profiles.
 - To timely notify and monitor along with the General Customs Office shipments of interest that need documental or physical verification.
 - To train along with the Ministry of the Environment and Natural Resources employees, officers and assistances of public custom duty over CITES and the Rotterdam Convention.
 - To collaborate along with the Ministry of the Environment and Natural Resources on the elaboration of manuals or guidelines to facilitate control by the General Customs Office.
- C) The Ministry of Public Health and Social Assistance [com*]promises to:
- To assist based on safety, physical integrity and human emotions the compliance of the Environmental Multilateral Agreements, by strengthening surveillance and control of all environmental risk factors to human health.
 - To coordinate with the Ministry of the Environment and Natural Resources by notifying to this ministry about all events that could risk the environment itself and people's health.
 - To share along with the Ministry of the Environment and Natural Resources information regarding facts related to industries or any other places that are inadequately handling or storing chemical substances that may risk the environment and consequently affect people's health.
 - Inform to the Ministry of the Environment and Natural Resources about industries or any other places that have authorized installation and sanitary operations, and those that were granted technical sanitary resolutions according to article 117 of the Health Code.
- D) The General Customs Office [com*]promises to:
- To participate in the elaboration of proposals to create or amend environmental regulations along with the Ministry of the Environment and Natural Resources and the Ministry of Agriculture and Livestock, looking to facilitate the enforcement and compliance of the Environmental Multilateral Agreements (MEAs) ratified by El Salvador.

- To analyze received information from the Ministry of the Environment and Natural Resources and the Ministry of Agriculture and Livestock, to determine risk in suspicious loading and selectivity criteria.
- To coordinate along with the Ministry of the Environment and Natural Resources and the Ministry of Agriculture and Livestock electronic searches looking to find trade patterns (in quantities, sources, destinations, etc.) that indicate the possible perpetration of an environmental crime.
- To inform periodically to the Ministry of the Environment and Natural Resources about all violations or irregularities detected at Customs.
- To monitor warnings about suspicious shipment activities that require documental and physical verification.

SIXTH CLAUSE

SHARED OBLIGATIONS

- To gather at least quarterly or when the situation or the authorities determine it.
- To cooperate with State parties to exchange information and for best compliance with Secretariats of the Environmental Multilateral Agreements.
- To promote through the Ministry of Economy or any other competent entity, the inclusion in regional custom law, proceedings to best comply and apply Environment Multilateral Agreements.
- To elaborate proposals to create new rate openings that identify by specific codes, those substances, CITES species, and other specific products controlled by the Environment Multilateral Agreements.
- To elaborate to the public dissemination programs regarding environmental requirements.

SEVENTH CLAUSE

CONFLICT RESOLUTIONS

Any controversy related to the interpretation and enforcement of the present document and its attachments shall be resolved by a good faith based agreement by the Parties.

EIGHTH CLAUSE

ATTACHMENTS CREATION AND AMENDMENTS

The parties by written agreement may include amendments discussed in different work meetings and will create Attachments according to the following clause of this Agreement. The Parties agree that reviews may be held every three years or when it is needed, with the object of updating the present Agreement.

NINTH CLAUSE

ATTACHMENTS AND SUB-AGREEMENTS

Under the present Agreement, the signing parties may elaborate Attachments and Sub Agreements to develop functions and additional or specific topics.

The attachments may treat specific topics referred to a particular Ministry, authority or regulation, either to apply it to an Environment Multilateral Agreement or to control additional commercial transactions for environmental protection, including, without any restrictions, all those purposes that protect human health, wildlife and natural resources.

TENTH CLAUSE

TERMINATION

Any party by written consent to the rest of the Parties may terminate the present Agreement with unilateral effects, justifying the reasons of the withdrawal with at least ninety days of anticipation. Nevertheless, the attachments will still be effective unless they are officially terminated.

ELEVENTH CLAUSE

EFFECTIVENESS

This Agreement shall be effective from the date that is signed for a five year term, which may be extended for equal periods of time, if none of the parties expresses otherwise. In case one of the parties disagrees with the extension, it shall be effective for those parties that agree with it.

In witness thereof, we grant this Agreement signing and approving each one of its parts in four copies of equal value, in the city of San Salvador, on the sixteenth day of December of the year two thousand and eight.-

[Signatures and Official Seals of the following:]

MINISTRY OF THE ENVIRONMENT AND NATURAL RESOURCES by its Vice Minister

MINISTRY OF AGRICULTURE AND LIVESTOCK by its Minister

MINISTRY OF HEALTH AND SOCIAL ASSISTANCE by its Vice Minister

GENERAL CUSTOMS OFFICE by its General Customs Director

[This page has full details and names of signatories:]

(Signature) Official Seal: A round seal with El Salvador's National Emblem at center is stamped beside the signature that says: MINISTRY OF THE ENVIRONMENT AND NATURAL RESOURCES.

Mr. Roberto Escalante Caceros

Vice Minister of the Environment and Natural Resources

(Signature) Official Seal: A round seal with El Salvador's National Emblem at center is stamped beside the signature that says: MINISTRY OF AGRICULTURE AND LIVESTOCK.

Mr. Mario Ernesto Salaverría

Minister of Agriculture and Livestock

(Signature) Official Seal: A round seal with El Salvador's National Emblem at center is stamped beside the signature that says: MINISTRY OF HEALTH AND SOCIAL ASSISTANCE.

Mr. Jose Ernesto Navarro Marin, PhD.

Vice Minister of Health and Social Assistance

(Signature) Official Seal: A round seal with El Salvador's National Emblem at center is stamped beside the signature that says: GENERAL CUSTOMS OFFICE.

Mr. Héctor Gustavo Villatoro Funes

General Customs Director

* * * * *

[Not yet translated or attached are Annexes of the Superior Council of Public Health and of the Ministry of Defense, each being a "Declaration of Intention" within their respective competencies to support and cooperate to help give effect to the above agreement.]

About INECE

The International Network for Environmental Compliance and Enforcement (INECE) is a partnership among government and non-government compliance and enforcement practitioners from over 100 countries. Founded in 1989, INECE is the worldwide leader in developing network for enforcement cooperation, strengthening capacity for compliance and enforcement, and raising awareness of the importance environmental compliance and enforcement.

About OzonAction Programme

Under the Montreal Protocol on Substances that Deplete the Ozone Layer, countries worldwide are taking specific, time-targeted actions to reduce and eliminate the production and consumption of man-made chemicals that destroy the stratospheric ozone layer, Earth's protective shield.

The objective of the Montreal Protocol is to phase out ozone depleting substances (ODS), which include CFCs, halons, methyl bromide, carbon tetrachloride, methyl chloroform, and HCFCs. One hundred ninety seven governments have joined this multilateral environmental agreement and are taking action.

The UNEP DTIE OzonAction Branch assists developing countries and countries with economies in transition (CEITs) to enable them to achieve and sustain compliance with the Montreal Protocol. With our programme's assistance, countries are able to make informed decisions about alternative technologies, ozone-friendly policies and enforcement activities.

OzonAction has two main areas of work:

- Assisting developing countries in UNEP's capacity as an Implementing Agency of the Multilateral Fund for the Implementation of the Montreal Protocol, through a Compliance Assistance Programme (CAP).
- Specific partnerships with bilateral agencies and Governments.

UNEP's partnerships under the Montreal Protocol contribute to the realisation of the Millennium Development Goals and implementation of the Bali Strategic Plan.

For more information about these services please contact:

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UNEP DTIE

B-Publication Template

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Note: template shown is for Energy Branch.

This booklet provides guidance for establishing and implementing effective enforcement programs for preventing the illegal trade in HCFCs and methyl bromide.

Drawing on lessons learned from earlier phase-outs, the booklet provides case studies, short examples and guidance from developed and developing countries. The booklet offers law enforcement officers numerous recommendations and highlights a variety of strategies, both simple and complex, that can be implemented with flexible approaches that maximize the efficient use of scarce human and financial resources.

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UNITED NATIONS ENVIRONMENT PROGRAMME



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- > sustainable consumption and production,
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- > **The International Environmental Technology Centre** - IETC (Osaka, Shiga), which implements integrated waste, water and disaster management programmes, focusing in particular on Asia.
- > **Production and Consumption** (Paris), which promotes sustainable consumption and production patterns as a contribution to human development through global markets.
- > **Chemicals** (Geneva), which catalyzes global actions to bring about the sound management of chemicals and the improvement of chemical safety worldwide.
- > **Energy** (Paris), which fosters energy and transport policies for sustainable development and encourages investment in renewable energy and energy efficiency.
- > **OzonAction** (Paris), which supports the phase-out of ozone depleting substances in developing countries and countries with economies in transition to ensure implementation of the Montreal Protocol.
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