

MANUAL
FOR CUSTOMS OFFICERS
ON HAZARDOUS CHEMICALS
AND WASTES UNDER
THE **BASEL, ROTTERDAM**
AND **STOCKHOLM**
CONVENTIONS

2014



UNEP



Food and Agriculture
Organization of the
United Nations



BASEL CONVENTION



ROTTERDAM CONVENTION



STOCKHOLM CONVENTION

**Manual
for Customs Officers
on Hazardous Chemicals
and Wastes under the **Basel,**
Rotterdam and
Stockholm Conventions**

Table of Contents

Objectives and scope of the manual	vii
Disclaimer	ix

MODULE ONE

1

ABOUT THE BASEL, ROTTERDAM AND STOCKHOLM CONVENTIONS

MODULE 1	About the Basel, Rotterdam and Stockholm Conventions	3
	Lesson 1.1 Background	4
	1.1.1 The Basel Convention	4
	1.1.2 The Rotterdam Convention	5
	1.1.3 The Stockholm Convention	6
	Lesson 1.2 Objectives and pillars of the conventions	7
	1.2.1 The Basel Convention	7
	1.2.2 The Rotterdam Convention	7
	1.2.3 The Stockholm Convention	8
	1.2.4 Main stakeholders	8
	Lesson 1.3 Synergies among the conventions	9
	1.3.1 Overall goal	9
	1.3.2 Framework for life-cycle management	9
	1.3.3 Coverage	10
	1.3.4 Regulatory infrastructures	12
	1.3.5 Import/export control	12
	1.3.6 Waste management	13
	1.3.7 Hazard communication	13
	1.3.8 Illegal trade/traffic	13

Lesson 1.4	Wastes and chemicals covered by the conventions	13
1.4.1	Hazardous wastes and other wastes	13
1.4.2	Chemicals	17
1.4.3	Persistent Organic Pollutants	18
1.4.4	POPs in e-waste	18
Lesson 1.5	The rules governing the transboundary movement of hazardous chemicals and wastes	19
1.5.1	Introduction	19
1.5.2	What constitutes legal/illegal trade of chemicals and wastes?	19
1.5.3	Why are chemicals and wastes illegally traded?	20
1.5.4	What are the consequences of illegal trade/traffic?	22
1.6	Conclusion	23
1.7	QUIZ	24

MODULE TWO

25

IMPORT AND EXPORT PROCEDURES

MODULE 2	Import and export procedures	27
Lesson 2.1	Import and export procedures for wastes and chemicals	28
2.1.1	Introduction	28
2.1.2	Basel Convention	29
2.1.3	Rotterdam Convention	34
2.1.4	Stockholm Convention	37
2.2	Conclusion	39
2.3	QUIZ	40

MODULE THREE

41

CUSTOMS CONTROL

MODULE 3	Customs control	43
Lesson 3.1	Smuggling schemes	44
Lesson 3.2	Screening methods	46
3.2.1	Risk assessment	46
3.2.2	Profiling and indicators	47
3.2.3	Screening documentation	50
3.2.4	Physical examination	56
3.3	Checklist	57
3.4	Conclusion	57
3.5	QUIZ	58

MODULE FOUR**59****IDENTIFICATION, CLASSIFICATION AND SAFETY ISSUES**

MODULE 4	Identification, classification and safety issues	61
	Lesson 4.1 How do I visually recognize wastes and chemicals?	62
	4.1.1 General	62
	4.1.2 Labels	62
	4.1.3 Appearance	62
	Lesson 4.2 Sampling and testing (scientific evidence)	64
	4.2.1 Why and when?	64
	4.2.2 How?	66
	4.2.3 Analysis	67
	Lesson 4.3 Codes and trade names	67
	4.3.1 Introduction	67
	4.3.2 Wastes codes	67
	4.3.3 Harmonized System codes	68
	4.3.4 Trade names	68
	4.3.5 CAS numbers	71
	Lesson 4.4 Safety issues	71
	4.4.1 Introduction	71
	4.4.2 Safety information systems	71
	4.4.3 Safety of the Customs officer	77
	4.5 Conclusion	79
	4.6 QUIZ	80

MODULE FIVE**81****DEALING WITH SUSPICIOUS OR ILLEGAL TRADE/TRAFFIC**

MODULE 5	Dealing with suspicious or illegal trade/traffic	83
Lesson 5.1	What to do? 83	
	5.1.1 Detaining the shipment	84
	5.1.2 Storing the load	84
	5.1.3 Evidence gathering and case documentation	84
	Lesson 5.2 What are the consequences of illegal shipments?	84
	5.2.1 Introduction	84
	5.2.2 Wastes	85
	5.2.3 Other consequences	87
	5.3 Conclusion	87
	5.4 QUIZ	88

MODULE SIX**89****COOPERATION**

MODULE 6	Cooperation	91
	Lesson 6.1 National cooperation	92
	6.1.1 Who is involved and with what rights and responsibilities?	92
	6.1.2 How can other authorities support Customs?	92
	6.1.3 How can Customs support other authorities?	93
	Lesson 6.2 How to organize inter-agency cooperation?	93
	6.2.1 Introduction	93
	6.2.2 Phases	94
	6.2.3 Essential elements of an MOU	94
	Lesson 6.3 International cooperation	98
	6.3.1 Introduction	98
	6.3.2 Formal collaboration mechanisms at the international level	98
	6.3.3 Informal cooperation networks	101
	Lesson 6.4 Involvement of private partners	102
	6.4.1 Private Actors	102
	6.4.2 Public-Private Partnerships	103
	6.5 Conclusion	105
	6.6 QUIZ	105

GLOSSARY OF TERMS AND ABBREVIATIONS**ANNEX I TO IV****109**

Objectives and scope of the manual

This Manual for Customs on hazardous chemicals and wastes under the Basel, Rotterdam and Stockholm conventions will enhance your knowledge of the three global treaties that contribute to safely managing the production, movement, use and disposal of hazardous chemicals and wastes: the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (hereafter, “the Basel Convention”), the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (hereafter, “the Rotterdam Convention”) and the Stockholm Convention on Persistent Organic Pollutants (hereafter, “the Stockholm Convention”). Customs play a key role in facilitating the legal trade of hazardous chemicals and wastes, and in detecting possible cases of illegal traffic – especially in ports and along the borders.

This manual will inform you about the objectives, procedures, rights and obligations contained in these three multilateral environmental agreements as they relate to the work of Customs. It describes in general what Customs should know to facilitate the legal trade in hazardous chemicals and wastes. It will also support you in how to identify and deal with possible cases of illegal trade/traffic.

The manual is divided into 6 modules, each of them containing an introduction, lessons, questions and a resources section. The lessons are supported by practical examples and images.

The manual is complemented by four annexes:

1. a glossary explaining key terms and concepts under the Basel, Rotterdam and Stockholm Conventions which will be frequently referred to in this Manual (annex I);
2. an identification tool for wastes covered by the Basel Convention (annex II);
3. an identification tool for the persistent organic pollutants that may be subject to international trade under the Stockholm Convention (annex III); and
4. an identification table for the chemicals covered by the Rotterdam Convention (annex IV).

Disclaimer

The views expressed in this publication are those of the authors and do not necessarily reflect the views of the BRS Secretariats, the United Nations Environment Programme (UNEP), the Food and Agriculture Organization (FAO), the United Nations (UN) or contributory organizations. The BRS Secretariats, UNEP, FAO or the UN do not accept responsibility for the accuracy or completeness of the contents and shall not be liable for any loss or damage that may be occasioned, directly or indirectly, through the use of, or reliance on, the contents of this publication.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the BRS Secretariats, UNEP, FAO or the UN, concerning the geo-political situations or the legal status of any country, territory, or city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

This manual is produced with the financial assistance of the European Union. The views expressed herein can in no way be taken to reflect the official opinion of the European Union.

Copyright © Secretariats of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, and of the Stockholm Convention on Persistent Organic Pollutants, April 2014.

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder, provided acknowledgement of the source is made. The Secretariats of the Basel, Rotterdam and Stockholm Conventions (“the “BRS Secretariats”) would appreciate receiving a copy of any publication that uses this publication as a source. No use of this publication may be made for resale or for any other commercial purpose whatsoever without prior permission in writing from the BRS Secretariats.

MODULE

ONE

About the Basel, Rotterdam and Stockholm conventions

About the Basel, Rotterdam and Stockholm Conventions

About this module

In this module, the Customs officer will learn why the three conventions were established. The module provides information on the objectives of the conventions and the substances regulated by the conventions. It will also explain how the three conventions work together towards improving the management of hazardous chemicals and waste in order to protect human health and environment. Lastly, this module deals with the illegal trade in hazardous chemicals and wastes.

Upon completion of this module, the Customs officer will be able to:

- Explain the objectives, pillars and coverage of the three conventions;
- Understand what “life-cycle management” of hazardous chemicals and wastes is and what measures will support this approach;
- Identify which chemicals and wastes are covered by the conventions; and
- Understand why illegal trade takes place and what its consequences are.

Resources

Name	Where to find
Basel Convention	
Text of the Basel Convention	http://www.basel.int/Portals/4/Basel%20Convention/docs/text/BaselConventionText-e.pdf
The Basel Convention at a glance	http://www.basel.int/Portals/4/Basel%20Convention/docs/convention/bc_glance.pdf
Rotterdam Convention	
Text of the Rotterdam Convention	http://www.pic.int/Portals/5/download.aspx?d=RC_Convention_Text_2011_English.pdf
Protecting human health and the environment: A guide to the Rotterdam Convention on trade in hazardous chemicals and pesticides	http://www.pic.int/Portals/5/ResourceKit/A_General%20information/a_Companion%20guide/PIC%20GUIDE-English%204.0.pdf

Stockholm Convention	
Text of the Stockholm Convention	http://chm.pops.int/Convention/ConventionText/tabid/2232/Default.aspx
Ridding the world of POPs: A guide to the Stockholm Convention on POPs	http://chm.pops.int/Convention/Publications/BrochuresandLeaflets/tabid/3013/Default.aspx
Synergies and integration	
Information brochure on the Hazardous Chemicals and Wastes Conventions	http://www.pic.int/Portals/5/ResourceKit/A_General%20information/d.3Convention%20brochure/UNEP_threeConventions_engV4.pdf
The life - cycle approach to assessing the environmental impacts of products and wastes	http://www.basel.int/Portals/4/Basel%20Convention/docs/pub/leaflets/leaflet170806-3.pdf
PCBs and other POPs in the context of the Basel Convention	http://www.basel.int/Portals/4/Basel%20Convention/docs/pub/leaflets/leafPCB.pdf
Synergies Success Stories - Enhancing cooperation and coordination among the Basel, Rotterdam and Stockholm conventions	http://chm.pops.int/Portals/0/download.aspx?d=UNEP-FAO-DESA-SYN-COMPL-SynergiesSuccessStories.En.pdf
Illegal trade	
INTERPOL study: Assessing the links between organised crime and pollution crime	http://www.interpol.int/Media/Files/Crime-areas/Environmental-crime/Interpol-Pollution-Crimes-Working-Group-Assessing-the-Links-between-Organised-Crime-and-Pollution-Crimes

Introduction

The Basel, Rotterdam and Stockholm conventions are binding international treaties designed to protect human health and the environment from the pollution or damage caused by hazardous chemicals and wastes. Although legally autonomous, the three conventions aim at achieving the same common goal: contributing to the careful management of hazardous chemicals and wastes during their entire life-cycle, from production to disposal, in order to protect human health and the environment.

In order to better achieve the objectives of the three conventions, the international community has worked over the past years on enhancing cooperation and coordination among the three conventions. These efforts are sometimes referred to as the “synergies” process. Combating illegal traffic and trade in hazardous chemicals and wastes is one specific area that countries have identified where closer cooperation and coordination among relevant sectors, ministries and programmes at the national level is recommended. The secretariat of the three conventions has also been requested to provide further guidance and training on preventing and combating illegal trade and traffic. The development of this manual is one contribution to a “synergized” implementation and enforcement of the three conventions.

Lesson 1.1 Background

1.1.1 The Basel Convention

In the late 1980s, increasingly strict environmental rules in industrialized countries led to a sharp rise in the cost of hazardous waste treatment. Searching for ways to reduce the increasing cost of disposal, some waste traders began shipping hazardous wastes to developing countries. Tragic incidents involving ships carrying hazardous wastes from developed countries attempting to dispose of their shipment in developing countries without the capacity to handle them safely evidenced the need for global cooperation to prevent and combat these types of activities.

Such incidents triggered the negotiations that led to the adoption of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, an international treaty intended to protect human health and the environment from the negative effects resulting from the inappropriate management of hazardous wastes, including in the context of their movements across borders. The Convention entered into force in 1992. In November 2013, the Convention had **180 Parties**.

<http://www.basel.int/Countries/StatusofRatifications/tabid/1341/Default.aspx>

Example of incidents pertaining to transboundary movements of hazardous wastes

The ships *Karin B.* and the *Khian Sea* (later renamed the *Pelicano*) are the best known symbols of the growing global problem associated with waste management.

In the 1980's, Italian industrial waste was carried from Italy to Nigeria, resulting in a reported 6,000 drums of chlorinated solvents, waste resins, and some highly toxic polychlorinated biphenyls, or PCB's, being dumped in the port of Koko, Nigeria. In 1988, after protests by the Nigerian government and environmental groups, the Italian Government ordered the waste to be repatriated and chartered two ships – the *Karin B* and the *Deepsea Carrier* – to do so. But for several months, local authorities and the public in Italy, through blockades, strikes and protests, objected to the return of the waste. The waste was finally unloaded in Italy. The *Khian Sea* wandered the world's seas for more than two years in search of a place to dump its 28 million pounds of Philadelphia's municipal and industrial incinerator ash, containing aluminium, arsenic, chromium, copper, lead, mercury, nickel, zinc and toxic dioxins. After dumping over 2,000 tons of ash in Haiti, the *Khian Sea* was denied entry at ports throughout Latin America, the Caribbean Africa and Asia, before the ash is suspected to have been dumped in the Indian Ocean. The ship showed up at port with an empty hold and a new name, *Pelicano*.

Basel Convention



Graphic: World map with Parties to the Basel Convention (highlighted in green)

1.1.2 The Rotterdam Convention

Increased production, trade and use of chemicals during recent decades coincided with a growing awareness of and concern about the risks that the use of hazardous chemicals could pose to human health and the environment. In addition, there were concerns that regulatory action in some countries to ban or restrict the use of certain chemicals could result in these same chemicals being exported to other countries where regulatory systems, infrastructure and resources were sometimes not adequate to assess and control the risks.

Recognizing the need for information exchange on hazardous chemicals and mandatory controls in the trade of toxic chemicals, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade was developed. The Convention provides Parties with the opportunity to inform exporting countries as to whether import of certain hazardous chemicals into their territory is allowed, not allowed or restricted. The Convention entered into force in 2004 and as of November 2013 had **153 Parties**.

<http://www.pic.int/Countries/Parties/tabid/1072/language/en-US/Default.aspx>

Rotterdam Convention



Graphic: World map with Parties to the Rotterdam Convention (highlighted in blue)

1.1.3 The Stockholm Convention

Persistent Organic Pollutants (POPs) are a group of chemicals that are very toxic. POPs are persistent in the environment and travel vast distances via air and water. They are organic chemical compounds which bio-accumulate in animals and humans. These pollutants are primarily the products and by-products of human industrial processes.

Exposure to POPs can lead to serious health effects including certain cancers, birth defects, dysfunctional

immune and reproductive systems, greater susceptibility to disease and even diminished intelligence. Given their long range transport, no government acting alone can protect its citizens or its environment from POPs. In response to this global problem, the Stockholm Convention on Persistent Organic Pollutants was adopted. It entered into force in 2004 and as of November 2013 had **179 Parties**.

<http://chm.pops.int/Countries/StatusofRatifications/tabid/252/Default.aspx>

Stockholm Convention



Graphic: World map with Parties to the Stockholm Convention (highlighted in green).

Lesson 1.2 Objectives and pillars of the conventions

1.2.1 The Basel Convention

The Basel Convention is based on three pillars:

- The minimization of the generation of hazardous and other wastes ;
- The requirement of environmentally sound management (ESM) of hazardous wastes and other wastes; and
- The control of transboundary movements of hazardous wastes and other wastes.

It is the third pillar of the Basel Convention that will be of most interest to Customs. The Basel Convention regulates the transboundary movements of hazardous and other wastes by applying the concept of Prior Informed Consent (PIC). This means that imports, transits and exports of wastes that fall under the Basel Convention are only allowed when **all concerned Parties have given their consent before the movement is initiated**. The PIC procedure is clearly defined under the Convention, with a number of steps to be followed by the exporter, importer and any transit State. Lesson 2.1.2 provides details on these steps. In addition to the PIC procedure, specific conditions have to be met for a transboundary movement to take place in accordance with the Basel Convention. For instance, movements to and from non-Parties are illegal unless there is a special agreement between them. Another important requirement is that the exporter and the disposer of the waste must conclude a contract specifying that the waste will be disposed of in an environmentally sound manner. By “environmentally sound manner” (ESM), the Convention means that all practical steps have been taken to ensure that the wastes are managed in a way that will protect human health and the environment against the adverse effects which may result from such wastes. The ESM requirement includes, for instance, that Parties:

- Prevent or minimize the generation of wastes at source;
- Treat and dispose of wastes as close as possible to their place of generation; and
- Reduce movements of wastes across borders to the minimum consistent with their environmentally sound and efficient management.

Strong controls have to be applied from the moment of generation of hazardous or other wastes to their collection, storage, transport, treatment, reuse, recycling, recovery and final disposal to ensure the ESM requirements are met.

1.2.2 The Rotterdam Convention

The two pillars of the Rotterdam Convention are:

- Promotion of shared responsibilities and cooperative efforts among Parties in the international trade of certain hazardous chemicals; and
- Contribution to the environmentally sound use of those chemicals by facilitating exchange of information about their characteristics and providing for a national decision-making process for their import and export.

The Rotterdam Convention provides Parties with a first line of defence against hazardous chemicals. It acts as an early warning system by:

- Facilitating information exchange on a broad range of chemicals that have been banned or severely restricted to protect human health or the environment **in other countries**; and
- Enabling countries to decide if they wish to allow imports of the hazardous chemicals and pesticides **listed in Annex III** of the Convention. This is done by facilitating information exchange through the legally binding “prior informed consent” procedure (PIC procedure). The PIC procedure is a means for formally obtaining and disseminating the decisions of Parties about whether they wish to allow the chemicals listed in Annex III of the Rotterdam Convention to be imported into their territories. It also ensures compliance with these decisions by Parties from whom such chemicals are exported. The Basel Convention has a similar procedure also called the PIC procedure (see 1.2.1.).

More information about the PIC procedures of the Rotterdam and Basel Conventions is available in lesson 2.1.

The Rotterdam Convention is not a recommendation to ban the global trade or use of specific chemicals. In case trade does take place, the Convention includes requirements for labelling and for the provision of

information on potential health and environmental effects in order to promote the safe use of these chemicals.

The Convention promotes the exchange of information on a very broad range of chemicals. It does so through:

- The requirement for a Party to inform other Parties, through the secretariat, of each national ban or severe restriction of a chemical that was taken to protect human health or the environment;
- The possibility for a Party which is a developing country or a country with an economy in transition to inform other Parties that it is experiencing problems caused by a severely hazardous pesticide formulation under conditions of use in its territory;
- The requirement for a Party that plans to export a chemical that is banned or severely restricted for use within its territory and that is not listed in Annex III, to inform the importing Party that such export will take place, before the first shipment and annually thereafter (referred to as an “export notification”);
- The requirement for an exporting Party, when exporting chemicals that are to be used for occupational purposes, to ensure that an up-to-date safety data sheet is sent to the importer; and
- Labelling requirements for exports of chemicals included in the PIC procedure, as well as for other chemicals that are banned or severely restricted in the exporting country.

1.2.3 The Stockholm Convention

The pillars of the Stockholm Convention are:

- Eliminating or reducing the production and use of the intentionally produced POPs listed in Annexes A and B;
- Minimizing and where feasible eliminating releases of unintentionally produced POPs listed in Annex C;
- Cleaning-up of old stockpiles and equipment containing POPs;

- Supporting the transition to safer alternatives; and
- Targeting additional POPs for action.

The Stockholm Convention prohibits the production and use of the POPs listed in the Convention and restricts their trade across international boundaries. However, the Convention contains exceptions to these general rules and allows for limited and carefully controlled uses of certain POPs for which safer alternatives do not exist or are not readily available to all countries.

To be able to produce and use POPs chemicals that are subject to exemptions under the Convention, Parties have to register for the allowed uses. The same obligation applies for the trade of POPs. If a Party wants to trade an exempted chemical with another Party, it has to ensure that the trade takes place with a country which has registered for the same exempted uses. For instance, the production and use of DDT is only allowed to control disease vectors such as malarial mosquitoes in accordance with the World Health Organization’s recommendations and guidance. Therefore, trade of DDT is allowed provided that both the exporting/importing Parties have notified the Secretariat of their intention to produce or use DDT for this acceptable purpose.

The Convention also requires that stockpiles consisting of POPs, as well as products and articles containing POPs upon becoming wastes, are managed safely and are not transported across international boundaries unless the waste is disposed of in an environmentally sound manner in the importing country. Therefore, when trade involves wastes consisting of or containing POPs (“hazardous wastes”), the Basel Convention PIC procedure applies.

Video on POPs

<http://chm.pops.int/Convention/Media/AudioVideo/tabid/656/modId/3614/AutoLaunchElementId/0/Default.aspx>

1.2.4 Main stakeholders

A wide range of stakeholders, both at national and international levels, are involved in the continued development, implementation and enforcement of the three conventions. Module 6 on Cooperation provides more information on this matter and about the interactions between these stakeholders.

At the national level, individual Parties will determine the role of governmental entities under the conventions. The identification of these entities, as well as their respective roles and responsibilities, is left to each Party's discretion, although all three conventions require that each Party designate specific entities to undertake the following tasks:

- Under the Basel Convention: one Focal Point (FP) and one or more Competent Authorities (CA);
- Under the Rotterdam Convention: at least one Designated National Authority (DNA) and at least one Official Contact Point (OCP); and
- Under the Stockholm Convention: one Official Contact Point (OCP) and one National Focal Point (NFP).

Ministries that are involved in matters related to the continued development and implementation of the conventions usually have competences in the field of Environment, Trade, Agriculture, Health and Foreign Affairs. Authorities from these same Ministries that have enforcement responsibilities may also be involved in the enforcement of the national legal framework pertaining to the three conventions, alongside authorities with general law enforcement responsibilities such as Customs, police and the judiciary. Adequate coordination and cooperation among governmental entities entrusted with responsibilities for the implementation and enforcement of the conventions is therefore strongly recommended. Besides governmental entities, a variety of stakeholders at the national level are involved in the life of the conventions, primarily the regulated community – or industry-, civil society organizations, and academia.

At the international level, key players are the individual States (and political/or economic integration organizations, for instance, the European Union) that have consented to be bound by the conventions: following the expression of this consent, they become "Parties" to the Convention. Parties act individually or jointly in the framework of the conventions' bodies. Such bodies include primarily the Conference of the Parties (COP) that brings together all the Parties to a particular convention. The COP is the ultimate governing body of the Convention and continues its development through the adoption of decisions. In addition to the COP, several subsidiary bodies may be entrusted with specific functions, for instance of a scientific or technical nature or to promote compliance by the Parties with the Con-

vention. The work of each convention is supported by a Secretariat, and regional institutions (Basel Convention Regional and Coordinating Centres as well as Stockholm Convention Regional Centres) have been established to provide Parties with assistance in the implementation of the conventions. Several intergovernmental organizations also have an important role to play in furthering the conventions' objectives. These include for instance the United Nations Environment Programme, the Food and Agriculture Organization, the International Maritime Organization, the World Health Organization and the World Trade Organization. On the enforcement side, official organizations such as the World Customs Organization and INTERPOL play an important role.

Lesson 1.3 Synergies among the conventions

1.3.1 Overall goal

The overall goal of the three conventions is to protect human health and the environment from the detrimental effects of hazardous chemicals and wastes. Together the three conventions cover the key elements of a life-cycle approach to the management of hazardous chemicals and wastes: production, use, storage, transport and disposal. This shared overall goal is also reflected through common approaches embodied in the three conventions. The following paragraphs aim at identifying such commonalities as they may be most relevant for Customs. More detailed information on the synergies process among the three conventions may be found at: <http://synergies.pops.int/SynergiesProcess/Overview/tabid/2614/language/en-GB/Default.aspx>

Video on synergies

<http://www.youtube.com/watch?v=UJ9LkBy9i2s&feature=youtu.be>

1.3.2 Framework for life-cycle management

Taken together, the three conventions support a "cradle to grave" approach for the management of hazardous chemicals and wastes. The Rotterdam Convention is a first line of defence against the unwanted trade in hazardous chemicals and gives countries an early opportunity to consider alternatives. The information exchange provisions under the Rotterdam Convention apply to any chemical that is banned or severely restricted by a Party. The Stockholm Convention eliminates production and use of POPs chemicals and restricts the import and export of POPs to cases

where the purpose is their environmentally sound disposal or for certain uses when safer alternatives are not readily available to all countries (and fall under specific exemptions or acceptable purposes). The Basel Convention aims at ensuring that once these hazardous chemicals become wastes, their transboundary movement is strictly controlled and they are treated in an environmentally sound manner.

A concrete example of the life-cycle approach is the collaborative work under the Basel and Stockholm conventions to establish guidance on methods that constitute environmentally sound disposal of POPs containing wastes.

The Basel Convention technical guidelines on POPs wastes. <http://www.basel.int/Portals/4/Basel%20Convention/docs/pub/techguid/tg-POPs.pdf>

1.3.3 Coverage

Although the chemicals and wastes covered by the three conventions differ, with the scope of the Basel Convention being much wider than that of the Rotterdam and Stockholm conventions, it is possible to identify the substances that are regulated by all three conventions. At the juncture of the three conventions are POPs: as of October 2013, 13 of the 19 intentionally produced POPs covered by the Stockholm convention are also subject to the Rotterdam Convention. When becoming wastes, POPs as substances, as well as mixtures and articles containing POPs, will fall within the scope of the Basel Convention.

Table of Chemicals listed under the Rotterdam, Stockholm and Basel Conventions (October 2013)

Rotterdam Convention *	Stockholm Convention **	Basel Convention – only covering chemicals as hazardous or other waste ¹
2,4,5-T and its salts and esters		Y4, A4030, A4130, A4140
Alachlor		Y4, Y45, A4030, A4130, A4140
Aldicarb		Y4, A4030, A4130, A4140
Aldrin	Aldrin (Annex A)	Y4, Y45, A4030, A4130, A4140
Azinphos-methyl		Y4, Y45, A4030, A4130, A4140
Binapacryl		Y4, A4030, A4130, A4140
Captafol		Y4, Y45, A4030, A4130, A4140
Chlordane	Chlordane (Annex A)	Y4, Y45, A4030, A4130, A4140
Chlordimeform		Y4, Y45, A4030, A4130, A4140
Chlorobenzilate		Y4, Y45, A4030, A4130, A4140
DDT	DDT (Annex B)	Y4, Y45, A4030, A4130, A4140,
Dieldrin	Dieldrin (Annex A)	Y4, Y45, A4030, A4130, A4140
DNOC and its salts		Y4, A4030, A4130, A4140
Dinoseb and its salts and esters		Y4, A4030, A4130, A4140
EDB(1,2-dibromoethane)		Y4, Y45, A4030, A4130, A4140
Ethylene dichloride		A3150, A3160
Ethylene oxide		A3140
Endosulfan	Endosulfan (Annex A)	Y4, Y45, A4030, A4130, A4140
Fluoroacetamide		Y4, Y45, A4030, A4130, A4140
HCH (mixed isomers)	Alpha HCH (Annex A) Beta HCH (Annex A)	Y4, Y45, A4030, A4130, A4140
Heptachlor	Heptachlor (Annex A)	Y4, Y45, A4030, A4130, A4140
	Hexabromocyclododecane (Annex A) ²	Y45, A3180
Hexachlorobenzene	Hexachlorobenzene (Annex A and C)	Y4, Y45, A3150

¹ The classification provided is indicative; other codes under the Basel Convention may also be applicable.

² At the sixth meeting of the Conference of the Parties from 28 April to 10 May 2013, an amendment to Annex A of the Stockholm Convention was adopted to list hexabromocyclododecane with a specific exemption (decision SC-6/13). This amendment is expected to enter into force in 2014.

Lindane	Lindane (Annex A)	Y4, Y45, A4030, A4130, A4140
Mercury compounds (pesticide)		Y29 , A1030
Monocrotophos		Y4, A4030, A4130, A4140
Parathion		Y4, A4030, A4130, A4140
Pentachlorophenol and its salts and esters	Pentachlorophenol and its salts and esters (at submission stage, for POPRC consideration)	Y4, Y5, A4030, A4130, A4140
Toxaphene	Toxaphene (Annex A)	Y4, Y45, A4030, A4130, A4140
All tributyltin compounds including: – Tributyltin oxide – Tributyltin fluoride – Tributyltin methacrylate – Tributyltin benzoate – Tributyltin chloride – Tributyltin linoleate – Tributyltin naphthenate		Y4, A4030, A4130, A4140
Dustable powder formulations containing a combination of – Benomyl at or above 7 % – Carbofuran at or above 10 % – Thiram at or above 15 %		Y4, A4030, A4130, A4140
Methamidophos (soluble liquid formulations of the substance that exceed 600 g active ingredient/l)		Y4, A4030, A4130, A4140
Phosphamidon (soluble liquid formulations of the substance that exceed 1000 g active ingredient/l)		Y4, A4030, A4130, A4140
Methyl-parathion (emulsifiable concentrates (EC) at or above 19.5 % active ingredient and dusts at or above 1.5 % active ingredient)		Y4, A4030, A4130, A4140
Asbestos – actinolite – anthophyllite – amosite – crocidolite – tremolite		Y36 , A2050
Polybrominated biphenyls (PBBs)***		Y10, A1180, A3180
Polychlorinated biphenyls (PCBs)***	Polychlorinated biphenyls (PCBs) (Annex A and C)	Y10 , A1180, A3180
Polychlorinated terphenyls (PCTs)***		Y10, A1180, A3180
Tetraethyl lead		Y31 , A1020, A3030
Tetramethyl lead		Y31, A1020
Tris (2,3-dibromopropyl) phosphate		Y4, Y45, A4030, A4130, A4140
	Chlordecone (Annex A)	Y4, Y45, A4030, A4130, A4140
	Endrin (Annex A)	Y4, Y45, A4030, A4130, A4140
	Hexabromobiphenyl (Annex A)	Y45
Commercial octabromodiphenyl ether including: – Hexabromodiphenyl ether – Heptabromodiphenyl ether	Hexabromodiphenyl ether and heptabromodiphenyl ether (Annex A)	Y45
	Mirex (Annex A)	Y4, Y45, A4030, A4130, A4140

	Pentachlorobenzene (Annex A and C)	Y45
Perfluorooctane sulfonic acid, perfluorooctane sulfonates, perfluorooctane sulfonamides and perfluorooctane sulfonyls including:	Perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride (Annex B)	Y4, Y17, Y45
<ul style="list-style-type: none"> – Perfluorooctane sulfonic acid – Potassium perfluorooctane sulfonate – Lithium perfluorooctane sulfonate – Ammonium perfluorooctane sulfonate – Diethanolammonium perfluorooctane sulfonate – Tetraethylammonium perfluorooctane sulfonate – Didecyldimethylammonium perfluorooctane sulfonate – N-Ethylperfluorooctane sulfonamide – N-Methylperfluorooctane sulfonamide – N-Ethyl-N-(2-hydroxyethyl) perfluorooctane sulfonamide – N-(2-hydroxyethyl)-N-methylperfluorooctane sulfonamide – Perfluorooctane sulfonyl fluoride 		
	Polychlorinated dibenzo-p-dioxins (PCDD) (Annex C)	Y 44, A4110
	Polychlorinated dibenzofurans (PCDF) (Annex C)	Y 43, A4110
Commercial pentabromodiphenyl ether including:	Tetrabromodiphenyl ether and pentabromodiphenyl ether (Annex A)	Y45
<ul style="list-style-type: none"> – Tetrabromodiphenyl ether – Pentabromodiphenyl ether 		

* Hazardous or other wastes, consisting of or containing chemicals covered by the Rotterdam Convention, are subject to requirements of the Basel Convention when treated, recycled or disposed of either in the country of generation or when the object of a transboundary movement.

** Wastes, consisting of or containing chemicals covered by the Stockholm Convention, are subject to requirements set out in Article 6 of the Stockholm Convention, with due account being taken of any relevant provisions in existing international instruments and cooperative agreements with the Basel Convention bodies.

Stockholm Convention: Annex A (Elimination), Annex B (Restriction), Annex C (Unintentional production).

*** To have a complete overview of applicable classification please refer to Basel Convention Updated technical guidelines for the environmentally sound management of wastes consisting of, containing or contaminated with polychlorinated biphenyls (PCBs), polychlorinated terphenyls (PCTs) or polybrominated biphenyls (PBBs), (page 9-10; paragraphs 30-33)

1.3.4 Regulatory infrastructures

In order to implement the three conventions at the national level, Parties should develop regulatory infrastructures. Each Convention requires that Parties take specific measures to develop an appropriate legal and institutional framework for the implementation and enforcement of the conventions. For instance, under the Basel Convention, each Party is required to consider illegal traffic in hazardous wastes as a crime and to introduce appropriate national/domestic legislation to prevent and punish illegal traffic. Countries that are Parties to more than one convention may benefit from harmonizing their national legal and institutional frameworks pertaining to the implementation and enforcement of those conventions. This can be done, for instance, by establishing coordination mechanisms among relevant governmental agencies at the national

level or by designating one entity to serve as Competent Authority (under the Basel Convention), National Focal Point (Stockholm Convention) and Designated National Authority (under the Rotterdam Convention).

1.3.5 Import/export control

All three conventions provide mechanisms to control imports and exports of hazardous chemicals and wastes. The control procedures provided in the Basel and the Rotterdam conventions apply, as appropriate, to the chemicals covered by the Stockholm Convention. These procedures are expected to ensure that importing States are not confronted with hazardous chemicals and wastes that they do not wish to receive, for instance because they are unable to manage them in an environmentally sound manner.

1.3.6 Waste management

The environmentally sound management of wastes is primarily regulated under the Basel Convention. Parties to the Basel Convention have adopted technical guidelines for the environmentally sound management of several of the wastes covered by the Convention. When these wastes contain POPs, for instance Polychlorinated Biphenyls (PCBs), such guidance is elaborated in cooperation with the Parties to the Stockholm Convention. The Rotterdam and Stockholm conventions are expected to have an impact upstream by restricting the production, use and import/export of certain chemicals that will, when becoming wastes, fall within the scope of the Basel Convention.

1.3.7 Hazard communication

All three conventions have mechanisms for hazard communication. The Competent Authorities (under the Basel Convention), National Focal Point (under the Stockholm Convention) and Designated National Authority (under the Rotterdam Convention) should share information to ensure awareness among relevant authorities at the national level. Close cooperation will assist with an integrated approach and coordinated implementation. For instance, the three conventions require labelling of chemicals and wastes in conformity with recognized international rules and standards.

1.3.8 Illegal trade/traffic

Like in the framework of other multilateral environment agreements with trade control procedures, such as the Convention on the International Trade of Endangered Species (CITES) and the Montreal Protocol on Substances that Deplete the Ozone Layer, illegal traffic and trade in hazardous chemicals and wastes is a matter of concern under the three conventions. Combating illegal traffic and trade in hazardous chemicals and wastes is one specific area that countries have identified where closer cooperation and coordination among relevant sectors, ministries and programmes at the national level is recommended.

More information about illegal trade is available in Module 3 and Module 5.

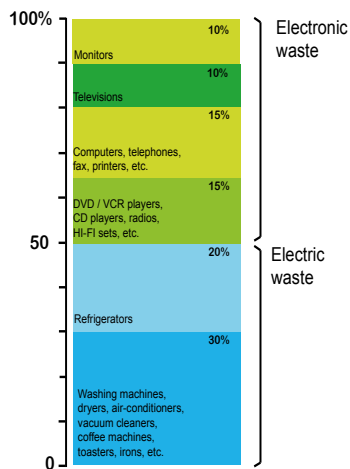
Lesson 1.4 Wastes and chemicals covered by the conventions

1.4.1 Hazardous wastes and other wastes

Under the Basel Convention, wastes are defined as substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by provisions of national law. Wastes covered by the Basel Convention include for instance:

- Biomedical and healthcare wastes
- Used oils
- Used lead acid batteries
- Persistent organic pollutants such as polychlorinated biphenyls (PCBs), used in industry as heat exchange fluids, in electric transformers and capacitors, and as additives in paint, carbonless copy paper, sealants and plastics (also covered by the Stockholm Convention)
- Chemical wastes generated by industries and others
- Electronic and electrical wastes (“e-waste”) such as mobile phones and computers (see Graphic below)
- Wastes from the dismantling of ships
- Wastes containing mercury and asbestos
- Obsolete pesticides (also covered by the Rotterdam Convention).

What is e-waste?



Additional categories: lighting equipment (fluorescent tubes); toys, sports and recreational equipment; electric and electronic tools (drills, sewing machines, lawn mowers, etc); surveillance and control equipment, medical instruments, automatic ticket machines.

Source: EMPA Swiss Federal Laboratories for Materials Testing and Research (definition according to the European Union WEEE Directive).



Graphic: What is E-waste (source: Vital Waste Graphics 2, 2006, Secretariat of the Basel Convention and UNEP GRID/Arendal) **Photo: Pile of E-waste (source: unknown)**

The wastes covered by the Basel Convention fall under two broad categories: “hazardous” and “other” wastes.

“Hazardous” wastes are those wastes listed in Annex I of the Convention, as further elaborated in Annexes VIII and IX, and possessing any of the hazardous characteristics listed in Annex III of the Convention, e.g. explosive, flammable, poisonous, infectious, corrosive, toxic, ecotoxic. Annex VIII lists wastes presumed to be hazardous while Annex IX lists wastes presumed not to be hazardous. Wastes considered hazardous under the national legislation of a Party also fall in the category of “hazardous” wastes. Such national definitions are to be communicated to the Secretariat of the Basel Convention and are made publicly available on the [website of the Convention](http://www.basel.int/Countries/NationalDefinitions/tabid/1480/Default.aspx) <http://www.basel.int/Countries/NationalDefinitions/tabid/1480/Default.aspx>

Example of a national definition of hazardous wastes

The Canadian Government informed the Secretariat of the Basel Convention of its national definition of hazardous waste which covers wastes other than those listed under the Basel Convention. Examples are: compressed or liquefied gasses and aerosols, used oil filters containing more than 6% of oil by mass and wastes that contain more than 2mg/kg of polybrominated biphenyls (PBB) or polychlorinated terphenyls (PCT).

Annexes I, VIII and IX of the Basel Convention also identify codes associated with the individual types of hazardous wastes: Annex I uses the system of Y-codes; Annex VIII uses the system of A-codes; and Annex IX uses the B-codes.

Annexes I, VIII and IX to the Convention:
<http://www.basel.int/Portals/4/Basel%20Convention/docs/text/BaselConventionText-e.pdf>

Table of a list of hazardous characteristics - Annex III of the Basel Convention

UN Class3	Code	Characteristics
1	H1	Explosive
		An explosive substance or waste is a solid or liquid substance or waste (or mixture of substances or wastes) which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings.
3	H3	Flammable liquids
		The word “flammable” has the same meaning as “inflammable”. Flammable liquids are liquids, or mixtures of liquids, or liquids containing solids in solution or suspension (for example, paints, varnishes, lacquers, etc., but not including substances or wastes otherwise classified on account of their dangerous characteristics) which give off a flammable vapour at temperatures of not more than 60.5°C, closed-cup test, or not more than 65.6°C, open-cup test. (Since the results of open-cup tests and of closed-cup tests are not strictly comparable and even individual results by the same test are often variable, regulations varying from the above figures to make allowance for such differences would be within the spirit of this definition.)
4.1	H4.1	Flammable solids
		Solids, or waste solids, other than those classed as explosives, which under conditions encountered in transport are readily combustible, or may cause or contribute to fire through friction.
4.2	H4.2	Substances or wastes liable to spontaneous combustion
		Substances or wastes which are liable to spontaneous heating under normal conditions encountered in transport, or to heating up on contact with air, and being then liable to catch fire.
4.3	H4.3	Substances or wastes which, in contact with water emit flammable gases
		Substances or wastes which, by interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities.
5.1	H5.1	Oxidizing
		Substances or wastes which, while in themselves not necessarily combustible, may, generally by yielding oxygen cause, or contribute to, the combustion of other materials.
5.2	H5.2	Organic Peroxides
		Organic substances or wastes which contain the bivalent-o-o-structure are thermally unstable substances which may undergo exothermic self-accelerating decomposition.
6.1	H6.1	Poisonous (Acute)
		Substances or wastes liable either to cause death or serious injury or to harm human health if swallowed or inhaled or by skin contact.
6.2	H6.2	Infectious substances
		Substances or wastes containing viable micro organisms or their toxins which are known or suspected to cause disease in animals or humans.
8	H8	Corrosives
		Substances or wastes which, by chemical action, will cause severe damage when in contact with living tissue, or, in the case of leakage, will materially damage, or even destroy, other goods or the means of transport; they may also cause other hazards.
9	H10	Liberation of toxic gases in contact with air or water
		Substances or wastes which, by interaction with air or water, are liable to give off toxic gases in dangerous quantities.
9	H11	Toxic (Delayed or chronic)
		Substances or wastes which, if they are inhaled or ingested or if they penetrate the skin, may involve delayed or chronic effects, including carcinogenicity.
9	H12	Ecotoxic
		Substances or wastes which if released present or may present immediate or delayed adverse impacts to the environment by means of bioaccumulation and/or toxic effects upon biotic systems.
9	H13	Capable, by any means, after disposal, of yielding another material, e.g., leachate, which possesses any of the characteristics listed above.

³ Corresponds to the hazard classification system included in the United Nations Recommendations on the Transport of Dangerous Goods (ST/SG/AC.10/1Rev.5, United Nations, New York, 1988).

“Other” wastes are those listed in Annex II of the Convention: wastes collected from households and residues arising from the incineration of household wastes. Annex II uses the system of Y-codes to identify “other” wastes, notably Y46 and Y47.

Exemptions

Radioactive waste that is covered under other international control systems and wastes which derive from the normal operation of ships, the discharge of

which is covered by another international instrument, are excluded from the scope of the Basel Convention. **Be aware that certain waste streams might contain radio-active material, such as metal scrap** (see also Lesson 4.4.3 concerning the safety of the Customs officer).

In practice, it may be challenging to identify whether a particular shipment contains “wastes” and whether such wastes are “hazardous” in nature. This issue is further discussed in Module 4.



Photo: Hazardous liquid residues



Photo: contaminated plastic waste



Photo: mixed wastes containing waste batteries

1.4.2 Chemicals

The Rotterdam Convention applies to banned or severely restricted chemicals and severely hazardous pesticides formulations. According to the definition in the Rotterdam Convention, a chemical means a **substance** whether by itself or in a **mixture** or preparation and whether manufactured or obtained from nature, but does not include any living organism.

The terms “banned chemical” and “severely restricted chemical” are defined in Article 2 of the Convention. Simply put:

- A ban is where all uses of a chemical as a pesticide, an industrial chemical or both are prohibited; and
- A severe restriction is where virtually all use of a chemical as a pesticide, an industrial chemical or both has been prohibited but for which certain specific uses are still permitted.

Chemicals subject to the Prior Informed Consent procedure are listed in Annex III of the Rotterdam Convention. As of October 2013 there are a total of **47 chemicals** in Annex III:

- 33 chemicals in the use category of Pesticide (including 4 severely hazardous pesticide formulations, which are specific formulations of a pesticide); and
- 14 chemicals in the use category of Industrial Chemical.

<http://www.pic.int/TheConvention/Chemicals/AnnexIIIChemicals/tabid/1132/language/en-US/Default.aspx>

For a chemical to be included in Annex III of the Rotterdam Convention, it must be banned or severely restricted to protect human health or the environment in at least one country from two of the seven “**PIC regions**” across the globe.

<http://www.pic.int/Countries/PICRegions/tabid/1070/language/en-US/Default.aspx>.

With respect to severely hazardous pesticide formulations, any Party that is a developing country or a country with an economy in transition and that is experiencing problems caused by a severely hazardous pesticide formulation under conditions of use in its territory, may propose to the Secretariat the listing of the severely hazardous pesticide formulation in Annex III.

The notification of a ban or restriction on a chemical and any proposal regarding severely hazardous pesticide formulation then go through a review process against the information requirements and criteria specified in the Convention. Countries who are Party to the Convention then decide on listing the chemical in Annex III of the Convention and therefore subjecting the chemical to the PIC Procedure. The PIC procedure applies to chemicals only in the use category (pesticide or industrial chemical) as specified in Annex III.



Photo: Heptachlor (source: © Kevin Helps)

Exemptions

The Rotterdam Convention does not apply to:

- Narcotic drugs and psychotropic substances;
- Radioactive materials;
- Wastes;
- Chemical weapons;
- Pharmaceuticals, including human and veterinary drugs;
- Chemicals used as food additives;
- Food;
- Chemicals in quantities not likely to affect human health or the environment provided they are imported:
 - For the purpose of research or analysis; or
 - By an individual for his or her own personal use in quantities reasonable for such use.

1.4.3 Persistent Organic Pollutants

Persistent Organic Pollutants (POPs) are organic chemical substances (i.e. carbon-based), that possess a particular combination of physical and chemical properties such that, once released into the environment, they:

- Remain intact for exceptionally long periods of time (many years);
- Become widely distributed throughout the environment as a result of natural transportation processes involving soil, water and, most notably, air;
- Accumulate in the fatty tissue of living organisms including humans, and are found in higher concentrations at higher levels in the food chain; and
- Are toxic to both humans and wildlife.

The POPs are listed in Annexes A, B or C of the Stockholm Convention:

- Annex A: the POPs listed in Annex A should be eliminated. Use of these POPs is only possible under specific exemptions, when alternatives are not readily available or affordable to all Parties.

- Annex B: the restricted POPs are listed in Annex B. Use of Annex B chemicals is only possible when a Party has registered for a specific exemption or an acceptable purpose.
- Annex C: unintentionally produced POPs to be reduced and eventually eliminated are listed in Annex C. Unintentionally produced POPs are not subject to trade.

For more information on the POPs listed in Annexes A and B, see the Stockholm Convention Identification Tool for Customs' in Annex III of this Manual.

1.4.4 POPs in e-waste

E-waste is a specific waste stream covered by the Basel Convention that contains POPs covered by the Stockholm Convention. E-waste is thus of concern to both conventions.

Three groups of POPs are of concern in relation to information electronic and communication technologies (ICT) electrical equipment (see pop-up for more information)



Photo: Chlordane (source: © FAO)



Photo: Aldrin (source: © Kevin Helps)

I) Brominated flame-retardants:

Hexabromobiphenyl, tetra- and pentabromodiphenyl ethers (components of commercial pentabromodiphenyl ether), and hexa and heptabromodiphenyl ethers (components of commercial octabromodiphenyl ether)

Hexabromobiphenyl and commercial octabromodiphenyl ether have been extensively used in components of electronic and electrical equipment made of plastic (e.g. computer and television casings made of acrylonitrile-butadiene-styrene) and in circuit boards. Commercial pentabromodiphenyl ether has been commonly used in rigid polyurethane elastomers in instrument casings and in epoxy and phenolic resins in EEE. Under the Stockholm Convention, the production and use of listed brominated diphenyl ethers (BDEs) are prohibited for all applications with the exception that Parties may recycle articles containing these chemicals, and the use and disposal of articles manufactured from recycled materials containing such chemicals. The production of listed BDEs has ceased in the developed countries but may still occur in other parts of the world. Furthermore, other brominated flame-retardants, such as decabromodiphenyl ether, remain widely used and may have the potential to be converted into listed BDEs.

II) Perfluorooctane sulfonic acid (PFOS), its salts and perfluorooctane sulfonyl fluoride (PFOS-F).

These chemicals are considered to be critical for a number of applications in the electronic and electrical equipment industry such as photoresistant and anti-reflective coatings and etching agent for semi-conductors, photo masks in the semiconductor and liquid crystal display (LCD) industries and electric and electronic parts for some colour printers and colour copy machines. The Stockholm Convention allows the production and use of PFOS, its salts and PFOS-F for these applications until alternatives are identified or are phased-in.

III) Polychlorinated biphenyls (PCBs)

PCBs can be found in small capacitors from power supply units in household appliances and other EEE. Since 1930, PCBs were used for a variety of industrial uses (mainly as dielectric fluids in capacitors and transformers but also as flame retardants, ink solvents, plasticizers, etc.) because of their chemical stability, e.g. low electrical conductivity, fire resistance, etc.. The production of PCBs was gradually stopped and their applications in equipment were phased out in the 1980s. PCBs can be released in the environment when PCB-containing equipment is not properly disposed of. Adverse effects associated to the exposure of PCBs can damage the immune system, liver, skin, reproductive system, gastrointestinal tract and thyroid gland and even can cause cancer.

It is also important to note that, when not disposed of in an environmentally sound manner, for example the open burning of wastes by the informal sector in developing countries, e-waste will release other types of hazardous chemicals and POPs such as polychlorinated dioxins and furans. These chemicals are among the most toxic chemicals known, and constitute a cause of cancer.

Lesson 1.5 The rules governing the transboundary movement of hazardous chemicals and wastes

1.5.1 Introduction

Each of the three conventions regulates the transboundary movements of hazardous chemicals and wastes. The Basel, Rotterdam and Stockholm conventions specify the conditions under which international trade of hazardous chemicals and wastes can take place. In addition, the Basel Convention specifies the procedures that need to be followed for each transboundary movement of hazardous or other wastes that takes place. These conditions and procedures aim at ensuring, inter alia, that there is adequate information exchange among concerned States and that shipments are willingly received by an importing State with the actual capacity to manage them safely.

1.5.2 What constitutes legal/illegal trade of chemicals and wastes?

International trade in hazardous chemicals and wastes is expected to be considered legal, as far as the conventions are concerned, when the conditions and procedures embodied in these conventions are complied with. For instance, under the Basel Convention, a Party is not allowed to import hazardous wastes from a non-Party, unless a specific agreement is concluded. In a similar way, imports and exports of POPs included in the Stockholm Convention are allowed only for the purpose of environmentally sound disposal or for a use which is permitted by the importing State. Other requirements for trade to be considered "legal" may be imposed by other international treaties as well as by the national legal framework of a country: such requirements must therefore also be contended with in order to determine whether a particular shipment is legal.

Among the three conventions, the Basel Convention is the only treaty to define what amounts to “illegal traffic” in hazardous and other wastes. Whether an import or export of chemicals covered by the Rotterdam and Stockholm conventions amounts to illegal trade is a matter for the domestic legal framework to clarify.

More information about “illegal traffic” under the Basel Convention is included in lesson 2.1.2.

1.5.3 Why are chemicals and wastes illegally traded?

Illegal trade is a complex and cross-border phenomenon that involves social and economic actors at different levels within countries, both on the demand and on the supply sides. Illegal trade in chemicals and wastes may take place to lower costs for production, consumption, management and disposal of the commodities. Factors like lower labour costs and weak safety and environmental regulations may therefore influence the nature and extent of illegal trade. A high demand for materials, like metals or certain chemicals, will further provide incentives for additional supply, whether legal or not.

In the case of the Basel Convention for instance, waste electronic equipment such as computers that are discarded in developed countries can constitute a welcome source of aluminium, copper and steel in developing countries. If electronic waste is exported and imported in contravention to legislation implementing the Basel Convention, there may be a case of illegal traffic. Specific guidance on the **illegal traffic of e-waste** is available. <http://www.basel.int/Implementation/TechnicalAssistance/EWaste/EwasteAfricaProject/ToolkitonEwasteInspectionandEnforcement/tabid/3160/Default.aspx>

In the case of the chemicals covered by the Rotterdam and Stockholm conventions illegal trade may occur due to lack of financial resources for chemicals management, lack of coherent legislation and lack of coordination between ministries, lack of institutional, technical and legal capacities for development, implementation and enforcement of legislation and lack of information and awareness of the impacts of chemicals on the environment and health. For instance, insufficient or no capacity at the national level to deal with outdated equipment or expired products containing covered substances can lead to their illegal export. Also counterfeit crop protection products are an example of illegal trade in pesticides.

Example - controlling the international trade of products containing hazardous substances in Peru

Exposure to toys containing high levels of lead can result in neurological effects, with possible life-long effects on intelligence and development of the nervous system. Small children have the greatest risk, as their nervous systems are still in a state of development and also because their play behaviour can include chewing or biting toys, resulting in direct consumption of paint from the toy's surface. Peru has established maximum permissible levels of toxic substances in a range of goods, including toys and office supplies. This law seeks to prevent access to materials which may be toxic or dangerous to health and are designed to impede the import, manufacture or sale of such goods.

The Ministry of Health in Peru, through the General Environmental Health Directorate, became aware of the potential for toys containing hazardous substances exceeding permissible levels to be distributed. Therefore they took action to control and supervise the manufacture, import, commercialization, distribution, and storage of toys and office supplies. This action was taken under a national law, which prohibits the manufacture, import distribution and sale of toys and office supplies which are considered toxic or dangerous. The law sets out maximum permissible limits of concentration of controlled substances, including lead, arsenic, cadmium, chromium, barium, antimony, mercury, selenium and nickel.

The General Environmental Health Directorate collected a range of toys readily available on the market in Peru, and had them analyzed for levels of controlled substances. Many of the toys analyzed had levels of up to 30 times the maximum permissible limit concentration of lead.

Due to concerns about the high levels of controlled substances detected in these toys, which were all purchased from one exporting country, stringent controls were placed on the import of such toys.

A temporary import ban was put in place, based on the identified health concerns, although it was recognized that most toys met the standard. Action was deemed necessary before serious effects from exposure to these substances were seen in children.

The investigation highlighted that it is not sufficient to have legal controls in place, but to also have an enforcement program to ensure standards are being met. Follow-up action to ensure ongoing compliance with the regulations is anticipated.

Source: “Practices in the Sound Management of Chemicals”; UNEDESA, Stockholm Convention, UNEP, link: http://www.un.org/esa/dsd/resources/res_pdfs/publications/sdt_toxichem/practices_sound_management_chemicals.pdf

Example - Illegal traffic of DDT in Tajikistan

The Republic of Tajikistan, a former part of the Soviet Union, became a sovereign state in 1991. Employing 67 per cent of the working population, agriculture is the main economic sector in Tajikistan. During the time of the Soviet Union agriculture was very pesticide intensive. Various preparations containing organochlorine, organophosphorous and mercury compounds were used. All pesticides in Tajikistan were imported, including DDT which was used for cotton and vegetable crops. The excessive use and poor management of chemical pesticides in agriculture have had severe environmental effects in Tajikistan.

Over the years until 1990, large amounts of pesticides accumulated in storage facilities, as imports surpassed actual demand. These obsolete or banned pesticides have become a serious problem in Tajikistan.

During the Soviet era, numerous storage facilities were built. About 90 per cent of these are in very poor or sub-standard conditions. Many of them are freely accessible and dilapidated—they are not safeguarded, some are missing doors, windows or roofs, as these and other materials have been taken to build new structures. Pesticides, which may contain persistent organic pollutants listed under the Stockholm Convention, mineral fertilizers and soil are stored together.

The exact location and condition of pesticides stockpiles and contaminated sites are unknown—DDT has not been legal for over 30 years, hence information on the location of stocks has been lost.

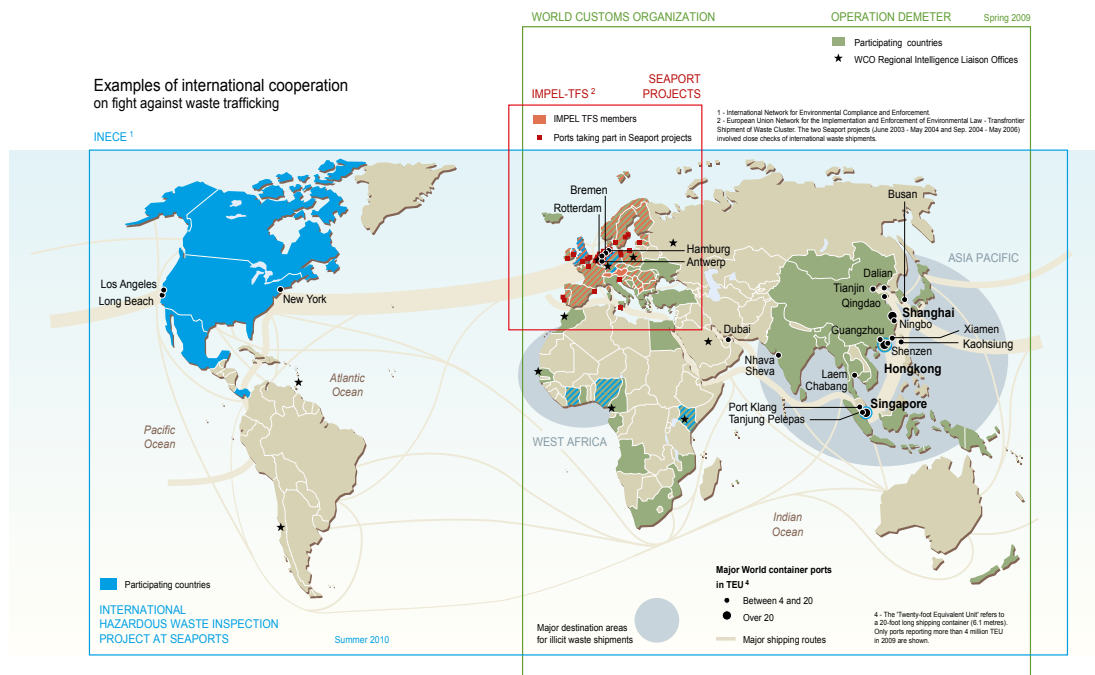
There are two main disposal sites for pesticides in Tajikistan, which contain about 11,000 tons of banned or obsolete pesticides. These disposal sites, established during the Soviet period, received between 100 and 300 tons of pesticides per year from Tajikistan, Kyrgyzstan and Uzbekistan. Pesticides in these sites were either incinerated or buried.

Both disposal sites, which contain about 40 per cent of organochlorine pesticides stocks including 3,000 tons of DDT, are in poor condition and do not meet health and safety requirements.

After 2001, the high price and scarcity of agricultural chemicals in the country led people to engage in the illegal trade of old stocks of pesticides from storage facilities and disposal sites. The storage facilities and the disposal sites are in urgent need of remediation to ensure that they meet health and safety standards. Tajikistan also lacks required technologies and financial resources to dispose POPs pesticides properly and to clean up contaminated land in an environmentally sound manner.

In 2008, the Tajikistan NGO “Foundation to Support Civil Initiatives” (FSCI) implemented the project “Illegal trade of DDT and its use in Tajikistan” with financial support from the International POPs Elimination Network (IPEN). Research was conducted and surrounding communities gathered information on the storage, sale and use of pesticides in Tajikistan and to provide support for an international awareness raising campaign on the need for the sound management of chemicals.

Source: “Practices in the Sound Management of Chemicals”, UNEDESA, Stockholm Convention, UNEP, link: http://www.un.org/esa/dsd/resources/res_pdfs/publications/sdt_toxichem/practices_sound_management_chemicals.pdf



Examples of international cooperation on fight against waste trafficking (Source: Vital Waste graphics 3, 2012, Secretariat of the Basel Convention)

Research conducted on behalf of the INTERPOL Pollution Crime Working Group (PCWG) has revealed the huge potential for informal networks of criminals to profit from the illegal export to developing countries of 'e-waste'.

Lack of, incomplete or vague rules also contribute to the problem. In the case of wastes it is not always easy to determine whether a good is actually "waste" or a second-hand product. In other instances, the hazardous characteristics need to be proven in order to classify the wastes as "hazardous wastes". The lack of understanding or awareness about regulatory frameworks may thus also lead to illegal trade.

1.5.4 What are the consequences of illegal trade/traffic?

Illegal trade and trafficking of hazardous chemicals and wastes may have several negative impacts.

- The illegal production, use, storage, management or disposal of hazardous wastes and chemicals may lead to the release of toxic substances in the air, soil and water, thereby affecting ecosystems, the water supply and the food chain. It may also cause health and safety risks for workers and individuals in general, both in the short and long terms.



Photo: Open burning of plastics parts such as cable isolation or computer monitors, lead to the emission of dioxins and furans (source: © Huib van Westen, Human Environment and Transport Inspectorate, Netherlands)



Photo: breaking cathode ray tubes (CRTs) will release cadmium containing internal phosphorous coating, which will be inhaled by the workers (source: © 2006, Basel Action Network BAN)



Photo: During the recovery of gold from e-waste (source: © 2006, Basel Action Network BAN)



Photo: Leaking drums inside workers come in contact with acid sea containers (source: © picture courtesy of the IMPEL network)

Example - The Trafigura Probo Koala incident

The case of illegal dumping of hazardous wastes in Abidjan, Côte d'Ivoire, in August 2006 from the tanker Probo Koala brought to international attention the complex problems associated with the management of hazardous wastes.

The company Trafigura chartered the Probo Koala in March 2006 to collect a cargo of full range coker naphtha (heavy residual fuel oil). Subsequently, a process called 'on-board washing' took place which resulted in the generation of residues or slops.

On 3 July 2006, the Probo Koala berthed in Amsterdam having obtained agreement from the Amsterdam Port Service (APS) to treat the slops at a cost of €30 per m³. The slops were unloaded but on examination by the APS, they were discovered to be more toxic than initially given to believe. A revised fee for treatment was submitted to Trafigura of €600- 900 per m³, giving a total cost of €330,000. This price was not accepted by Trafigura and the slops were reloaded. The Probo Koala subsequently made its way to West Africa.

Between 19 and 20 August 2006, the slops were discharged at the Port of Abidjan in Cote d'Ivoire after arrangements had been made with a recently certified local company, Compagnie Tommy, for the disposal at a cost of US\$35 per m³ (thus for a total cost of approximately US\$18,000). Instead of being brought to a facility with the capacity to manage wastes in an environmentally sound manner, the slops were dumped by Compagnie Tommy in about 17 open municipal waste sites in and around the central area of Abidjan. This operation apparently occurred at night using a number of trucks. Residents immediately complained about the smell of rotten eggs from the vaporising hydrogen sulphide. Immediately, health problems were reported, such as nosebleeds, nausea, vomiting, headaches, skin and eye irritations and respiratory symptoms. Later more severe symptoms were reported, including miscarriages and up to 12 deaths. It is estimated that 100,000 people sought medical attention in makeshift clinics that the government authorities hastily set-up in the aftermath of the dumping of the wastes.

Link between organised and pollution crimes

INTERPOL conducted a **study on the links between organised and pollution crimes**. This study concluded that for the majority of case studies the links to organised crime are self evident owing to the number of individuals and organisations involved in the offence, the period of criminal activity, and the nature of criminal activity. Some of the case studies provide evidence of the link between terrorism and pollution crimes.

<http://www.interpol.int/Media/Files/Crime-areas/Environmental-crime/Interpol-Pollution-Crimes-Working-Group-Assessing-the-Links-between-Organised-Crime-and-Pollution-Crimes>

- Due to poor recycling or illegal disposal of wastes, valuable and scarce fractions such as precious metals are being lost.
- As the illegal market or informal sector can offer lower prices, it will create an uneven playing field for companies that want to comply with the rules. The competition will be distorted. Illegal trade may also eventually result in revenue loss for governments.
- Circumventing the rules and procedures agreed to in international treaties undermines the effectiveness of multilateral environmental agreements, and in general the rule of law and principles of good governance.
- Economic crime, and thus economic harm, is usually associated with environmental crimes. Breaking environmental rules goes in many cases hand in hand with other criminal activities

such as smuggling, fraud, money laundering, tax evasion and falsification of records.

1.6 Conclusion

The Basel, Rotterdam and Stockholm conventions are binding international treaties designed to protect human health and the environment from the adverse impacts caused by hazardous chemicals and wastes. The three conventions aim at achieving the same common goal: the careful management of hazardous chemicals and wastes during their entire life-cycle, from production to disposal in order to protect human health and the environment. The synergies process aims to enhance the cooperation and coordination among the three conventions.

For the Customs officer it is important to know that:

- The Basel Convention deals with the generation and management - including transboundary movements - of hazardous and other wastes.

- The Rotterdam Convention promotes shared responsibilities and cooperative efforts among Parties in the international trade of certain hazardous chemicals and contributes to the environmentally sound use of those chemicals by facilitating the exchange of information about their characteristics and providing for a national decision-making process on their import and export.
- The Stockholm Convention aims to eliminate and reduce the production and use of Persistent Organic Pollutants (POPs) and to manage stockpiles and wastes containing POPs.

In order to ship hazardous chemicals and wastes across the borders of countries that are bound by the conventions, certain conditions and procedures need to be complied with, for instance by securing the prior informed consent of the importing State. Lack of compliance with such requirements may mean that illegal trade or traffic in hazardous chemicals and waste has taken place. Illegal trade or traffic, which may be linked to other types of crimes, may threaten human health, damage the environment, lead to the loss of (scarce) resources and distort trade competition. It also undermines the rule of law.

MODULE

TWO

Import and export procedures

Import and export procedures

About this module

In module 2 the Customs officer will learn about the procedures that need to be followed for the import, transit and export of the hazardous chemicals and wastes covered by the conventions. This module explains the prior informed consent procedures, what information is to be made available and what forms are to be used.

Upon completion of this module, Customs will be able to:

- Explain the main elements of the prior informed consent procedures for chemicals and wastes;
- Understand which documents and what information should accompany transboundary movements of chemicals and wastes; and
- Understand what illegal trafficking of waste constitutes.

Resources

Name	Where to find
Basel Convention	
Basel Convention Training Manual on Illegal Traffic for Customs and Enforcement Agencies	http://www.basel.int/Portals/4/Basel%20Convention/docs/legalmatters/illegtraffic/trman-e.pdf
Illegal traffic under the Basel Convention	http://www.basel.int/Portals/4/Basel%20Convention/docs/pub/leaflets/leaflet-illegtraf-2010-en.pdf
Controlling transboundary movements of hazardous wastes leaflet	http://www.basel.int/Portals/4/Basel%20Convention/docs/pub/leaflets/leaflet-control-procedures-en.pdf
Rotterdam Convention	
Importing and exporting a chemical under the Rotterdam Convention	http://www.pic.int/Portals/5/customs/Minisite/doc/Decision%20tree_poster.pdf
The role of Customs in the implementation of the Rotterdam Convention Fact Sheet	http://www.pic.int/Portals/5/customs/Minisite/doc/Role%20of%20customs.pdf
Stockholm Convention	
Guidance for the control of the import of POPs	http://chm.pops.int/Implementation/NIPs/Guidance/GuidanceforthecontroloftheimexportofPOPs/tabid/3173/Default.aspx

Introduction

Customs authorities play a key role in ensuring that the provisions of the conventions relating to international trade or transboundary movements are complied with, including by facilitating legal trade and by protecting their countries from unwanted trade in hazardous chemicals and wastes. Governments will have an increased ability to enforce national legal frameworks pertaining to the import, transit and export of hazardous chemicals and wastes if Customs are aware of their role in enforcing the Basel, Rotterdam and Stockholm conventions and if they have the capacity to undertake the tasks assigned to them. The moment chemicals and wastes cross borders provides a unique opportunity to verify that any transboundary movement is taking place in accordance with applicable rules. Customs are among the most appropriate authorities to perform monitoring and controlling actions at that stage.

In order for Customs to play their role in facilitating the legal trade in hazardous chemicals and wastes and in detecting and reacting to illegal traffic, a legal and institutional framework should be in place that implements the provisions of the conventions into national law. This framework should clarify the Customs' competences to perform monitoring and controlling activities pertain-

ing to hazardous chemicals and wastes. In addition, this framework should ideally provide for cooperation and coordination at the national level between Customs and the other authorities responsible for the implementation and enforcement of the three conventions. Finally, the national framework may also extend to cooperation with non-governmental stakeholders, such as waste generators, waste collectors, the transport sector, and waste disposers.

More about cooperation this is found in Module 6.

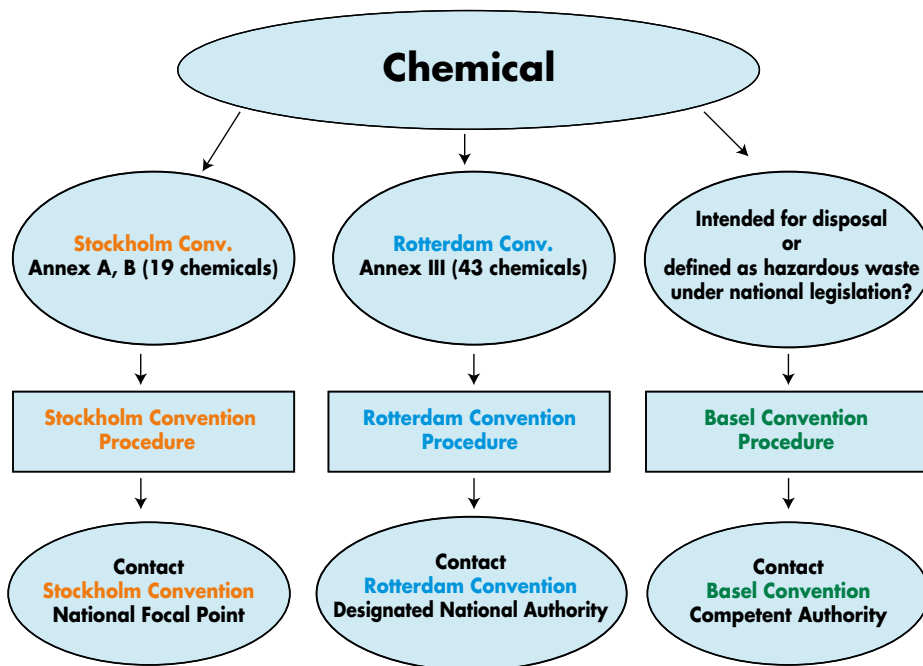
Lesson 2.1 Import and export procedures for wastes and chemicals

2.1.1 Introduction

As indicated in lesson 1.2 all three conventions pose certain *conditions* for international trade or transboundary movements of hazardous chemicals and wastes to take place. In addition, the Basel Convention details the *procedures* that need to be followed for each transboundary movement of hazardous or other wastes.

Below is an overview of how the Basel, Rotterdam and Stockholm Convention import and export procedures relate to one another.

Overview of border control procedure for chemicals (import/export)



Graphic: Overview of the Basel, Rotterdam and Stockholm border control procedures

The import and export procedures as described hereafter mainly focus on the stages and information

relevant for Customs and not on the whole procedure in detail.

0111

2.1.2 Basel Convention

Under the Basel Convention, a transboundary movement (TBM) means any movement of hazardous wastes or other wastes:

- From an area under the national jurisdiction of one State
- To or through an area under the national jurisdiction of another State, or to or through an area not under the national jurisdiction of any State, provided **at least two States are involved in the movement**.

Parties are under an obligation to take the appropriate measures to ensure that such movements of hazardous wastes and other wastes are only allowed if one of the three following conditions is met:

- The State of export does not have the *technical capacity* and the necessary *facilities, capacity or suitable disposal sites* in order to dispose of the wastes in question in an “environmentally sound manner”; or
- The wastes in question are required as *raw material* for recycling or recovery industries in the State of import; or
- The TBM in question is in accordance with *other criteria* decided by the Parties (such criteria will normally be found in the decisions adopted by the Conference of the Parties).

In all cases, the Convention requires that the standard of “environmentally sound management” (ESM) of hazardous wastes or other wastes is met.

What is ESM?

ESM means taking all practicable steps to ensure hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes.

In addition to these conditions, the Basel Convention specifies instances in which Parties *may restrict* transboundary movements and instances in which Parties *must restrict* such movements. Such restrictions may apply to the export, to the transit or to the import of hazardous wastes and other wastes.

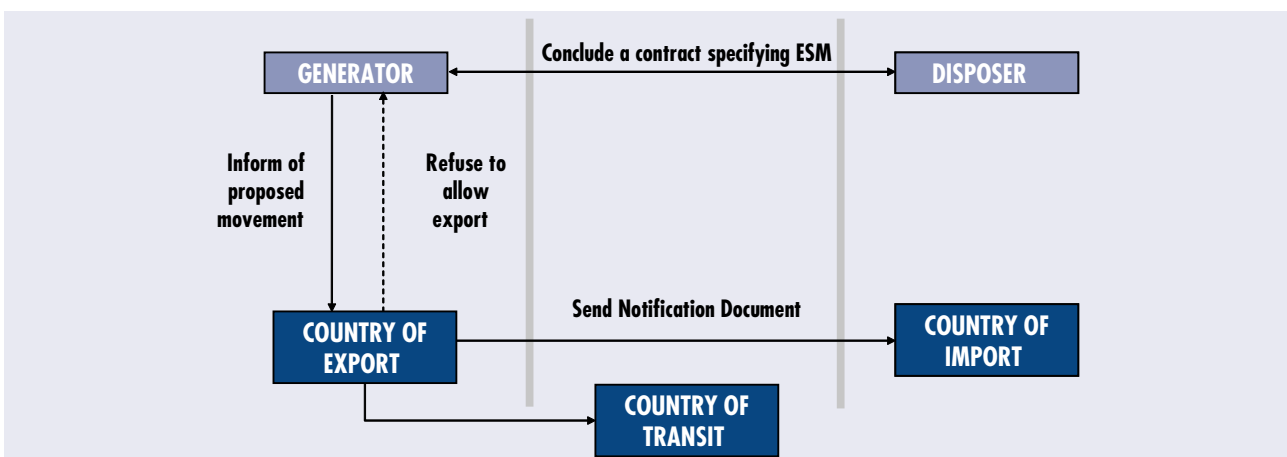
Finally, the Basel Convention requires that only persons authorized or allowed to transport or dispose of wastes undertake such operations, and that wastes subject to a TBM be packaged, labelled and transported in conformity with generally accepted and recognized international rules and standards.

A. Procedures for transboundary movements

The Basel Convention contains a detailed Prior Informed Consent (PIC) procedure with strict requirements for transboundary movements of hazardous wastes and other wastes. The PIC procedure forms the heart of the Basel Convention control system and is based on four key stages (1) notification; (2) consent and issuance of movement document; (3) transboundary movement; and (4) confirmation of disposal.

Stage 1: Notification

The purpose of stage 1 is for the exporter to properly inform the State of import (and any State of transit) of a proposed transboundary movement of hazardous wastes or other wastes.



Graphic: Stage 1: Notification

The exporter/generator of the wastes must inform the Competent Authority (CA) of the State of export of a proposed shipment of hazardous or other wastes.

What is the Competent Authority (CA)?

Competent Authority (CA) means the governmental authority designated by a Party to be responsible within such geographical area as the Party may think fit, for receiving the notification of a transboundary movement of hazardous wastes or other wastes, and any information related to it, and for responding to such a notification, as provided in Article 6 of the Convention on "Transboundary Movement between Parties".

Where can I find out who the CA is? The **list of CAs** is maintained by the Secretariat. <http://www.basel.int/Countries/CountryContacts/tabid/1342/Default.aspx>

Before the shipment can be allowed to start, the generator and the disposer conclude a contract for the disposal of the waste. Under the Convention this contract must ensure that the disposal is conducted in an environmentally sound manner.

The CA of the State of export assesses the information received from the exporter/generator and may refuse to allow the export.

If the CA of the State of export has no objection to the export, it informs - or requires the generator/exporter to inform - the CA of the States concerned (State of import and State(s) of transit) of the proposed movement of hazardous wastes or other wastes by means of a "[notification document](#)".

<http://www.basel.int/Portals/4/Basel%20Convention/docs/techmatters/forms-notif-mov/vCOP8.doc>

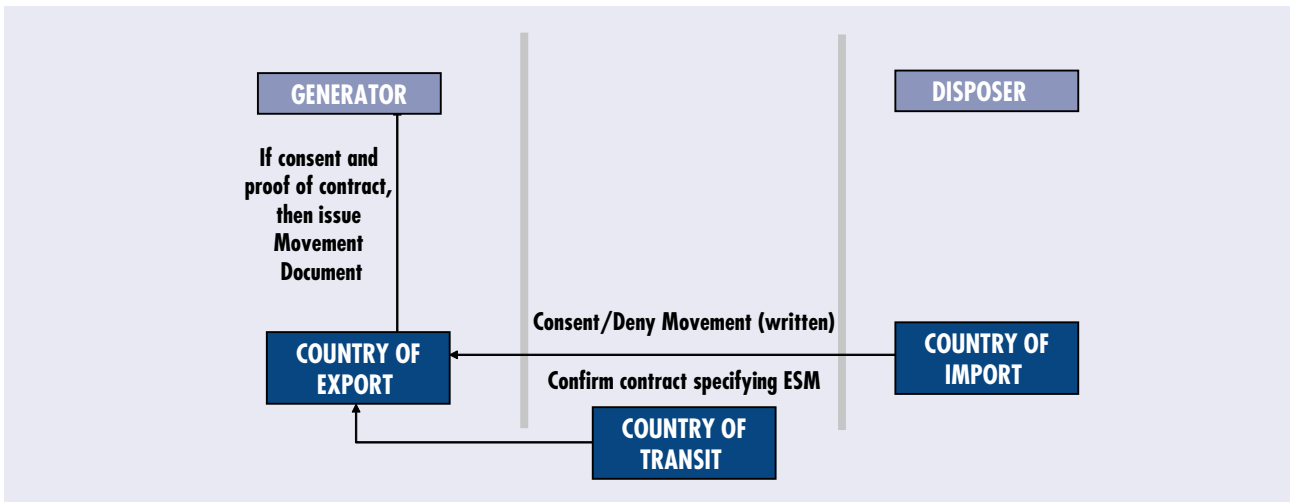
The purpose of the notification is to provide the CA of the countries concerned with detailed, accurate and complete information on the waste itself, on the proposed disposal operation and other details relating to the proposed shipment. This document must contain the information specified in Annex VA of the Convention, and must be in a language that is acceptable to the State of import and State(s) of transit.

What information must be included in the notification?

- In accordance with Annex VA of the Basel Convention, the following information must be featured in the notification:
- Reason for wastes export
- Exporter of the wastes
- Generator(s) of the wastes and site of generation
- Disposer of the wastes and actual site of disposal
- Intended carriers of the wastes
- Countries of export, transit and import
- General or single notification
- Projected date(s) of shipment(s) and period of time over which the wastes is to be exported and proposed itinerary
- Means of transport
- Information relating to insurance
- Designation and physical description of the wastes including Y number and UN number and its composition and information on any special handling requirements including emergency provisions in case of accidents
- Type of packaging envisaged
- Estimated quantity in weight/volume
- Process by which the waste is generated
- For wastes listed in Annex I, classifications from Annex III: hazardous characteristics, H number and UN class
- Method of disposal as per Annex IV
- Declaration by the generator and exporter that the information is correct
- Information transmitted (including technical description of the plant) to the exporter or generator from the disposer of the wastes upon which the latter has based his assessment that there was no reason to believe that the wastes will not be managed in an environmentally sound manner in accordance with the laws and regulations of the country of import
- Information concerning the contract between the exporter and disposer

Stage 2: Consent & Issuance of Movement Document

The purpose of stage 2 is to ensure that the State of import (and any State of transit) agrees to the proposed transboundary movement and that the appropriate documentation accompanies the shipment of hazardous wastes or other wastes.



Graphic: Consent & Issuance of Movement Document

On receipt of the notification document, the CA of the State of import must provide its written consent (with or without conditions) or denial (can ask for further clarification).

The CA of the State of import must also confirm to the notifier the existence of a contract between the exporter and the disposer. One of the most important conditions of the notification procedure is the verification of the existence of a legally binding contract between the generator and the disposer, specifying ESM of the wastes in question.

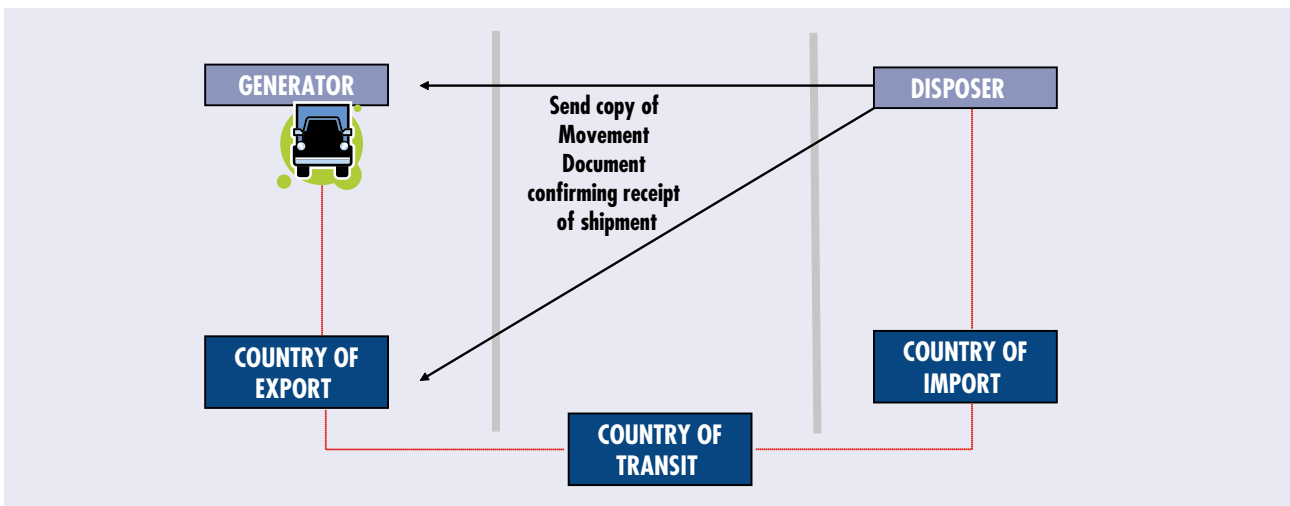
The CA of any State of transit must promptly acknowledge receipt of the notification document and may provide its written consent to the country of export (with or without conditions) or denial within 60 days. States of transit may decide not to require prior written consent, in which case the State of export may allow the export to proceed if it does not receive any response from that State of transit after 60 days.

Once the relevant CAs have established that all the requirements of the Convention have been met and have agreed to the movement, the CA of the State of export can proceed with the issuance of the [movement document](#) and authorize the shipment to start. The movement document contains detailed information about the shipment and must accompany the consignment at all times at the time of departure to the arrival of the consignment at the disposer.

<http://www.basel.int/Portals/4/Basel%20Convention/docs/techmatters/forms-notif-mov/vCOP8.doc>

Stage 3: Transboundary Movement

Stage 3 illustrates the various steps that need to be followed once the transboundary movement has been initiated and until the wastes have been received by the disposer.



Graphic: Transboundary movement

The movement document provides relevant information on a particular consignment, for example, on all carriers of the consignment, which Customs officers it has to pass through, the type of waste and how it is packaged. It should also provide accurate information on the authorizations by the CAs for the proposed movements of wastes. Each person who takes charge of a shipment must sign the movement document. It is important to note that, although not required by the Convention, some countries require the Customs office at the border where waste leaves the territory to send a copy of the movement document to the competent authority(ies) which issued the authorization for transboundary movement of waste (see blocks 26 - 28 on the Reverse side of the movement document).

The Conference of the Parties has recommended that the duly completed notification should always accompany the movement document. Most countries accept a copy of the duly completed and fully authorized notification to be enclosed with the movement document. However, some countries require that an original notification, stamped and signed by the CA, shall always accompany the movement document.

Stage 4: Confirmation of disposal

The purpose of stage 4, the final stage in the TBM procedure, is for the generator and country of export to receive confirmation that the wastes moved across borders have been disposed of by the disposer as planned and in an environmentally sound manner.

The Convention requires a *confirmation* from the disposer when the disposal has taken place, according to the terms of the contract, as specified in the notification document. If the CA of the country of export has

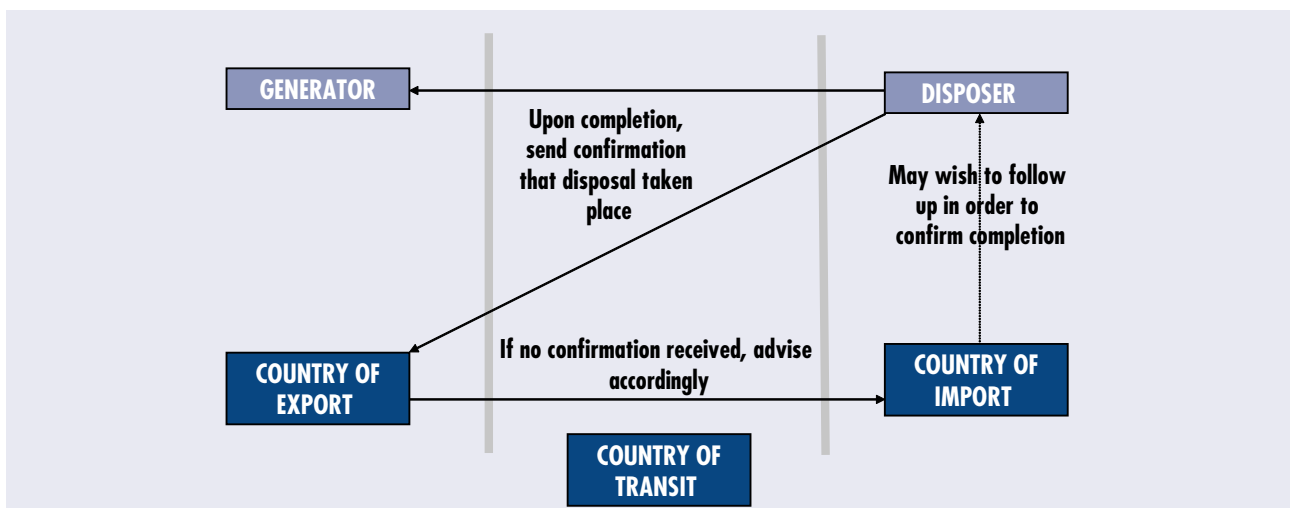
not received the confirmation that disposal has been completed, it must inform the CA of the country of import accordingly.

B. Special rules: application of the *mutatis mutandis* principle

In some instances, Parties may have different views as to whether the control procedure should apply to a particular TBM. This may result from different legal frameworks between countries, or from a different appreciation between countries as to whether the object of a TBM is a “waste” that is “hazardous” or “other” in nature.

Possible scenarios

- *Differing definitions of “hazardous wastes” under national legislations:* Under paragraph 1 (b) of Article 1 of the Convention, Parties have the right to define as “hazardous wastes” wastes other than those listed in the Annexes of the Convention. In doing so, Parties extend the scope of application of the Convention. The consequence is that some wastes may be legally defined as hazardous in one jurisdiction but not in another.
- *Differing consideration of the “hazardous” characteristic of a waste:* Notwithstanding variations between the applicable legal frameworks, it may also happen that Parties have a different appreciation of the hazardous characteristic of a specific waste that is the object of a TBM, with one Party considering that the waste in question is not “hazardous” while another considers that it is.
- *Differing legal and/or factual appreciation of the object of the TBM: is it waste or non-waste?* Because the definition of “waste” may vary from one country’s national legislation to another, a certain substance or object may not be defined as waste by all the States concerned by a TBM. In addition, it may also happen that Parties have a different factual appreciation of the nature of the object of a TBM, with one Party considering that it amounts to “waste” while another will consider that it is a good or a product.



Graphic: Confirmation of disposal

Article 6, paragraph 5 of the Convention aims at providing legal clarity in such circumstances:

In the case of a TBM of wastes where the wastes are legally defined as or considered to be hazardous wastes only:

- **By the State of export, the requirements of paragraph 9 of Article 6 that apply to the importer or disposer and the State of import shall apply *mutatis mutandis* to the exporter and State of export, respectively.** This means that the State of export shall ensure that the disposer issues a certification of receipt of the waste and a certification of the completion of disposal as required by the Convention. This may be done, for example, by requiring these obligations to be included in the contract between the exporter and the disposer.
- By the State of import, or by the States of import and transit which are Parties, the requirements of paragraphs 1, 3, 4 and 6 of Article 6 that apply to the exporter and State of export shall apply *mutatis mutandis* to the importer or disposer and State of import, respectively. This means that the disposer or the competent authority of the State of import shall provide the notification to the competent authorities concerned. Similarly, the competent authority of the State of import shall assume the responsibilities of the competent authority of the State of export.
- **By any State of transit which is a Party, the provisions of paragraph 4 of Article 6 shall apply to such State.** The Convention does not clearly define the procedures to be applied in cases where the waste is legally defined as or considered to be hazardous wastes only by the State of transit. For practical reasons, it is recommended that the exporter or the State of export, through negotiations or by some other means, makes arrangements for the notification to be provided to the competent authority of the State of transit in accordance with the Basel Convention.

Detailed flow charts on the steps that must be followed by the various entities concerned by a TBM (generator or exporter, State of export, transit State, disposer and any person taking charge of a TBM) can be found in the Convention's **Guide for the Control System**.

<http://www.basel.int/Portals/4/Basel%20Convention/docs/pub/instruct.doc>

Please note that most cases of illegal traffic of wastes take place without any notification between relevant Competent Authorities and without the issuance of a movement document. The absence of a notification or of a movement document does not automatically imply that the load being shipped is not waste covered by the Basel Convention.

The Basel Convention “Ban Amendment”

At the second meeting of the Conference of the Parties (COP) in 1994, Parties adopted a decision whereby they agreed to prohibit immediately all transboundary movements of hazardous wastes which are destined for final disposal operations from OECD to non-OECD States. In that same decision, Parties also agreed to phase out by 31 December 1997, and prohibit as of that date, all transboundary movements of hazardous wastes destined for recovery or recycling operations from OECD to non-OECD States. At the next meeting (COP-3) in 1995, Parties adopted a further decision as an amendment to the Basel Convention (the “Ban Amendment”).

Scope of the “Ban Amendment”

The “Ban Amendment” provides for the prohibition by each Party included in a proposed new Annex VII to the Basel Convention (Parties and other States which are members of the OECD, EC, Liechtenstein) of all transboundary movements to States not included in Annex VII of hazardous wastes covered by the Convention that are intended for final disposal. Also all transboundary movements to States not included in Annex VII of hazardous wastes covered by paragraph 1 (a) of Article 1 of the Convention that are destined for reuse, recycling or recovery operations are prohibited.

In October 2013, the Ban amendment was not yet in force. Some Parties however have already incorporated the Ban amendment in their national or regional legislation, such as the European Union Member States. Other States have adopted national legislation or regional agreements banning the import of hazardous and other wastes, for instance the previously mentioned Bamako Convention and the 1995 Convention to Ban the Importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region (the Waigani Convention).

The European Union has enacted the Waste Shipment Regulation N° 1013/2006 to implement the provisions of the Basel Convention pertaining to transboundary movements of hazardous and other wastes. This Regulation labels the export of waste with hazardous characteristics from the European Union to any non OECD-member country both for recovery as well as disposal as illegal. Exports of non-hazardous waste, also called green-listed waste, to non OECD-member countries for recovery are regulated by European Regulation N° 1418/2007. The European Commission periodically sends out a questionnaire to all the non OECD-member countries asking them if, and if so, under which conditions they allow the import of non-hazardous waste into their country for recovery. They can either: a) prohibit the import, b) require the procedure of prior written notification and consent as described in Article 35 of Regulation (EC) No 1013/2006, c) inform there will be no control in the country of destination, or d) inform that other control procedures will be followed in the country of destination under applicable national law.

The answers provided by the non OECD-member countries are implemented in the Regulation N°1418/2007. The European Commission periodically updates this Regulation by transposing replies submitted by importing countries. This means that even if a waste is considered non-hazardous, still the PIC procedure needs to be followed if that is what the importing non OECD-member country has requested.

The Basel Convention not only specifies the conditions and procedures for transboundary movements of hazardous wastes to take place. It also defines what amounts to “illegal traffic” as well as the consequences of illegal traffic. Finally, under the Convention, **Parties consider that illegal traffic is criminal** and are to take appropriate measures to prevent and punish such conduct.

Definition of illegal traffic (Article 9.1 of the Basel Convention)

According to article 9.1 of the Basel Convention illegal traffic occurs when a transboundary movement of hazardous or other wastes takes place:

- Without notification to all States concerned; or
- Without the consent of all States concerned; or
- With consent obtained through falsification, misrepresentation or fraud; or
- When there is a material discrepancy between documents and wastes; or
- When the movement results in deliberate disposal of the wastes in contravention of the Convention (e.g. dumping).

Activities that may amount to illegal traffic

Illegal traffic, as defined by the Basel Convention, may manifest itself by:

1. Omitting information from, or making a false statement in, a Movement Document;
2. Transporting wastes without a Movement Document;
3. Adding or replacing hazardous wastes in a shipment when changing carrier in a way that its nature no longer matches the information featured in the Movement Document;
4. Transporting hazardous wastes to a facility not designated in the contract between the exporter and the importer and that lacks the technical capacity to deal with the wastes in an environmentally sound manner;
5. Disposing of hazardous wastes in such a way that individuals are placed in imminent danger for their health;
6. Exporting hazardous wastes without having obtained the written consent of the importing State.

Information on the role of Customs in detecting and reacting to cases of illegal traffic is contained in lesson 6.1. In addition to their role in verifying that the control procedures for transboundary movements of hazardous and other wastes have been followed and, if necessary, identifying cases of illegal traffic, Customs can play an

important role in gathering data on imports transit and exports of hazardous and other wastes. Such data must be **reported** by all Parties, on an annual basis, to the Secretariat of the Basel Convention.

<http://www.basel.int/Procedures/NationalReporting/tabid/1332/Default.aspx>

2.1.3 Rotterdam Convention

The Rotterdam Convention sets out provisions for the import and export of chemicals between Parties. The key elements are the (1) Prior Informed Consent procedure, (2) Export Notification and (3) Labelling Requirements.

A. Prior informed consent

The Prior Informed Consent (PIC) procedure applies to the chemicals listed in Annex III of the Rotterdam Convention. For each of these chemicals a document, known as a **Decision Guidance Document (DGD)**, is prepared and sent to all Parties with a request that they take a decision as to whether or not they will allow future import of the chemical.

<http://www.pic.int/TheConvention/ChemicalsDecisionGuidanceDocuments/tabid/2413/language/en-US/Default.aspx>

These decisions, known as import responses, are sent to the Secretariat. The Secretariat compiles these decisions and circulates them to all Parties every six months via the **PIC Circular**.

<http://www.pic.int/Procedures/ImportResponses/Database/tabid/1370/language/en-US/Default.aspx>

All Parties are required to ensure that exports of chemicals subject to the PIC procedure do not occur contrary to the decision of an importing Party. This means that an export of a chemical in Annex III must not be made to a Party that has indicated that it **does not wish to receive imports** of that chemical. Similarly, if the importing Party has indicated that it will allow import of a chemical **subject to certain condition(s)**, then the exporting Party must ensure that exports to that importing Party complies with these condition(s).

According to Article 11 paragraph 2 of the Rotterdam Convention, exporting Parties should ensure that a chemical listed in Annex III is not exported from its territory to an importing Party that has not provided an import response (or has provided an interim response that does not contain an interim decision), unless:

(a) It is a chemical that, at the time of import, is registered as a chemical in the importing Party; or

(b) It is a chemical for which evidence exists that it has previously been used in, or imported into, the importing Party and in relation to which no regulatory action to prohibit its use has been taken; or

(c) Explicit consent to the import has been sought and received by the exporter through a designated national authority of the importing Party. The importing Party shall respond to such a request within sixty days and shall promptly notify the Secretariat of its decision.

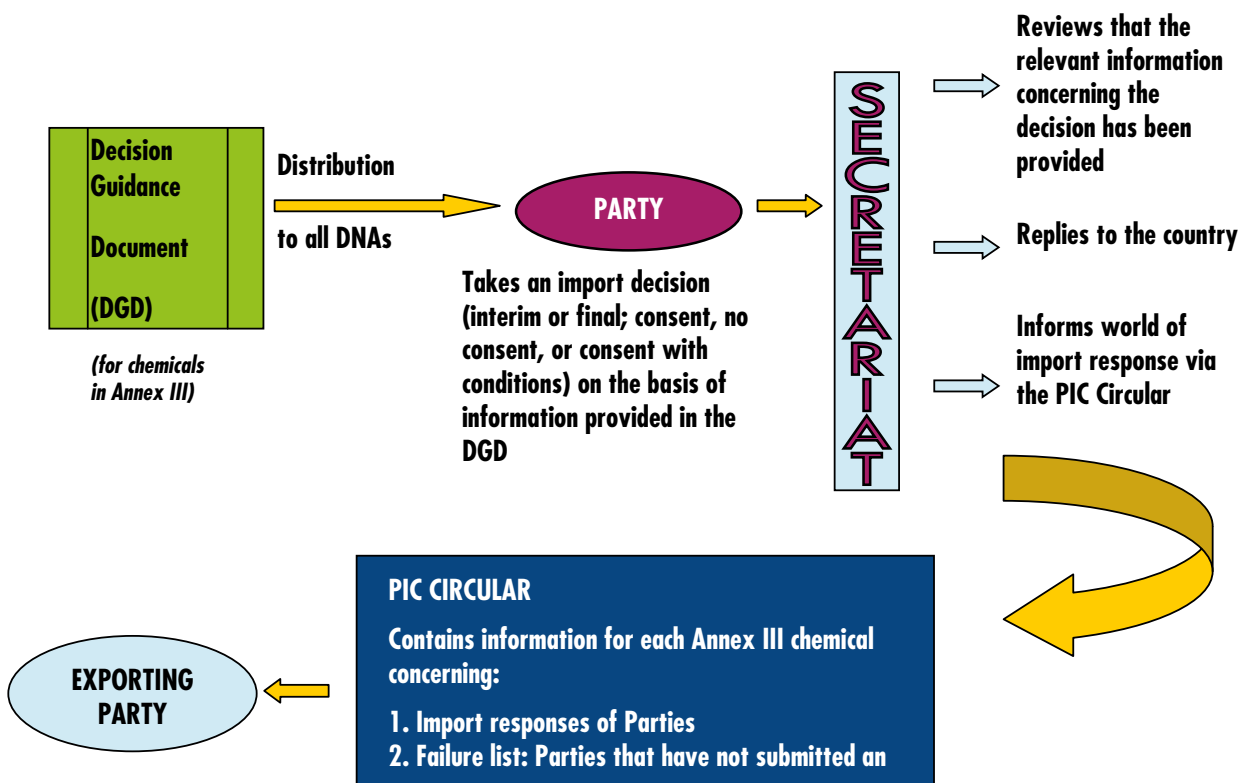
These obligations of exporting Parties apply from the expiration of a period of six months from the date on which the Secretariat first informs Parties, through the PIC Circular, that a Party has failed to transmit a response (or has transmitted an interim response that does not contain an interim decision), and apply for one year.

It is important to note that many chemicals are not necessarily traded in bulk but could be contained in products. Furthermore it is useful to know the types of products that may contain these chemicals so that assessment and evaluation can be done on these products when imported if no information is provided as to the chemicals contained. The DGD should be kept at hand to have as an information tool to guide the Customs Officer in the assessment of any given product that may contain listed chemicals from the Convention. This requires vigilance by Customs Officers as many times the information on a listed chemical in a product is not fully disclosed.

B. Export notification

The Rotterdam Convention contains several provisions pertaining to information exchange. One such provision is the requirement for Parties that have banned or severely restricted a chemical in their own territory to notify importing Parties of this fact through an export notification. Export notifications are provided from exporting to importing Parties for that chemical before the first export in each calendar year.

<http://www.pic.int/Portals/5/eforms/export/Export%20Notification%20Form%20Final.doc>



Graphic of Rotterdam PIC procedure

The export notification must contain the specific information set out in Annex V to the Convention.

Export notifications shall contain the following information:

- (a) Name and address of the relevant designated national authorities of the exporting Party and the importing Party;
- (b) Expected date of export to the importing Party;
- (c) Name of the banned or severely restricted chemical and a summary of the information specified in Annex I that is to be provided to the Secretariat in accordance with Article 5. Where more than one such chemical is included in a mixture or preparation, such information shall be provided for each chemical;
- (d) A statement indicating, if known, the foreseen category of the chemical and its foreseen use within that category in the importing Party;
- (e) Information on precautionary measures to reduce exposure to, and emission of, the chemical;
- (f) In the case of a mixture or a preparation, the concentration of the banned or severely restricted chemical or chemicals in question;
- (g) Name and address of the importer;
- (h) Any additional information that is readily available to the relevant designated national authority of the exporting Party that would be of assistance to the designated national authority of the importing Party;

C. Commonalities between the Basel and the Rotterdam conventions procedures

The Basel and the Rotterdam conventions PIC procedures share the same objective: prior to an intended export of chemicals or waste, the country of import

needs to agree to the import and provide its written consent. There are however, important differences between the two PIC procedures as well between the PIC procedure and the procedure applicable to non ANNEX III chemicals under the Rotterdam Convention.

Summary of the import/export procedures under Basel and Rotterdam Conventions

	BASEL	ROTTERDAM	ROTTERDAM
Object	All the <u>hazardous and other wastes</u> covered by the Convention	Chemicals <u>listed in annex III</u> of the Convention.	Chemicals <u>outside annex III</u> that are banned or restricted by the Exporting Party
Trigger	TBM proposed by State of export to State of transit and State of import, using a notification document	Decision Guidance Document (DGD) sent by the Secretariat to all Parties	Export notification sent by State of export to State of import
Decision by the State of import (and State of transit)	Consent/ deny/ request for additional information	Consent/ no consent/ consent with conditions.	Acknowledgement
Form for expressing decision	Written decision communicated to the State of export by the import (and transit) State in the notification document	Written notification sent to the Secretariat. Notifications (so-called "import responses") made available in the PIC circular	Written
Routine customs control	Check the movement document	Check PIC circular or contact Designated National Authority (DNA). Check labelling/SFD.	Check labelling/SFD
Contact	Competent Authority	Designated National Authority	Designated National Authority

D. Labelling Requirements

Under the Convention, Parties should also require that both chemicals listed in Annex III and chemicals banned or severely restricted at the national level are, when exported, subject to labelling requirements that ensure adequate availability of information with regard to risks and/or hazards to human health or the environment, taking into account relevant international standards. It is advised to develop procedures within the Party to monitor and ensure that the labelling provisions of the Convention are met and the necessary information is provided to accompany exports, including HS custom codes and safety data sheets in the official language(s) of the importing Party.

Involved Authorities

The **Designated National Authority (DNA)** is the focal point in a country for the Rotterdam Convention.

DNAs can be a person, a specific position, or an office within a government ministry. Often, countries nominate several DNAs. The DNA plays a crucial role in the implementation of the Convention for the dissemination of information concerning the provisions of the Convention to the relevant government departments as well as to other partners, such as export and importing industries and Customs officers. The DNA is also the key contact point for matters related to the Convention for other Parties and the Secretariat.

Where can I find out who the DNA is? The **list of DNAs** is maintained by the Secretariat. <http://www.pic.int/Countries/CountryContacts/tabid/3282/language/en-US/Default.aspx>

The key is that shipments of the Annex III chemicals from exporting Parties do not take place without the prior informed consent of the importing Party. Exports of chemicals for which a country has indicated it does not consent to import should not be sent, and Customs can play a role in stopping shipments received in violation of a country's import decision. When importing and exporting Annex III chemicals, Customs authorities could therefore, in consultation with their DNA(s), develop activities to make sure that trade takes place with consenting parties as specified in a country's import response. When chemicals are imported that have been banned or severely restricted in other countries, the acknowledgement of export notifications should be ensured. DNAs and Customs officers are key authorities that can play a role in ensuring that the list of chemicals banned or severely restricted domestically

and subject to export notification is updated. It is suggested that a procedure be defined to check whether an export notification has been sent for the first export to a Party in the calendar year. For further information and clarification on the chemicals listed in the Convention, the DNA could be consulted and any import of a listed chemical should be reported to the DNA.

It is worthwhile for involved authorities to consider developing a **standard procedure** for implementation of the Convention.

The standard operating procedure would help ensure that the Party benefits fully from all the Convention's provisions. It could take into account the following elements:

1. The availability of and access to a current list of chemicals in Annex III (PIC chemicals);
2. The integration of specific Harmonized System (HS) codes for chemicals in Annex III into the domestic Customs system;
3. A monitoring strategy for the import and export of PIC chemicals; and
4. An up-to-date list of import decisions.

2.1.4 Stockholm Convention

In general, the Stockholm Convention prohibits the production and use of POPs and bans their trade across international boundaries. However, the conventions can allow some exceptions to these rules for specific POPs when used in specific applications by Parties that have registered for such uses. The import and export of POPs wastes is also allowed for the purpose of environmentally sound disposal, taking into account relevant international rules, standards and guidelines, such as provided by the Basel Convention PIC procedure.

A. POPs in use

Parties to the Stockholm Convention may register for a specific exemption or an acceptable purpose for the production or use of a POP listed in Annex A (elimination) or B (restriction). This is done by informing the Secretariat of the Stockholm Convention that maintains a **list of Parties that have registered for exemptions**. <http://chm.pops.int/Implementation/Exemptions/RegisterofSpecificExemptions/tabid/1133/Default.aspx>

Import and export of these exempted POPs may only take place for a **permitted use** in the importing Party.

List of exemptions (permitted use) for POPs

Exemptions for POPs listed in Annex A as of October 2013

Chemical	Activity	Specific exemptions	Countries
Hexabromodiphenyl ether and heptabromodiphenyl ether	Use	Articles in accordance with provisions of part IV of Annex A of the Convention	Canada, Czech Republic, Japan
Lindane CAS No: 58-89-9	Use	Human health pharmaceutical for control of head lice and scabies as second line treatment	Canada, Nigeria
Tetrabromodiphenyl ether* and pentabromodiphenyl ether	Use	Articles in accordance with the provisions of Part V of Annex A	Canada, Czech Republic, Japan
Technical endosulfan and its related isomers	Production Use	As allowed for the parties listed in the Register of Specific Exemptions Crop-pest complexes are listed in accordance with the provision sof Part VI of Annex A	Costa Rica

Exemptions for POPs listed in Annex B

Chemical	Activity	Specific exemption	Countries
Perfluorooctane sulfonic acid (CAS No: 1763-23-1), its salts and perfluorooctane sulfonyl fluoride (CAS No: 307-35-7) For example: <ul style="list-style-type: none"> Potassium perfluorooctane sulfonate (CAS no. 2795-39-3); Lithium perfluorooctane sulfonate (CAS no. 29457-72-5); Ammonium perfluorooctane sulfonate (CAS no. 29081-56-9); Diethanolammonium perfluorooctane sulfonate (CAS no. 70225-14-8); Tetraethylammonium perfluorooctane sulfonate (CAS no. 56773-42-3); Didecyldimethylammonium perfluorooctane sulfonate (CAS no. 251099-16-8). 	Production Use	As allowed for Parties listed in the Register For the following specific uses, or as an intermediate in the production of chemicals with the following specific uses: <ul style="list-style-type: none"> Photo masks in the semiconductor and liquid crystal display (LCD) industries Metal plating (hard metal plating) Metal plating (decorative plating) Electric and electronic parts for some colour printers and colour copy machines Insecticides for control of red imported fire ants and termites Chemically driven oil production Carpets Leather and apparel Textiles and upholstery Paper and packaging Coatings and coating additives Rubber and plastics 	Canada, Czech Republic, European Union, Iran, Nigeria, Norway, Switzerland

Export is also allowed to a State that is not party to the Convention if the State provides an annual certification in which it specifies the intended use of the chemical and includes a statement in which it commits to:

- Protecting human health and the environment by minimizing or preventing releases;
- Complying with provisions of the Convention on the management of wastes and stockpiles; and
- Complying with requirements for DDT production and use, if applicable.

Import and export requirements **do not apply** to quantities of chemicals to be used for laboratory-scale research or as a reference standard and to quantities of chemicals occurring as unintentional trace contaminants in products and articles. Quantities of POPs occurring as constituents of articles manufactured or already in use before or on the date of entry into force of the relevant obligation with respect to that chemical, shall not be considered as listed in the annex of the Convention (provided that the Party has notified the Secretariat that a particular type of article remains in use within that Party).

More information on the conditions of international trade of POPs can be found in the **Guidance for the control of the import of POPs**. <http://chm.pops.int/Implementation/NIPs/Guidance/GuidanceforthecontroloftheimportofPOPs/tabid/3173/Default.aspx>

B. POPs wastes

For **stockpiles** consisting of or containing chemicals listed either in Annexes A (elimination) or B (restriction) and **wastes**, including products and articles upon becoming wastes, consisting of, containing or contami-

nated with a chemical listed in Annexes A (elimination) and B (restriction), the import and export is allowed only for the purpose of environmentally sound disposal. All other imports are prohibited. Export is allowed to a State that is a non-Party to the Convention, when it is certified that it will comply with applicable provisions of the Convention.

Thus in cases where POPs wastes are being imported or exported, the Basel Convention rules have to be followed and a prior informed consent for the movement is required.

Example - POPs in Pacific Island countries (PICs)

The development of the Pacific Islands with the larger world brought many improvements, but it also introduced to the region chemicals such as Dieldrin and Dichloro-Diphenyl-Trichloroethane (DDT), which were used to fight diseases and pests. Additionally, capacitors and electrical transformers that contained polychlorinated biphenyls (PCBs) were brought to the islands to generate electricity for lighting, communication and industry.

Disposal of these POPs is difficult for Pacific Island countries, with their low-lying coral terrain and limited resources. This resulted in many open air dumps of the chemicals and its containers, endangering the health of people and the environment.

Recognising the need for improved management of chemicals in the Pacific, the Australian Government, in cooperation with the Secretariat of the Pacific Regional Environment Programme (SPREP) and governments of the Pacific Island countries, undertook an investigation of the size of the problem.

The project, known as 'POPs in PICs', employed an international team of waste management and logistics specialists to collect and repackage the chemicals identified during the preliminary investigation.

Special import approval was necessary from the Australian Government Department of Environment and Heritage under the Basel and Waigani conventions for the trans-boundary movement of the waste. The chemicals were listed on a manifest before being loaded onto ships for transport to Australia where it was managed in an environmentally sound manner.

The removal of more than 140,000 kilograms of POPs, including 60,000 kilograms of transformer casings, has led to major health and environmental benefits for the local community.

Source: <http://www.sprep.org/attachments/CaseStudy/Case Study - POPs in PICs Project extracted.pdf>

(1997-2006)

For the purposes of a Party's reporting requirements under the Stockholm Convention, it is suggested that Customs officers:

- (i) Register the imports and exports of each chemical;
- (ii) Maintain a list of States from which chemicals are imported;
- (iii) Maintain a list of States to which chemicals are exported.

2.2 Conclusion

Customs authorities play a key role in the implementation of the three conventions. The cross-border

movement of chemicals and wastes is a crucial point to verify that the whole international trade/transboundary movement chain complies with applicable rules. Customs are among the most appropriate authorities to perform monitoring actions at this point, due to their specific competences and skills at border-crossings and in ports. However, close coordination and cooperation with other relevant authorities is essential.

The Customs officer should be aware that for the transboundary movements of certain hazardous chemicals and wastes:

- consent should be given by the relevant authorities **prior to** the movement being initiated, and
- these movements can only take place under certain conditions.

MODULE

THREE

Customs control

Customs control

About this module

In this module the Customs officer will learn about smuggling and screening methods. The module presents the main steps to undertake a risk assessment, to develop risk indicators and to perform administrative and physical checks.

Upon completion of this module, Customs will be able to:

- Understand under which circumstances chemicals and wastes are illegally shipped;

- Understand which tools can be applied to support the targeting of possible illegal shipments;
- Identify the phases of a risk assessment;
- Apply various screening methods when aiming to detect illegal trade;
- Recognize risk indicators; and
- Screen documentation that should accompany legal trade in chemicals and wastes covered by the conventions.

Resources

Name	Where to find
Basel Convention	
Basel Convention Training Manual on Illegal Traffic for Customs and Enforcement Agencies	http://www.basel.int/Portals/4/Basel%20Convention/docs/legalmatters/illegtraff/c/trman-e.pdf
Rotterdam Convention	
The role of Customs in the implementation of the Rotterdam Convention Fact Sheet	http://www.pic.int/Portals/5/customs/Minisite/doc/Role%20of%20customs.pdf
Stockholm Convention	
Guidance for the control of the import of POPs	http://chm.pops.int/Implementation/NIPs/Guidance/GuidanceforthecontrolofthemexportofPOPs/tabid/3173/Default.aspx
Green Customs Initiative	
Green Customs guide to Multilateral Environmental Agreements	http://www.greencustoms.org/reports/guide/Green_Customs_Guide%20(low).pdf (page 27, 83-84, 91-92)
Asian network for the prevention of illegal transboundary movements of hazardous waste	
Summary of HS codes with high risk at deliberate disguised notification	http://www.env.go.jp/en/recycle/asian_net/Annual_Workshops/2010_II_PDF/Additional_Paper/QuestionnaireSummary.pdf (page 7-8)

Introduction

Lessons 1.5.3 and 1.5.4 explained why hazardous chemicals and wastes are illegally traded and what the consequences of such illegal trade are. Customs control activities aim at verifying whether trade in hazardous chemicals and wastes is legal, and conversely, at detecting and stopping illegal traffic without unduly disrupting legal trade.

In order to overcome limited human and technical resources, smart and efficient ways of targeting possible suspicious loads may be implemented. This module will discuss commonly used smuggling schemes, risk profiling, different types of inspections, detection methods and what to check when monitoring movements of hazardous chemicals and wastes.

When monitoring the trade in and trafficking of chemicals and wastes, technical or legal support by the authorities having the primary responsibility for the implementation of the conventions may be required. Effective communication channels and mutual support between Customs and these authorities is thus very important.

More about this in Module 6.

Lesson 3.1 Smuggling schemes

When targeting illegal movements of hazardous chemicals and wastes, Customs officers need to be aware of the techniques used to conceal these illegal shipments.

In the paperwork accompanying the shipment, the contentious load will either not be mentioned or will

not be described accurately. For example, wastes are wrongly classified as a product or a second-hand good, or hazardous wastes are wrongly declared as non-hazardous wastes.

Frequent cases of *mis-declarations* are:

- E-waste and CFC-containing refrigerators declared as second-hand goods;
- Mixed household residues declared as paper or plastic waste;
- PCB-containing transformers classified as metal scrap;
- Cathode-ray tubes classified as metal scrap;
- Expired chemical and pigments declared as products.

In addition to concealing the true nature of a shipment, the goods that are illegally traded are often physically hidden. Common *concealment methods* are:

- Using a cover load: placing the illegal goods behind rows of legal goods or under layers of legal goods;
- Placing false labels on the goods or removing old labels.
- Hiding e-waste in blinded and sealed vehicles or trucks
- Mixing hazardous waste with non-hazardous waste or material.

Cases of mis-declarations and concealment methods

Export of Waste Fridges from the UK to Ghana, detained in Belgium and successfully prosecuted in the UK

In June 2009, during a routine inspection, the Federal Environmental Inspectorate (FLI), Belgium, detained a container of fridges and freezers that was en route from the United Kingdom to Ghana. The sales invoice indicated that the fridges and freezers had been tested and the items were labelled as working products.

Several fridges were tested by the FLI and found to be not working. A number of other fridges had had their wires cut: it was therefore not possible to test their functionality.

The Belgian FLI identified the shipment as illegal and contacted the other States concerned by the shipment: the United Kingdom and Ghana. The UK Environment Agency agreed with the Belgian FLI that the shipment was illegal and that the wastes had to be taken back by the exporter in the UK.

The UK Environment Agency contacted the exporter identified on the sales invoice in order to:

- Inform him that the container had been detained;
- Explain why the shipment was deemed to be an illegal shipment of waste; and
- Request that the exporter make the necessary arrangements to take back the waste.

The UK Environment Agency worked closely with the Shipping Agent and the Competent Authority in Belgium to ensure that the waste was taken back by the exporter and thus returned to the UK. The waste was returned by September 2009 to a designated site in the UK. After further investigation of the waste, the waste was sent to an authorised disposal facility.

In February 2011, the case was heard in a Magistrates court in the UK. Following conviction, the person responsible for the illegal shipment was sentenced to serve 280 hours of unpaid work and given a six months curfew order.

Source: Press release Environment Agency

Mixed household waste declared as waste paper

In 2005 the Dutch Customs Authorities discovered that mixed household waste from the UK was being shipped to various Asian destinations via the port of Rotterdam without the notification to and consent from the involved authorities. In the documents accompanying the shipment, the waste was declared as paper waste, a non-hazardous mono stream. Physical inspections of the load revealed that the waste in the containers included plastic packaging, batteries, drink cans, old clothes, carrier bags and wood. For these kinds of exports, a prior informed consent should have been obtained, which was not the case. The export was deemed illegal and the waste was returned to the UK.

Source: <http://www.guardian.co.uk/society/2005/mar/28/environment.uknews>

Cathode Ray Tubes misdeclared as "Plastic Scrap"

In the United States, the export of used cathode ray tubes (CRTs) (the glass video display component of an electronic device such as a television or computer monitor) is subject to a notification procedure. However, it is also illegal to ship used CRTs into China under Chinese law. During an International Inspection Project of the INECE network, officials in Hong Kong SAR, China, discovered a shipment from the United States of glass from CRTs which the shipper had declared as non-hazardous "plastic scraps." The shipment was deemed to be illegal hazardous waste and was returned to the U.S. by the authorities of Hong Kong SAR, China.

Source: http://inece.org/seaport/exercise/INECE_SeaportInspectionProjectOutcomes_22dec.pdf

Household waste contaminated with hazardous wastes

In 2009, the Brazilian authorities reported the illegal import of 89 containers from the United Kingdom. The contents of the containers were labelled as 'recyclable plastics' but during a visual inspection of the load, the authorities found that the containers contained landfill and hazardous wastes, including batteries and used syringes. The UK Environment Agency investigated the alleged illegal export and arrested three men. The containers were sent back to the UK by the shipping lines which had transported them to Brazil in the first place. The waste was then disposed of properly in the UK.

Source: <http://www.businessgreen.com/bg/news/1804474/brazil-ships-illegal-waste-uk>



Photo: mixture of household waste, declared as paper waste (source: © Nancy Isarin)



Photo: Oil coated ground cable, declared as copper waste (source: © Huib van Westen, Human Environment and Transport Inspectorate, the Netherlands)

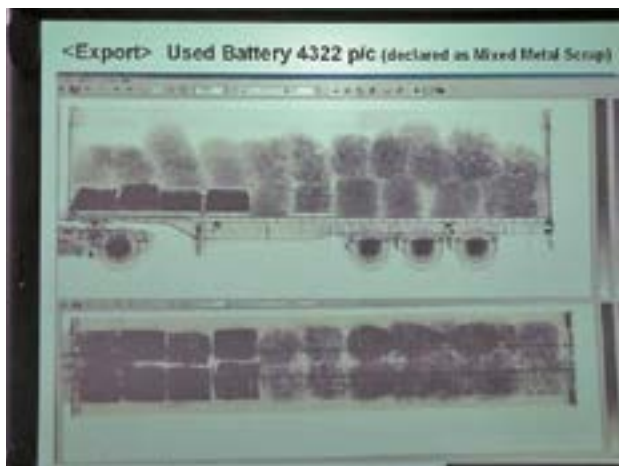


Photo: hidden waste batteries declared as metal scrap
(source: © BRS Secretariat)



Photo: PCB containing transformers
(source: © picture courtesy of the IMPEL network)

Lesson 3.2 Screening methods

Customs' monitoring activities cannot focus on all the movements that take place within a port or at a terrestrial border. Therefore priorities may be set in order to focus these efforts.

3.2.1 Risk assessment

A first step is to perform a **risk assessment** of the current situation. By "risk", we mean the potential for non-compliance with relevant rules and regulations. This assessment may provide, for instance, information on the risks associated with the legal trade of hazardous chemicals and wastes, an evaluation of the existence of illegal trade/traffic, and the impact of illegal trade/traffic on human health, the environment and the economy. It is recommended to perform the risk assessment together with other relevant governmental entities, in particular the police as well as environmental, health and agricultural authorities.

The production of a risk assessment may rely on the following 3 phases: 1. risk identification; 2. risk analysis; and 3. evaluation and prioritization. Examples of questions that may be asked during the risk identification phase include for instance the following:

- **What?** What kind of illegal activity is taking place? What kind of hazardous chemicals and wastes are being illegally traded and how were these described in the paperwork? What is the magnitude of the illegal trade/traffic? How many offences have taken place within a given time? What is the historical trend? What is the seriousness of these offences? What is the actual and potential impact of illegal activities on human

health, the environment and the economy? What is the current risk for violators of getting caught? If offences are detected, what are the likely consequences for those violating the law? How do these consequences compare with the gains that may be generated by the illegal activity? What is the current enforcement response? How much effort goes into detecting and preventing illegal trade/traffic? How effective are these efforts?

- **Where?** Where are illegal activities taking place or most likely to take place within the country or on which route? Are there any illegal trade "hot-spots" that can be identified? Consider the entire international trade chain: where is the chemical produced? Where is the waste generated and at what point in time does the waste enter the illegal waste chain? What transport route does it follow? And where is it imported or disposed of?
- **Why?** Why do individuals or legal entities engage in illegal trade/traffic? What are the gains to be made? How big is the market for the illegal trade of chemicals and wastes? What is the current market value for the chemicals and wastes being traded? Is illegal trade/traffic associated with other violations of the law (car theft, tax fraud or forgery for example)? Do contraveners act intentionally, recklessly or negligently? How far may a lack of awareness of a regulatory framework or the complexity of that framework explain illegal activities?
- **When?** When does illegal trade/traffic take place? Are there seasonal trends or particular times within a month / year when illegal activities reach higher or lower levels?

- **Who?** Who is violating the law? Are these individuals or legal entities? Is this “organized” crime? Are contraveners repeated offenders or occasional ones? What is the contravener’s relationship to the chemicals and wastes (eg. producer, generator, shipper, broker/freight forwarder, carrier, disposer)? Can profiles of contraveners be established? What other illegal activities have been committed by contraveners?
- **How?** What is the *modus operandi* of the contraveners? How do they conceal their activities? How are they organised?

In order to answer these questions, data can be collected both from open and closed sources. Examples of closed sources of information are the pre-arrival or pre-departure information, historical data collected by Customs, shipping lines and law enforcement authorities. Internet, as an open source, holds information on trading sites, news items on discovered illegal trade, court cases, research and study reports from NGOs and IGOs. Also container tracking sites can be searched. In addition, interviews with stakeholders supply useful information for the risk assessment process as they can give insight on the trading schemes and trends, on the level of awareness and on involved actors.

In the risk analysis phase, a systematic use of available information helps to determine how often specific risks may occur and the magnitude of their likely consequences. The most effective risk management system uses statistical scoring techniques according to the publication: **“Risk management systems: using data mining in developing countries”** <http://www.world-customsjournal.org/media/wcj/-2011/1/Laporte.pdf>

After analysing the information, priorities can be defined and profiles can be developed. The outcomes of a risk assessment could for example be a reason for Customs to focus on certain waste streams, chemicals, routes, countries, stakeholders or descriptions used in paperwork.

3.2.2 Profiling and indicators

Risk indicators and search parameters are developed following completion of the risk identification and analysis phases of the risk assessment. Risk indicators flag potential problems with a particular shipment. If Customs work with electronic systems, profiles can be built into their electronic systems.

Risk indicators can relate to:

- **The object of the trade**

Examples:

- False tariff heading, by using incorrect Customs codes
- Inadequate, incomplete or inconsistent description of the good/waste being shipped
- Wastes declared as (second hand) goods or equipment
- False declaration of origin
- False declaration of quantity
- Low value in relation to weight and/or the Customs code

- **Documents**

Examples:

- Missing documents
- Cash payment, freight paid in advance
- False certificates

- **Packaging**

Examples:

- Mislabelling
- Broken, defective or non-existent seals
- Packaging not corresponding to the goods/wastes description
- Dented, damaged or mishandled containers or drums
- Placards or labels on the container or on the packaging (drums, IBC’s, boxes, etc.) indicating hazardous materials;
- Shippers-owned container (not owned by a shipping line leasing company, without a prefix or with a prefix not related to a shipping line and container number);
- Expressions like: ‘expired’, ‘discarded’, ‘do not return’ or ‘for disposal’;
- Leaking containers or packaging.

Leaking containers – Pyramid case

In 2001, the Dutch Environmental Authorities were informed by the Customs about two leaking containers in the port of Rotterdam. This triggered an investigation which revealed that a US storage company was ordered by the US Environmental Protection Agency (US EPA) to clean up chemicals it had been storing illegally for years. Part of the chemicals were loaded onto 29 sea containers and were to be shipped via Rotterdam to Nigeria. The Dutch authorities discovered that the buyer in Nigeria did not exist and assumed that the chemicals were meant for illegal dumping. Together with the US EPA the investigation evidenced that the 29 containers contained more than 300 tons of expired hazardous chemicals which were classified as waste. The criminal investigation ultimately involved more than 40 witnesses in the United States and abroad, and thousands of pages of documents. It also required close coordination among the American, Dutch and Nigerian agencies, including joint EPA-Dutch sampling of the chemicals in Rotterdam. After having been stored in the port terminal in Rotterdam during the investigations for about three years, the wastes were incinerated in the Netherlands. A US federal judge sentenced the defendants to pay more than \$2 million in restitution and fines, with most of the funds being allocated to the Dutch authorities to cover the costs of storage and incineration of the hazardous wastes.

Source: <http://cfpub.epa.gov/compliance/resources/reports/endofyear/fy2006/civillandhighlights/>

Video about the pyramid case: <http://vimeo.com/7333397>

- **Concealment methods**

Examples:

- Legitimate goods mixed with non-legitimate goods or wastes
- Hazardous waste mixed with non-hazardous waste

- **Customs procedures**

Examples:

- Returned merchandise
- Falsely declaring the use of goods as being granted exemption for analytical or laboratory use

- **Routing**

Examples:

- Diversion of shipments, for example by using an intermediary country
- Involved countries (import and/or export) known for parallel illicit markets

- **Individuals/companies**

Examples:

- Activity not corresponding to that usually carried out by the company

- Operator not known or unlicensed for hazardous waste management
- The name of the consignee company is not indicated, with only the freight forwarder's contact details being given
- Address of the consignee is a Post Office Box
- Address of the waste disposer is a sky scraper in a major city
- History of illegal activities

- **Countries concerned**

Examples:

- Import, transit or export country in conflict or facing internal instability
- Import country lacking the capacity to manage hazardous wastes in an environmentally sound manner

Before a profile is implemented it is recommended to first perform an impact assessment based on historical data. Example: a profile that aims to select declarations with paper waste from country A to country B, might lead to a selection that will block numerous amounts of containers unnecessarily.

Examples of HS codes at high risk of illegal transboundary movements of hazardous waste

HS codes	Declared as	In fact can be
3915	Plastic scrap	Waste plastics mixed with other wastes, medical waste or used chemical bottles, municipal solid waste
7204	Metal scrap	Batteries, metal scrap contaminated with hazardous waste, electronic wastes
8528	CRT monitors	Waste CRT monitors



Photo: Leaking containers (source: © Courtesy of the IMPEL network)



Photo: mixture of old drums (source: © Nancy Isarin)

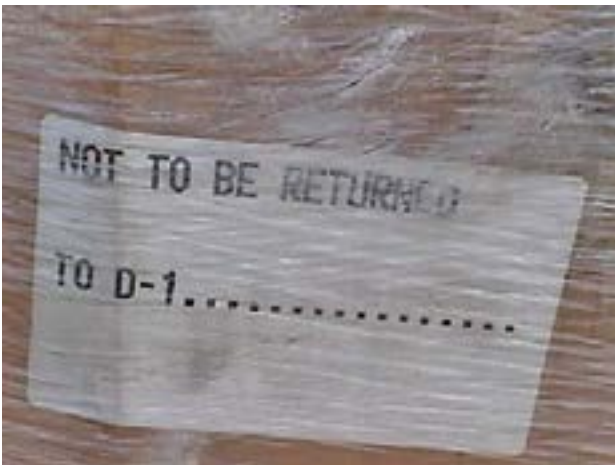


Photo: label 'not be returned' (source: © Huib van Westen, Human Environment and Transport Inspectorate, the Netherlands)

Other examples:

- Raw materials shipped from the factory generally have their seals intact. If the seals are broken, the contents are suspect. Hazardous materials must be packaged in appropriate containers. For example, if the manifest states that the material is corrosive, the container should be in plastic. If the material is a solvent, the container should be in metal. Review the shipping documents to be sure the container is appropriate.
- Recently painted drums could be suspicious. Look on the sides of the containers to determine whether paint covers one or more labels or other markings on the containers. If so, the shipment is suspect. Raw materials are rarely packaged in reconditioned containers.

Support by the WCO through its Risk Management Compendium

Risk management has been one of the key vehicles for Customs administrations to better meet the demands of the 21st century operating environment, which is seeing Customs administrations endeavouring to address risk wherever they are found and increasingly as early in the supply chain as possible. In this context, the World Customs Organization has developed the “WCO Customs Risk Management Compendium”.

<http://www.wcoomd.org/en/topics/enforcement-and-compliance/instruments-and-tools/rmc.aspx>

It is comprised of two separate but interlinked volumes. Volume 1 of the Compendium sets out the organizational framework for risk management and gives details of the risk management process; and:

- Outlines the changing operating environment and defines the need to adopt a holistic risk-based compliance management approach that enables administrations to operate more effectively and efficiently and to better meet their objectives,
- Describes the different building blocks of an organizational risk management framework. (These building blocks include mandate and commitment, risk governance arrangements, implementation of risk management, monitoring and review, and mechanisms for continuous learning and development of the approach),
- Discusses embedding risk management as an organizational culture and building risk management capacity.

Volume 2 of the Compendium, on the other hand, deals with operational risk management. It includes “enforcement sensitive” material for “Customs only” purposes, including numerous practical guides and templates for assessing risks in relation to the movement of goods, people, conveyances, economic operators and other parties to international trade.

The topics covered in Volume 2 can be categorized into four broad clusters:

- Risk Assessment, Profiling and Targeting,
- Risk indicators,
- Analysis Guidelines, and
- Information and Intelligence.

3.2.3 Screening documentation

Once the profiles are developed and implemented, shipments can be targeted and selected for further document review and/or physical examination. When monitoring the legal trade in chemicals and wastes covered by the three conventions, Customs officers need to verify that all required documents and information are presented and correctly completed. Screening ship-

ping documents is considered to be a part of the day-to-day job of Customs officers. Customs declarations, bills of lading and cargo manifests, for instance, hold important information. If Customs officers are trained to spot certain key words or indicators mentioned in such documents that might imply that an illegal shipment of chemicals or wastes could be taking place, they could trigger further investigation actions.

Example - Dutch Customs: support by specialists

Routine inspection: collaboration between Customs and Environmental Inspectorate in the Netherlands

In the Netherlands, the Ministries of Finance and Environment have signed an MOU in which they agreed on mutual training and support, information exchange and joint inspections in relation to transboundary movements of wastes. Under this MOU appointed Customs officers receive training on the Basel Convention and the European Waste Shipment Regulation. These specialists at the Customs service are trained to identify possible suspicious containers, to recognize waste and how to deal with a suspicious case. If, during a routine check, a Customs officer comes across suspicious terms used in documents or visual indicators, he or she can contact these specialists within his/her own organisation. In case of a possible illegal shipment of waste, the custom officer blocks the container for further investigation and contacts the environmental inspectorate. Together the two authorities perform the physical inspection of the container at a dedicated inspection area in the port terminal. The decision as to whether the shipment is deemed illegal is made by the environmental inspectorate. In case a shipment is deemed illegal, the Customs officer writes the official report which is then sent to the public prosecutor's office. The environmental inspectorate is responsible for ensuring that the shipment is taken back to the place of origin as well as for leading the administrative enforcement procedures.

Source: "E-waste Inspection and Enforcement Manual", Secretariat of the Basel Convention and IMPEL, 2012
<http://www.basel.int/Implementation/TechnicalAssistance/EWaste/EWasteAfricaProject/ToolkitonEwasteInspectionandEnforcement/tabid/3160/Default.aspx>

If a shipment of chemicals or wastes has been selected for further screening, first the relevant accompanying documentation should be collected and reviewed, such as:

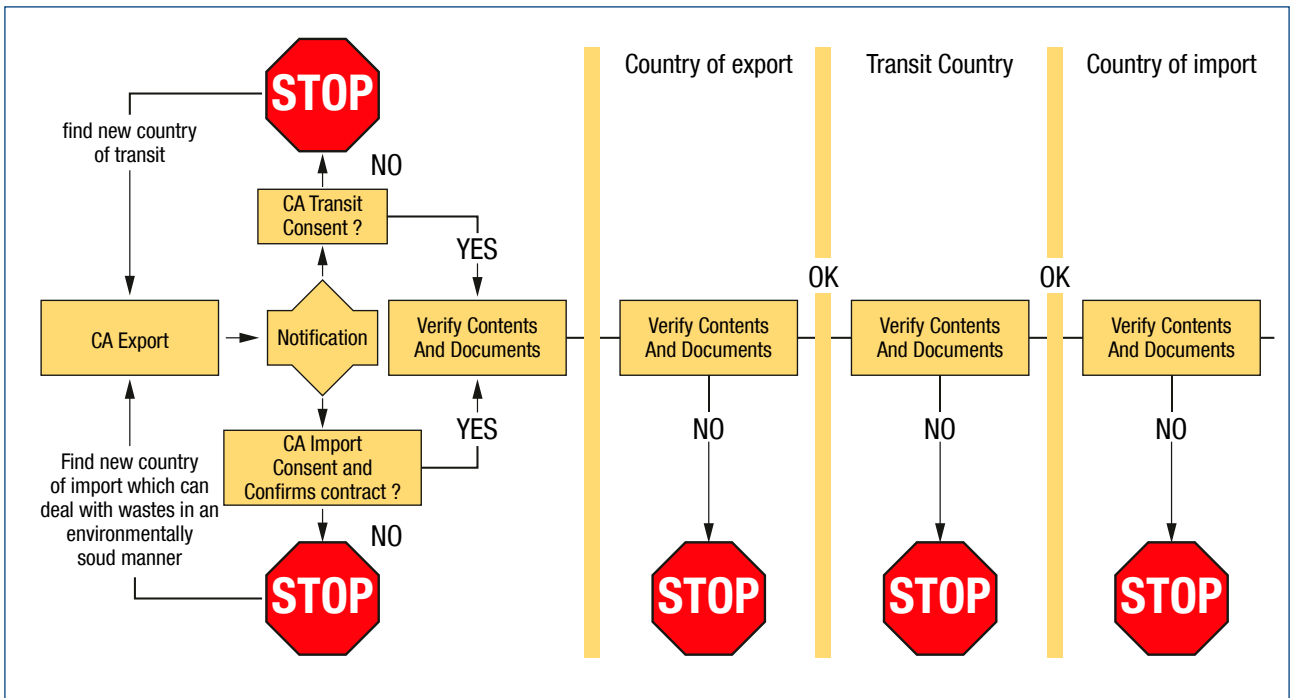
- Shipping documents
- Invoice
- Contract
- Certificate
- Licence
- Packing list

Specific additional documentation related to the trade of chemicals includes:

- Required import licences
- Safety data information sheet
- Correct HS Customs codes on the shipping documents

Specific additional documentation related to a transboundary movement of hazardous wastes and other wastes:

- Completed waste movement document
- Copy (or original if required) of the notification document



Graphic: Border control procedures Basel Convention

Questions

Key questions to ask yourself when examining the documents:

- Is this a waste or a product?

Indicators are:

- Codes used
- The description of the load, such as used, recycled, scrap, expired, rejected
- A low value of the goods
- Names of the companies involved, e.g. using terms such as recycling, waste management, environment,...

Is this a waste falling under the scope of the Basel Convention? Check Annexes I, II, III, VIII and IX of the Basel Convention and national legislation implementing the Basel Convention provisions to see if the waste is classified as hazardous or not or as “other”

Is the export of this chemical or waste allowed to the country of import?

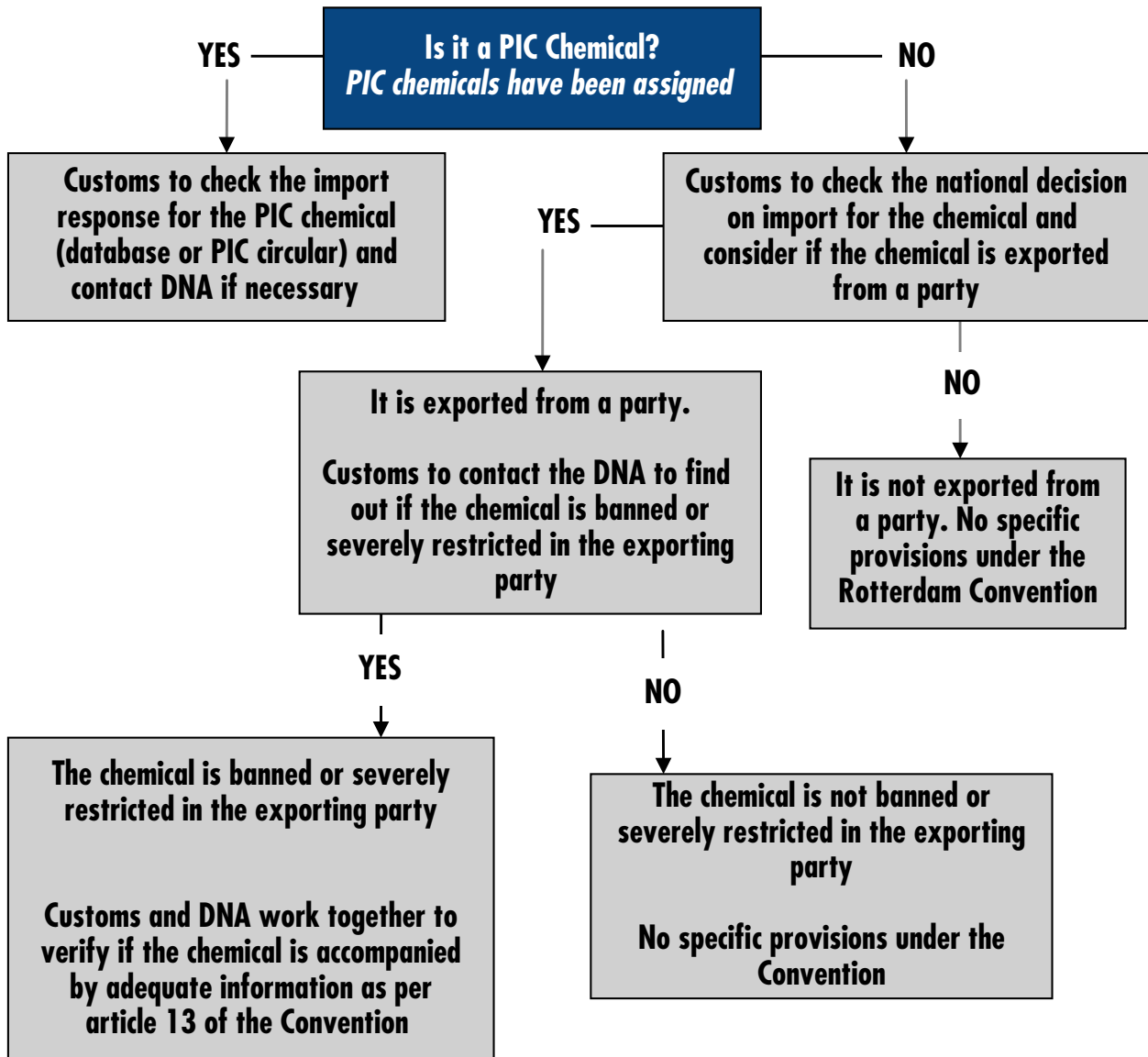
Is the import of this chemical or waste allowed into my country? Is this a chemical listed in Annex III of

the Rotterdam Convention or a nationally banned or severely restricted chemical?

Further issues to consider when inspecting an export shipment of a chemical listed in Annex III of the Rotterdam Convention

- Are the specific World Customs Organization’s Harmonized System codes assigned to the chemical included in the shipping documents?
- If the chemical is listed in Annex III of the Convention, there is a need to check the import decision of the importing country in Appendix IV of the PIC Circular (or the Convention website www.pic.int) for the chemical in question. If the decision is no consent then the export cannot proceed, if it is consent under certain conditions it may be necessary to contact the DNA in the importing country before exporting the chemical in order to ensure that those conditions are met.
- If the exported chemical is listed in Annex III or is banned or severely restricted in your country check the following:
- Does the chemical meet the labelling requirements for risks/ hazards to human health and the environment? The label should contain information on possible hazards of the chemical and the safety data sheet should contain information on how to handle accidents and spills.
- For chemicals that are to be used for occupational purposes, ensure that the safety data sheet, following an internationally recognised organised organisation, setting out the most up-to-date information available, is sent to each importer.
- Are any corresponding requirements under national legislation relevant to this chemical or group of chemicals?

Import of a chemical – Rotterdam Convention

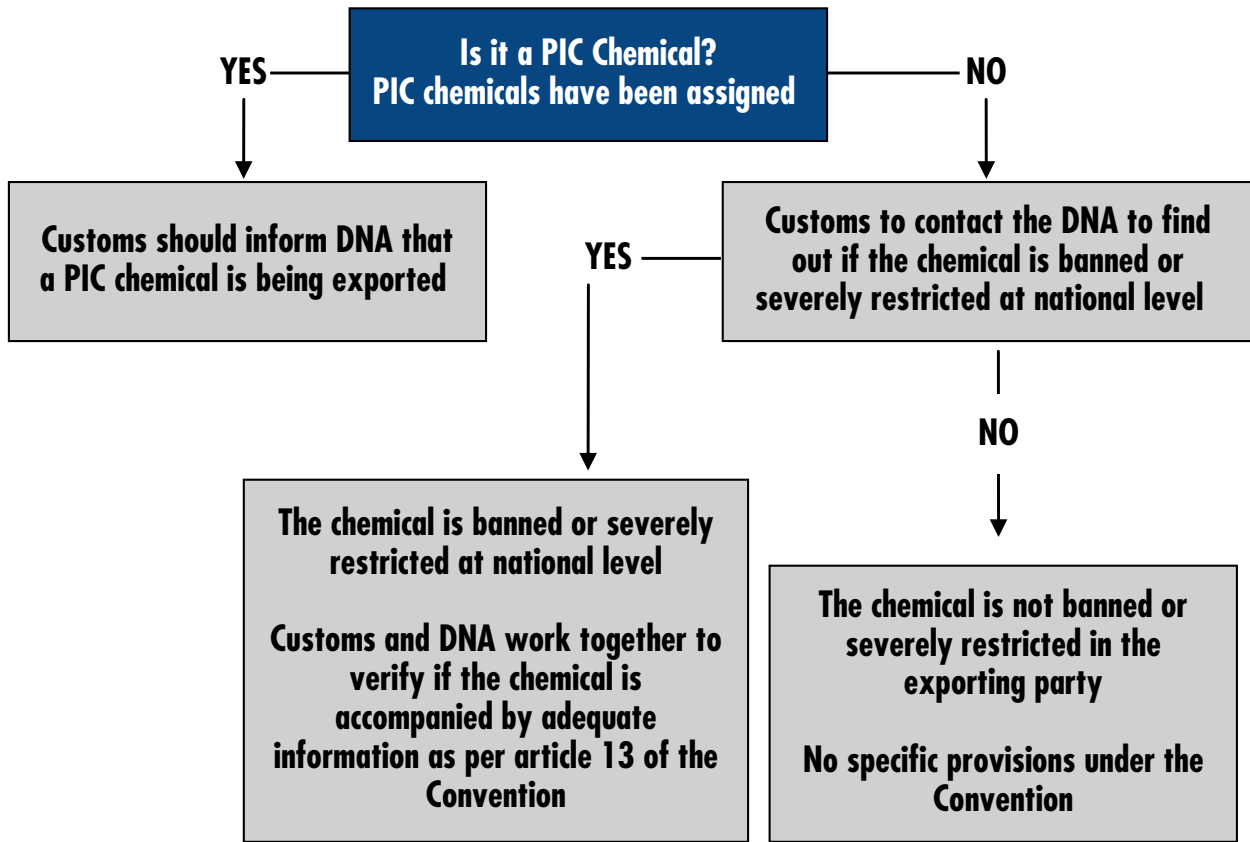


Graphic: Border control procedures Rotterdam Convention – import of a chemical

Further issues to consider when inspecting an import shipment of a chemical listed in Annex III of the Rotterdam Convention

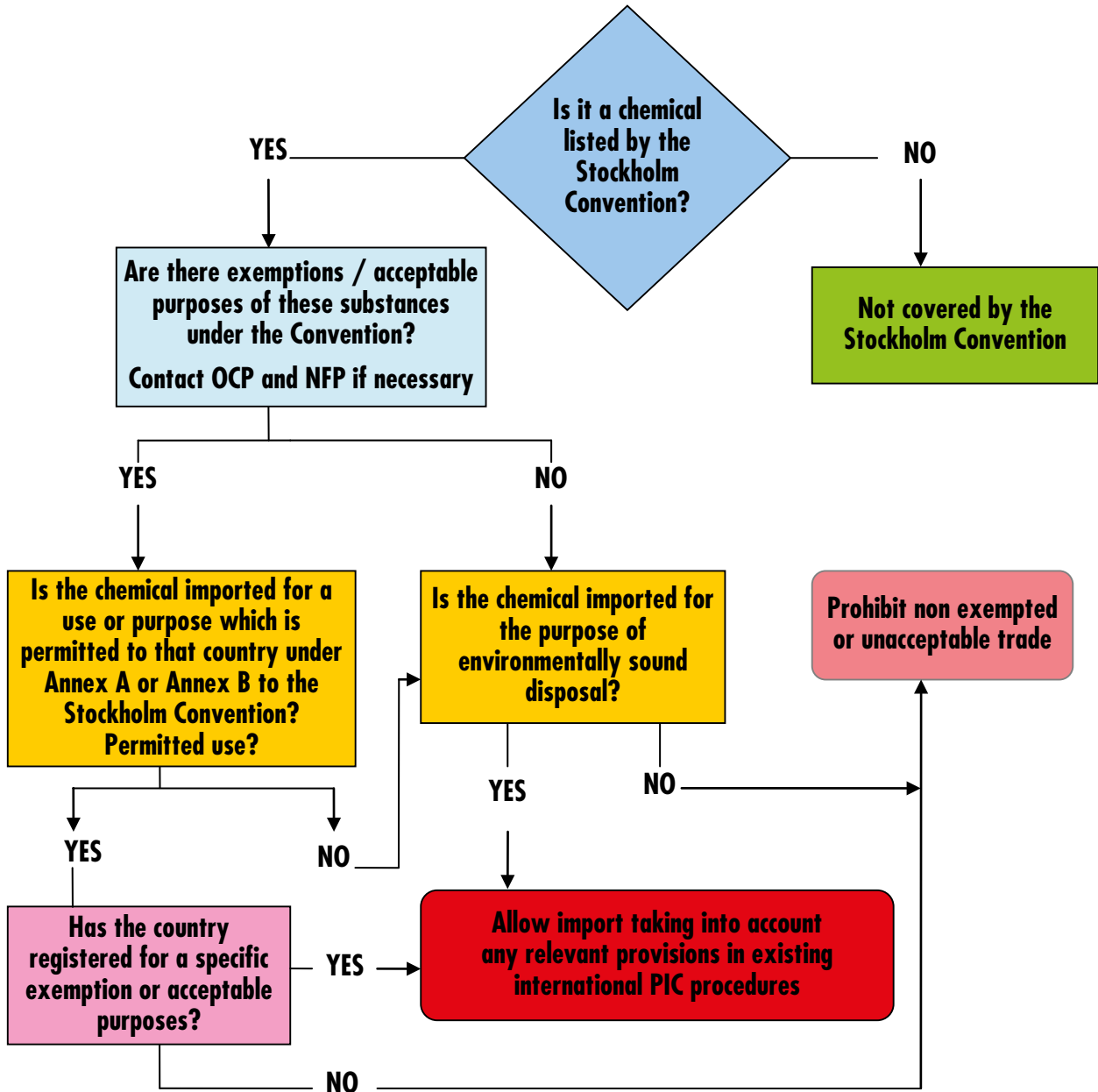
- Keep up-to-date regarding any import decision your Government has taken with respect to the chemical by checking Appendix IV of the PIC Circular or Rotterdam Convention website (www.pic.int);
- Is the chemical adequately labelled and accompanied by adequate information?
- Is a safety data sheet included if the chemical is used for occupational purposes? The safety data sheet should be in an internationally recognized format.
- Is the information on labels and safety data sheets provided, when possible, in the language of the importing Party?

Export of a chemical – Rotterdam Convention



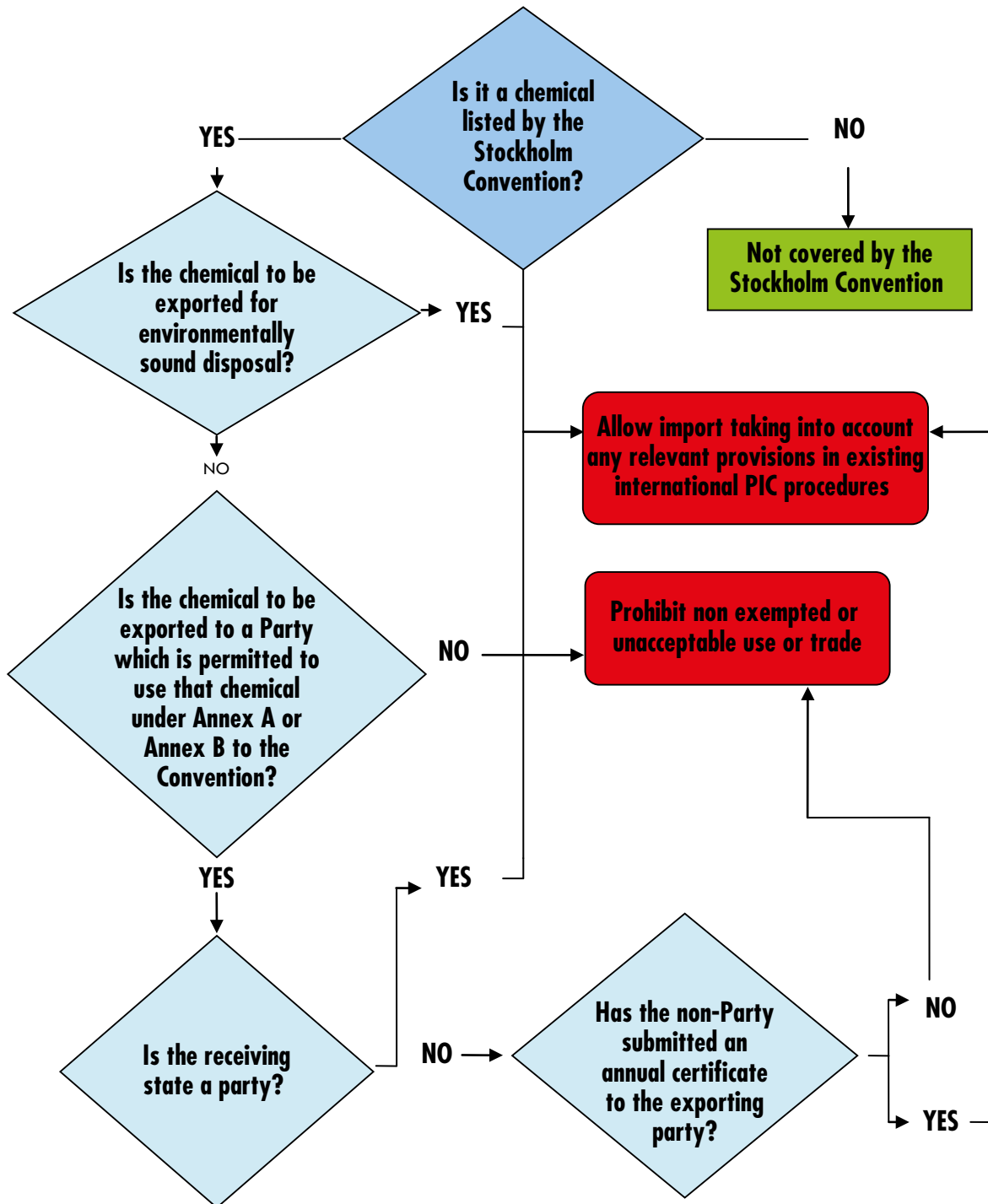
Graphic: Border control procedures Rotterdam Convention – export of a chemical

Import of a chemical – Stockholm Convention



Graphic: Border control procedures Stockholm Convention – importing a chemical

Export of a chemical – Stockholm Convention



Graphic: Border control procedures Stockholm Convention – exporting a chemical

3.2.4 Physical examination

In some cases a physical examination is required to verify if the information provided in the documents matches the actual load and if the requirements with regards to transporting, labelling and packaging are met. Depending on where a shipment is being stopped/ blocked for a visual screening (at the port, at the side of the road or a train terminal) the container or transport medium should be offloaded and stored at a safe inspection area.

A. Verification

During the verification process you should check if the information in the documents corresponds to the actual content. Key questions to ask yourself are:

- Is the classification of the load correct?
- Does the description of the wastes or chemicals in the documents correspond to the actual composition?
- Are there indications that this is waste instead of a product or second-hand good?
- Are the labelling and packaging requirements met?
- For chemicals in Annex III under the Rotterdam Convention and those that are banned or severely restricted domestically, one should check if the labelling provisions of the Convention are met. In the case of wastes covered by the Basel Convention, each Party shall require that transboundary movements be subject to generally accepted and recognized international rules in the field of packaging, labelling and transport.



Photo: old drums and a mixture of packaging
(source: © Nancy Isarin)



Photo: Leakage inside of a container due to bad packaging (source: © Picture courtesy of the IMPEL network)



Photo: container loaded with various types of damaged goods
(source: © Competent Authority of Norway for waste shipments)



Photo: badly stowed and packaged monitors (source: © Dutch ILT)

In some cases a visual inspection will not provide conclusive information about the composition of the chemical or waste. Sampling, testing and analyzing might therefore be required.

More about this in Lesson 4.2.

B. Inspections following a request

It may happen that Customs inspect a shipment based on a request from the DNA, Focal Point, Competent Authority or other law enforcement agencies within their own country or following a request from relevant authorities in another State. For instance, when there is a suspicion of an illegal shipment, the authorities with primary responsibility for the implementation of the conventions can exchange information on the name of a vessel, the container number(s) and the date of departure so that the shipment can be intercepted when it goes through a country of transit or upon its arrival in the country of final destination. This occurs when a container has already left the port, but the information, such as the (electronic) custom declaration, only becomes available afterwards.

C. At random or ad-hoc inspections

At random or ad hoc inspections complement targeted inspections based on risk assessments, profiling, intelligence or inspections conducted following a request. At random or ad hoc inspections can take place within the country of export, transit or export. They have an important deterrent effect. Another reason for performing at random inspections is to learn if new *modus operandi* or concealment methods are being used or if new trends have emerged.

3.3 Checklist

A. Risk assessment

- Understand the what, when, why, where, who and how of the illegal trade in hazardous chemicals and wastes
- Gather information and intelligence from relevant sources (open and closed) about *modus operandi* and illegal trade in hazardous chemicals and wastes
- Develop risk indicators and search parameters and implement these in your targeting system

B. Check the documentation

- Is the shipment accompanied by all the correct paperwork?
- Review all the documentation and check whether they are completed correctly
- Compare the documents that accompany the shipment to make sure that they match
- Is the valuation of the goods correct/realistic?

C. Verify the information

- Verify that the exporter and/or importer and place of business actually exist
- Contact the relevant authorities to verify if the shipment of hazardous chemicals or wastes is indeed consented to
- Verify if the quantity, description of the goods, treatment, origin and destination matches with the information in the registration/notification form/movement form

D. Visual screening

- Inspect the goods visually
- Check the packaging conditions
- Check the labelling requirements
- Match the load with the information in the paperwork
- Take samples if necessary
- Make photographic evidence if necessary

3.4 Conclusion

Effectively verifying that each import, transit or export of hazardous chemicals and wastes is made in accordance with applicable rules and regulations requires considerable resources. Customs can use a combination of various tools and methods to perform smart and efficient controls of potentially illegal shipments. Risk assessments, the use of intelligence and risk profiles are keys to successfully targeting possible suspicious shipments. Feedback from Customs and other relevant authorities will enable analysts to review and, if needed, modify the existing profiles to ensure their adequacy. Visual indicators can also suggest the existence of illegal shipments.

A shipment selected for further control can undergo an extensive administrative examination. When deemed necessary, this is followed by a visual screening of the content of the shipment. Experience has shown that in case of illegal trafficking of hazardous chemicals or wastes, the information provided in the documents does not match the actual load. Also various concealment methods can be used to hide the load.

For more information on how to deal with illegal trade, please refer to Module 5.

MODULE

FOUR

Identification, classification and safety issues

Identification, classification and safety issues

About this module

In this module the Customs officer will learn how to identify hazardous chemicals and wastes. Visual screening and sampling will be discussed as well as the use of codes and trade names during the identification process. Special attention will be paid to the safety of the officers whilst performing visual screening.

Upon completion of this module, Customs will be able to:

- Understand what to look for when visually checking possible hazardous chemicals or wastes;
- Know what codes and other systems can assist in identifying goods and wastes; and
- Evaluate the possible dangers associated with the visual inspection of hazardous chemicals and wastes

Resources

Name	Where to find
Basel Convention	
Technical guidelines for the identification and environmentally sound management of plastic wastes and for their disposal	http://www.basel.int/Portals/4/Basel%20Convention/docs/meetings/cop/cop6/cop6_21e.pdf
Technical Guidelines on the Identification and Management of Used Tyres	http://www.basel.int/Portals/4/Basel%20Convention/docs/meetings/sbc/workdoc/old%20docs/tech-usedtyres.pdf
Stockholm Convention	
Guidance on the Global Monitoring Plan for Persistent Organic Pollutants - Preliminary version, February 2007. Amended in May 2007	http://chm.pops.int/Implementation/GlobalMonitoringPlan/Overview/tabid/83/Default.aspx#LiveContent
Guidelines for the identification of PCBs and materials containing PCBs	http://www.chem.unep.ch/pops/pdf/PCBident/pcb1.pdf
Standardized Toolkit for Identification and Quantification of Dioxin and Furan Release, Second Edition	http://www.pops.int/documents/guidance/toolkit/en/Toolkit_2005_En.pdf

Introduction

The identification and classification of chemicals and wastes determine whether the PIC procedures or other information procedures have to be followed and if the import and export are allowed. Because the identification of chemicals and wastes may require Customs to come into contact with a shipment, this module will also address the important issue of safety.

Identification tables and tools have been developed under the three conventions:

- Basel Convention Waste Identification tool (Annex II)
- Stockholm Convention Identification tool for Customs (updated August 2012) (Annex III)
- PIC Chemicals under the Rotterdam Convention (Annex IV)

Lesson 4.1 How do I visually recognize wastes and chemicals?

4.1.1 General

To find out if a presumed illegal movement of a certain load involves chemicals or wastes, visual determination is the second step after having gathered and analysed the administrative documents.

But before opening a container for a visual inspection, Customs should be aware of the possible risks for them and the environment. It is strongly recommended to only open containers and perform visual inspections in dedicated inspection areas with proper equipment, such as protective flooring, personal protection equipment, gas and radiation meters and off-load facilities.

As containers can be shipped on a vessel, a truck or a train, it is recommended to decide on an appropriate inspection and storage *location* beforehand. Within ports, dedicated inspection and storage facilities are usually at hand. When the inspection is done alongside a road or at a terrestrial border, please consider where it is safe – for you, others and the environment – to open and store the container. Visual screening of containers shipped by train is, due to logistical matters, recommended at the point of loading or point of offloading (train terminal) only, and not during the transport. Whether the inspection takes place in a port, on a road or in a train station, international cooperation with relevant authorities involved in the movement of the shipment may be required.

In some cases, offloading a container may not be necessary – for instance when the documentation, supplemented with information or intelligence from the exporting country, provide enough evidence about the potential illegal nature of a shipment.

The conditions of the goods/wastes, the way they are loaded and the packaging can provide insights about the nature of the load and how it should be classified. However, Customs officers should avoid detection of hazardous substances by smell, taste or other senses. If officers encounter a smell that burns their eyes, mouth, nose, or skin, they should leave the area immediately, and contact health and safety professionals. The scene should be evacuated and a perimeter established.

4.1.2 Labels

Information regarding the original manufacturer, lot numbers and the type of chemical product may be listed on the label. If this information is present, the chemical manufacturer should be contacted and a list of customers obtained. If the only information remaining on the label is the product name, a Chemical Buyers Directory will supply the officer with a list of companies that manufacture that particular product. It is likely that each company will use a different label.



Photo of a mixture of rusty old drums with labels (source: © Nancy Isarin)

4.1.3 Appearance

Wastes are either solid or liquid, but can appear in many different ways, forms and shapes and are not always easy to recognize. Wastes can be a monostream or a mixture of different materials. But wastes can also be products that are expired or equipment that does not function anymore.



Photo: a refrigerator containing a CFC containing cooling medium R12 (source: © Nancy Isarin)

Most chemicals either appear in a pure form or in a mixture in different ways. Dieldrin for example in its pure form will appear as white crystals or pale tan flakes, with an odourless to mild chemical odour, while in a mixture it will look like a powder, emulsifiable concentrate, granules or wettable powder. As chemicals have so many different forms and appearances and because of the safety hazards associated with their handling, it is recommended to use means other than visual identification of the substances themselves to classify them, such as HS codes, trade names, origin and identity of exporter/importer and the CAS number (see also lesson 4.3). POPs can materialize themselves as pesticides, industrial chemicals or they can be an integral part of a product (so-called “POPs in articles”). In liquid form, POPs will be packaged either in drums or bottles while in solid form they will be in bags or pallets.

Examples of POPs in products

<p>Commercial octabromodiphenyl ether:</p>	<p>Used mainly as flame retardants principally in the plastics industry for flame-retarded polymer products, typically the housings of office and other equipment containing electronics.</p>
<p>Commercial pentabromodiphenyl ether:</p>	<p>Used almost exclusively in the manufacture of flexible polyurethane (PUR) foam for furniture and upholstery in homes and vehicles, packaging, and non-foamed PUR in casings and electronic equipment (EE).</p>
<p>Perfluorooctane sulfonic acid and its salts (PFOS) and perfluorooctane sulfonyl fluoride (PFOS-F):</p>	<p>Uses:</p> <ul style="list-style-type: none"> • Photo-imaging • Photo-resist and anti-reflective coatings for semi-conductors • Etching agent for compound semiconductors and ceramic filters • Aviation hydraulic fluids • Metal plating (hard metal plating) only in closed-loop systems • Certain medical devices • Fire-fighting foam • Insect baits for control of leaf-cutting ants • Photo masks in the semiconductor and liquid crystal display (LCD) industries • Metal plating (hard metal plating) • Metal plating (decorative plating) • Electric and electronic parts for some colour printers and colour copy machines • Insecticides for control of red imported fire ants and termites • Chemically driven oil production • Carpets • Leather and apparel • Textiles and upholstery • Paper and packaging • Coatings and coating additives • Rubber and plastics

Lesson 4.2 Sampling and testing (scientific evidence)

Due to the complexity of sampling, testing and analysing as well as safety risks associated with these activities, it is strongly recommended to carefully assess the situation and contact specialists (eg. DNA, CA or NFP) prior to any form of sampling or testing by Customs. At any rate: do not enter a container before all the appropriate safety measures have been taken!

4.2.1 Why and when?

Determining the nature of a chemical or hazardous wastes can require sampling and testing. This is the case when a visual inspection, interviews with the producer, exporter or importer, or an in-depth administrative investigation do not provide the required certainty about the composition of a substance or about whether a good is a waste.

Taking samples may be costly, require the availability of resources (laboratory, specifically training staff) and is not without risks. The way samples are taken (at random or representative) and the testing methods that are applied can lead to differences of opinion between two countries concerned by an illegal shipment. If samples are to be accepted readily as evidence in court, they must have been collected in line with applicable rules and regulations which will most likely require that the samples are of known quality, have been collected according to sound technical procedures, and are representative of materials and/or population being sampled.

Samples are taken to:

- Identify the nature of a substance: for example, a waste may require special treatment if it contains high levels of a certain contaminant such as lead.
- Define the extent of contamination. The level of contamination may influence the classification of a waste as hazardous or not.
- Help establish whether a trade in a chemical or waste is illegal: this is the most common reason for sampling to be undertaken in the framework of an inspection. The sample and the analytical results of the testing may become evidence.

The overall sample collection and analysis process

- Sample collection planning
- Sample collection (including documentation)
- Sample identification
- Transfer to the laboratory
- Analysis of the sample(s)
- Reporting of analytical results
- Evaluation of analytical results



Photo: sampling of PCB containing transformers (source unknown)

In relation to electronic and electrical goods, some legal frameworks provide that their functionality is key to determine whether they are wastes or not. In such cases, testing the functionality of electronic and electrical goods may be a necessity. One of the criteria to determine between a second-hand good or a waste is to check if the equipment actually works.

Functionality tests for mobile phones

Used mobile phones should be evaluated and assessed to determine the extent to which they are suitable for re-use with or without repair or refurbishment. As a minimum, this assessment will include:

- (a) **An "air" or "ping" test:** calling a test number (which will vary from country to country and from network to network), to generate a service response, and indication of whether or not the handset is functional.
- (b) **A "loop back" test:** blowing or speaking into the handset while on a call, to determine whether or not the microphone and speaker are functional.
- (c) **A screen and keypad test:** switching the handset on and pressing each of the keys, to indicate whether or not the LCD and keys are functional.
- (d) **A battery test:** testing the battery with a volt meter to indicate whether or not the battery is functional.

(Source: Guidance document on the environmentally sound management of used and end of life mobiles phones, adopted by the tenth meeting of the Conference of the Parties to the Basel Convention, © 2012 Secretariat of the Basel Convention)

Possible functionality tests for used computing equipment

Computing equipment	Functionality tests	Test results
Central processing units (CPUs), including desktop PCs	<p>Power on self test (POST)⁴</p> <p>Switching on the computer and successfully completing the boot-up process. This will confirm that the principal hardware is working, including power supply and hard drive.</p> <ul style="list-style-type: none"> • A working monitor should be supplied for testing if none is present. • Ensure that cooling fans are functioning. 	<p>Computer should boot up successfully.</p> <p>Computer should respond to keyboard and mouse input.</p> <p>Cooling fans should operate normally.</p>
Laptops/notebooks	<p>Power on self test (POST)⁵</p> <p>Switching on the laptop and successfully completing the boot-up process. This will confirm that the principal hardware is working, including power supply and hard drive.</p> <ul style="list-style-type: none"> • Test screen. • Test battery functionality. • Ensure that the display is fully functional. • Ensure that cooling fan(s) is(are) functional. 	<p>Laptop should boot up successfully.</p> <p>Laptop should respond to keyboard and mouse input.</p> <p>Display should turn on during boot up. Image should be clear and colours, contrast and brightness correct with no screen-burned images, scratches or cracks (see also below for display devices).</p> <p>Laptop battery able to retain a minimum of 1 hour⁶ of run time; alternatively the battery should be tested to determine that it has a full charge capacity in watt-hours of at least one hour (see appendix VI, testing of laptop batteries).</p>
Keyboards	<p>Connect to computer and ensure that computer and keyboard successfully interface.</p> <p>Test keys for functionality.</p>	<p>Computer should respond to keyboard input.</p> <p>Keyboard should have no missing or non-functioning keys.</p>
Mice	<p>Assess mouse casing, cable and parts.</p> <p>Plug into desktop or laptop to assess functionality.</p>	<p>Mouse should have all parts present (e.g., the rollerball). Computer should respond to mouse input. Visible cursor on screen should not shudder.</p>
Cables and power cords	<p>Assess cable insulation and inspect plugs.</p>	<p>Cabling and plugs should be complete and free of damage, e.g., have no cracked insulation.</p>
Display devices	<p>Plug in display and test the picture quality for pixels, colour, contrast and brightness.</p> <p>Software-based diagnostic testing for display devices are readily available online,⁷ and should be used.</p> <p>Visual inspection for screen burn (in the case of CRTs) or image persistence (in the case of flat screens) and scratches or other damage to screen or housing.</p> <p>Cabling should be inspected and present.</p>	<p>Display devices: the picture should not be fuzzy, have damaged pixels or be too dark. LCD backlights should all function. Colours, brightness, hue and straightness of lines should be considered.</p> <p>The software diagnostic test should be positive.</p> <p>Cabling should be free from damage.</p>

⁴ The power on self test (POST) is automatically engaged when a PC or laptop is switched on. POST is a software based system integral to all PCs and laptops. POST will check that the hardware systems of the computer are functioning, including the hard drive, computer ports, the motherboard and video cards. POST will deliver an audible beep or set of beeps to the refurbisher or operator should any of the hardware systems be faulty. Online guidance exists for better understanding of the beep codes (for example, see www.poweronselftest.com/ and www.computerhope.com/beep.htm).

⁵ Ibid.

⁶ One hour is the minimum charge that a battery should hold, although some laptop users may request more usable run time. It should be noted that some end-users will also be able to make use of batteries with less capacity, for example a battery able to hold 40 minutes capacity need not be discarded and could be adequate for user who will normally connect his or her laptop to a reliable electricity supply. For the purposes of this guidance and for export, however, batteries must hold at least a one hour charge.

⁷ See, for example, www.softpedia.com/progDownload/Nokia-Monitor-Test-Download-464.html.

Computing equipment	Functionality tests	Test results
Laser and inkjet printers	Print a test page with the printer in stand-alone mode or connected to a computer or local area network to assess connectivity. On inkjet printers, check that the ink heads are not clogged with dry ink.	A printer should successfully print a test page without jamming or producing smudged or incomplete copy.
Components (removed from equipment) including motherboards, other circuit boards, sound cards, graphics cards, hard drives, power supplies and cords/ cables	Components should be tested for functionality either before removal from the host computer or laptop or by insertion in a test bench computer using diagnostic software or a known working device, as applicable.	Components should be fully functional. Power supplies and cords/ cables should be complete and free of damage, e.g., have no cracked insulation.
<i>(Source: Revised guidance document on the environmentally sound management of used and end-of-life computing equipment, draft October 2013, set out in document UNEP/CHW.11/6/Add.1/Rev.1)</i>		



Photo: Sticker 'gift donation' on non-functional equipment (source: © picture courtesy of the IMPEL network)

4.2.2 How?

Customs may not be empowered under national legislation to undertake samplings and may need to call upon other authorities to undertake this task. But because Customs are on the front line, it is nevertheless important for them to know about this process. Prior to any sampling event, a sampling plan should be prepared. A sampling plan identifies the key information the samples will attempt to show as well as how samples should be collected and analyzed.

Sampling Plan Contents

1. Description: where, who, why, when
2. Responsibilities: who, lab
3. Sampling procedures: how, when, what, where, which standards
4. Laboratory issues: method requirements
5. Calibration procedures
6. Sample custody procedures
7. Shipping requirements and
8. Safety.

Such a sampling plan should be developed in close cooperation with the Competent Authorities, sampling specialists and the laboratory.

Of crucial importance during the sampling process is the safety of the officers involved. Depending on the (suspected) hazardousness of the material, appropriate personal protection equipment should be used. For sampling of most POPs the use of latex gloves, respiration masks and safety glasses are obligatory. Arms and legs have to be covered.

4.2.3 Analysis

In practice, the analysis of the sample will usually be performed by an accredited laboratory. Due to the different sampling requirements and circumstances, it is recommended that the laboratory is involved at an early stage, for instance, at the time of the taking of the sample, and that it provides advice on the types of analyses that should be performed to collect the necessary evidence. Many factors must be taken into account when making this decision, including the physical appearance of the waste or chemical, other information pertaining to the waste or chemical and any legal requirements.

List of some of the more common analytical parameters which may be tested

- Flashpoint
- Corrosivity
- Reactivity
- PCBs
- Volatiles by GC/MS
- Total Organic Halogens

The interpretation of the test results should also be done by experts: in most cases this step will be carried out by the laboratory staff together with technical officers from the involved authorities.

UNEP databank of laboratories analyzing POPs

<http://chm.pops.int/Implementation/GlobalMonitoringPlan/AdditionalResources/databankoflaboratories/tabid/2420/Default.aspx>

Lesson 4.3 Codes and trade names

4.3.1 Introduction

The chemicals and wastes under the conventions are all covered by one of more coding systems. The codes are developed to support the identification of the goods and

provide more information about their characteristics. The codes are developed by states through intergovernmental organisations. The trade names, on the other hand, are developed by the private sector involved in the production of the substances and products.

4.3.2 Wastes codes

The Basel Convention has developed a list of codes corresponding to wastes that are characterized as hazardous wastes (Annex I: Y codes; and Annex VIII: A codes) and codes for wastes that are not covered by the Convention unless they contain material causing them to be considered hazardous (Annex IX: B codes). The codes start either with a Y followed by 1 digit, or an A or a B followed by four digits.

Examples of codes

Y 1: clinical wastes from medical care in hospitals, medical centers and clinics

A1160: waste lead-acid batteries, whole or crushed

A2010: glass from cathode-ray tubes and other activated glass

A2050: waste asbestos

B1130: cleaned spent precious-metal-bearing catalysts

B2020: glass waste in non-dispersible form

B3030: textile waste

Other codes that a Customs officer can come across to identify wastes are:

- OECD codes to be used by OECD member countries for wastes that have no equivalent listing in the Basel Convention or that have a level of control under the OECD Decision that is different from the one required by the Basel Convention (see the OECD decision **C(2001)107/FINAL**, on the control of transboundary movements of wastes destined for recovery operations). [Link to](#)
- EU Regulation codes based on the EC list of wastes to be used by countries belonging to the European Union
- National wastes codes.

The wastes codes under the Basel Convention can assist the Customs officer in identifying the type of waste that is being shipped and to determine whether it is considered as hazardous waste. Whether prior consent should have been given will depend on the type of waste. If codes are used properly, a Y or A code means the PIC procedure normally applies, whilst a B code means the PIC procedure normally does not apply. Using the waste code for profiling purposes is also recommended.

4.3.3 Harmonized System codes

The Harmonized System is a multi-purpose international product nomenclature system developed and maintained by the World Customs Organization (WCO). The system is used as the basis for customs tariffs and for the collection of international trade statistics. It is also used by governments, international organizations and the private sector for many other purposes such as internal taxes, trade policies, monitoring of controlled goods, freight tariffs, transport statistics, quota controls, etc. The HS is thus a universal economic language and code for goods and an indispensable tool for international trade.

One of the stated aims of the Harmonized System is to facilitate the collection, comparison and analysis of international trade statistics. The WCO adopts **recommendations** with a view to reaching the goal of correct and uniform application of the HS by all Contracting Parties to the Harmonized System Convention.

http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs_recommendations.aspx

Under Article 3 of the Harmonized System Convention, Contracting Parties are obligated to make publicly available their import and export trade statistics in terms of the Harmonized System. Moreover, Member administrations and Contracting Parties to the Harmonized System Convention report their import and export trade statistics to the United Nations Statistics Division (UNSD) using the Harmonized System codes.

Therefore, the trade in these chemicals can be monitored, for example, by volume, value, and exporting and importing countries through the trade statistics of each country.

Article 13 of the Rotterdam Convention requires that, when specific HS codes have been assigned to chemicals listed in Annex III, each Party shall ensure that the shipping document for those chemicals bears the HS code when exported. The use of the specific HS codes facilitates the work of Customs Authorities and DNAs in importing and exporting Parties in identifying chemicals subject to the PIC procedure and ensuring that exports are in compliance with the decisions of importing Parties. The WCO has assigned specific HS

codes to most of the chemicals and groups of chemicals in Annex III. These codes, set out in Annex IV of this manual, entered into force on 1 January 2007 as part of HS 2007.

HS codes exist for most wastes and POPs. The correlation between the Harmonized System and selected international conventions including the Basel Convention, the Rotterdam Convention and the Stockholm Convention, are drawn up by the WCO Secretariat in collaboration with the Secretariat of the Conventions, in accordance with instructions received from the Harmonized System Committee. Although the **Interconnection Table** has been examined by the Harmonized System Committee, it is not to be regarded as reflecting classification decisions taken by that Committee; it constitutes a reference published by the WCO Secretariat for the purpose of facilitating the monitoring and control of certain products covered by other international conventions. The table is non-exhaustive and merely indicative and has no legal or official status.

<http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/interconnection-table.aspx>

Besides the legal obligation to use the correct HS codes for most of the chemicals, the codes can be used for identifying and profiling exercises.

4.3.4 Trade names

A trade name, also known as common name, is the name which a business trades under for commercial purposes. The trade name may therefore not be indicative of the nature of the substance or product that is being traded.

For chemicals and POPs, trade names are an important way of identifying and classifying them. These names could also be built in the profiling system as a criterion.

Because of the way wastes are defined under the Basel Convention, no (official) trade names exist.

Examples of Trade Names

Chemical	Synonyms and trade names	Listed under the Rotterdam Convention	Listed under the Stockholm Convention
Aldrin	Aldocit, Aldrec, Aldrex, Aldrex 25, Aldrex 30, Aldrex 40, Aldrin, Aldrite, Aldrosol, Altox, Andrex, Andrex 40, Bangald, Compound 118, Drinox, ENT 15,949, HHDN, Kortofin, Octalene, Rasayaldrin, SD 2794, Seedrin, Tatzin-ho.	X	X
Chlordane	Aspon, Belt, CD 68, Chloriandin, Chlorkil, Chlordane, Chlorindan, Chlorotox, Corodan, Cortilan-neu, Dowchlor, ENT 9932, Gold Crest C-100, HCS 3260, Kypchlor, M140, M410, NSC 8931, Niran, Octachlor, Octaterr, Ortho-Klor, Prentox, Penticklor, Synklor, Tat chlor 4, Topichlor, Toxichlor, Veliscol-1068.	X	X
Chlordecone	GC 1189, Kepone, Merex, ENT 16391, Curlone	X	
DDT	Aerosol DDT, Aerosol DL, Aavero-extra, Agritan, Anofex, Antrix, Arkotine, Azotox, Azotox M33, Benzochloryl, Bercema-Aero-Super, Bercema-Spritz-Aktiv, Bercema-BekusaL, Bosan Supra, Bovidermol, Chlorophenothan, Chloropenothane, Chloro phenotan, Clorophenotoxum, Citox, Clofenotane, Cyklodyn, p, p'-DDT, Dedelo, Deoval, Detox, Detoxan, Dibovan, Dibovin, Dicophane, Dicophaner, Didigam, Didimac, Diphenyl-trichloroethane, Dodat, Duaryl, Dykol, Dynocid, ENT-1506, Estonate, Gamadyn, Genitox, Gesafid, Gesapon, Gesarex, Gesarol, Guesapon, Gyron, Haverro-extra, Hildit, Holus, Hylotox 59, Ipsotox, Ipsotox Special, Ivoran, Ixodex, Kopsol, Lidykol, Meryl N, Micro DDT 75, Mutoxan, Mutoxin, Nera-emulze, Nerafum, Neracaine (Nerakain), Neratidine (Neratidin), Neocid, Neocidol, NSC 8939, OMS 16, Parachlorocidum, Pararyl, PEB1, Pentachlorin, Pentaidol, Pentech, Penticidum, Pilusan, Ppzeidan, R50, Rukseam, Santobane, Solomitol, Tech DDT, Tafidex, Tridynol, Zeidane, Zerdane.	X	X
Dieldrin	Aldrin epoxide, Alvit, Alvit 55, Compound 497, Dieldrex, Dieldrin, Dieldrite, Dieldrix, Dielmoth, Dorytox, ENT-16225, HEOD, Illoxol, Insectlack, Kombi-Albertan, Moth Snub D, Octalox, Panoram D-31, Quintox, Red Shield, SD 3417, Termitox.	X	X
Endosulfan	Beosit, Chlortiepin, Cycloclan, Devisulphan, Endocel, Endosol, Hildan, Insectophene, Malix, Rasayansulfan, Thifor, Thimul, Thiodan, Thionex, Thiosulfan	X	X
Endrin	Compound 269, EN 57, Endrex, Endricol, Experimental insecticide 269, Hexadrin, Isodrin Epoxide, Mendrin, Nendrin, Oktanex, SD 3419, Stardrin, Stardrin 20.	X	
Heptachlor	Aahepta, Agroceres, Arbinex 30 TN, Baskalor, Drinox, Drinox H-34, E 3314, ENT 15, 152, GPKh, Heptachlorane, Heptagran, Heptagranox, Heptamak, Heptamul, Heptasol, Heptox, ISTD 8930, Soleptax, Rhodiachlor, Velsicol 104, Velsicol.	X	X
Hexabromobiphenyl	FireMaster(R) BP-6 FireMaster(R) FF-1	X	
Hexachlorobenzene (HCB)	Amatin, Amaticin, Anticarie, Bent-cure, Bent-no-more, BHC, Bunt-cure, Bunt-no-more, Ceku C.B, Co-op hexa, Granox, HCB, HCB (pesticide), Hexachlorobenzene, No Bunt Liquid, Pentachlorophenyl chloride, Perchlorobenzene, Sanocide, Smut-go, Sniecotox, Zaprawa.	X	X
Alpha hexachlorocyclohexane	Alpha-HCH is produced unintentionally during the production of Lindane	X	X
Beta hexachlorocyclohexane	Alpha-HCH is produced unintentionally during the production of Lindane	X	X

Lindane	Agrocide, Aparasin, Arbitex, BBH, Ben-hex, Bentox, Celanex, Chloresene, Dvoran, Dol, Entomoxan, Exagamma, Forlin, Gallogama, Gamaphex, Gammalin, Gammex, Gammexane, Hexa, Hexachloran, Hexaverm, Hexicide, Isotos, Kwell, Lendine, Lentox, Linafor, Lindafor, Lindagam, Lindatox, Lintox, Lorexane, Nexit, Noco-chloran, Novigam, Omnitox, Quellada, Silvanol, Tri-6, Vitron.	X	X
Mirex	Dechlorane, Dechlorane 4070, Dodecachlor, Dodecachlorooctathydro-1,2,3,4-metheno-2H-cyclobuta[cd]pentalene, Dodecaclor, ENT 25719, Ferriamicide, GC 1283, Hexachlorocyclopentadiene dimmer, Mirex, NSC 124102, NSC 26107, NSC 37656, Paramex, Perchlorodécone, Perchlorodihomocubane.	X	
Toxaphene	Agricide maggot killer, Alltex, Alltox, Anatox, Attac 4-2, Attac 4-4, Attac 6, Attac 6-3, Attac 8, Camphechlor (ISO), camphechlor, Camphochlor, Camphochlor, Canfeclor, Chemphene M5055, chlorinated camphene, Chloro-camphene, Clor chem T-590, Compound 3956, Crestoxo, cristo-xo 90, Estonox, Fasco-Terpene, Geniphene, Gy-Phene, Hercules 3956, Hercules toxaphene Huilex, kamfochlor, M 5055, Melipax, Motox, octachlorocamphene, pctachlorocamphene, PCC, PChk, PChk (insecticide), Penphene, Phenacide, Phenatox, Phenphane, PKhf, Polychlorocamphene, Strobane-T, Strobane T-90, Toxadust, Toxakil, Toxon 63, Toxyphen, Vertac 90%.	X	X
PCBs	Abestol, Aceclor, Adkarel, ALC, Apirolio, Apirorio, Areclor, Arochlor, Arochlors, Aroclor/Arochlor(s), Arubren, Asbestol, Ask/Askarel/Askael, Auxol, Bakola, Biclolor, Blacol, Biphenyl, Clophen, Cloresil, Clophen, Chloretol, Chloroextol, Chlorfin, Chlorinal/Chlorinol, Chlorinated biphenyl, Chlorinated diphenyl, Chlorobiphenyl, Chlorodiphenyl, Chlorofen, Chlorpen, Chorexto, Chorinol, Clophen/Clophenharz, Cloresil, Clorinal, Clorpen, Crophene, Decachlorodiphenyl, Delofet 0-2, Delor, Delor/Del, Delorene, Delorit, Delotherm DK/DH, Diaclor, Diarol, Dicolor, Diconal, Disconon, DK, Ducanol, Duconol, Dykanol, Dyknol, Educarel, EEC-18, Elaol, Electophenyl, Elemex, Elinol, Eucarel, Euracel, Fenchlor, Fenclor, Fenocloro, Gilotherm, Hexol, Hivar, Hydolor, Hydol, Hydrol, Hyrol, Hyvol, Inclor, Inertenn, Inertenn, Kanechlor, Kaneclor, Kennechlor, Leromoll, Magvar, MCS 1489, Montar, Monter, Nepoli, Napolin, Niren, NoFlamol, No-Flamol, Olex-sf-d, Orophene, Pheaochlor, Pheneclor, Phenochlor, Plastivar, Polychlorinated diphenyl, Polychlorinated diphenyls, Polychlorobiphenyl, Polychlorodiphenyl, Prodelec, Pydraul, Pyraclor, Pyralene, Pyranol, Pyroclor, Pyrochlor, Pyronol, Safe-T-Kuhl, Saf-T-Kohl, Saf-T-Kuhl, Santosol, Santotherm, Santothern, Santovac, Sat-T-America, Siclonyl, Solvol, Sorol, Soval, Sovol, Tarnol, Terpheny-chlore, Thermanal, Therminol, Turbinol.	X	X
Penta-chlorobenzene	None	X	
Commercial octa bromodi-phenyl ether	To be determined. Guidelines are being prepared for Customs to identify POPs. The guidelines will be available shortly and will be reflected in the elearning tool as soon as available.	X	
Commercial penta bro-modiphenyl ether	To be determined. Guidelines are being prepared for Customs to identify POPs. The guidelines will be available shortly and will be reflected in the elearning tool as soon as available.	X	
PFOS / PFOS-F	To be determined. Guidelines are being prepared for Customs to identify POPs. The guidelines will be available shortly and will be reflected in the elearning tool as soon as available.	X	



Photo: Velsicol as trade name for heptachlor (source: ©FAO)



Photo: Trade names for aldrin and dieldrin (source: ©FAO)

4.3.5 CAS numbers

The Chemical Abstract Service is part of the American Chemical Society and maintains a database of chemical compounds and sequences. The CAS database currently contains over 55 million different organic and inorganic chemical compounds. Each CAS entry is identified by their CAS Registry Number or CAS Number for short.

CAS Numbers are up to 10 digits long using the format xxxxxx-yy-z. They are assigned to a compound as the CAS registers a new compound. The number has no significance to the chemistry, structure or chemical nature of the molecule.

All POPs and PIC chemicals have an assigned **CAS number or numbers**.

<http://www.cas.org/content/chemical-substances>

Again these numbers can help during the identification process to determine which chemicals are being traded.

Lesson 4.4 Safety issues

4.4.1 Introduction

The safety of the Customs officer and surroundings is a high priority when monitoring legal trade in chemicals and wastes. The exact composition of a material is not always clear; clues that can support the classification of the content of a shipment and thus evaluate potential risks should therefore be closely watched. Several

sources exist to gain more knowledge about the possible hazards of specific chemicals and wastes moved across borders. Once the information concerning a shipment has been gathered, concrete safety measures may be taken during any physical inspection.

4.4.2 Safety information systems

There are various systems and sources available that provide information about safety and precautions issues related to hazardous substances.

A. UN-class / UN numbers

Purpose

Through its “**UN Recommendations on the Transport of Dangerous Goods**”, the United Nations has developed requirements to ensure the safety of people, property and the environment associated with the *transport of*, inter alia, hazardous chemicals and wastes. The recommendations include a system of classifying dangerous goods by type of risk: 9 hazardous *UN classes* are specified (explosives, gases, flammable liquids, flammable solids, oxidizing substances and organic peroxides, toxic and infectious substances, radioactive material, corrosive substances, and lastly, Miscellaneous dangerous substances and articles), and four-digit *UN numbers* or UN IDs have been developed to identify more specifically certain types of hazardous substances and articles within each UN class.

http://www.unece.org/trans/danger/publi/unrec/12_e.html

Use

All the hazardous characteristics identified by the Basel Convention are associated with a UN class, as specified in Annex III to the Convention. Some hazardous substances have their own UN numbers (e.g. acrylamide has UN2074), while other numbers sometimes refer to groups of chemicals, wastes or products with similar properties (e.g. flammable liquid, not otherwise specified, have UN1993). A chemical in its solid state may receive a different UN number than the liquid phase if their hazardous properties differ significantly; substances with different levels of purity (or concentration in solution) may also receive different UN numbers. There is no UN number allocated to non-hazardous substances.

Evidence relevance

In a transport situation, placards on the transport medium or labels on the packaging can provide information about the contents. Together with other relevant paperwork, this will help determine if the shipment or trade is legitimate or not.

It will also support the decision whether or not to open the container or packaging and under which conditions – for instance for a visual screening or to take samples.

B. Globally harmonized system (GHS)

Purpose

The “**Globally Harmonized System of Classification and Labelling of Chemicals (GHS)**” is an interna-

tionally-harmonized approach to the classification and labelling of chemicals (whether subject to transport or not). It aims at ensuring that *information on physical hazards and toxicity* from chemicals are available so as to enhance the protection of human health and the environment during the handling, transport and use of these chemicals. The GHS also provides a basis for harmonization of rules and regulations on chemicals at national, regional and worldwide levels, an important factor for trade facilitation.

http://www.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html





The GHS includes:





- Harmonized criteria for the *classification* of substances and mixtures according to their physical, health and environmental hazards; and
- Harmonized *hazard communication* elements (including requirements for labels and safety data sheets)

Other relevant legal international instruments



The following legal instruments complement the GHS when substances are transported:

- International Maritime Dangerous Goods Code (IMDG Code) - The IMDG Code implements the GHS for the maritime sector. It is intended for use not only by the mariner but also by all those involved in industries and services connected with shipping. The Code contains advice on terminology, packaging, labelling, placarding, markings, stowage, segregation, handling, and emergency response.

Class	Symbol
Class 1: Explosives	
Class 2: Gases	
Class 2.1: Flammable gases	
Class 2.2: Non-flammable, non-toxic gases	
Class 2.3: Toxic gases	

Class 3: Flammable liquids	
Class 4: Flammable solids; substances liable to spontaneous combustion; substances which, in contact with water, emit flammable gases	
Class 4.1: Flammable solids, self-reactive substances and desensitized explosives	
Class 4.2: Substances liable to spontaneous combustion	
Class 4.3: Substances which, in contact with water, emit flammable gases	
Class 5: Oxidizing substances and organic peroxides	

<p>Class 5.1: Oxidizing substances</p>	
<p>Class 5.2: Organic peroxides</p>	
<p>Class 6: Toxic and infectious substances</p>	
<p>Class 6.1: Toxic substances</p>	
<p>Class 6.2: Infectious substances</p>	
<p>Class 7: Radioactive material</p>	

Class 8: Corrosive substances	
Class 9: Miscellaneous dangerous substances and articles	

- (b) ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI);
- (c) European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR);
- (d) Regulations concerning the International Transport of Dangerous Goods by Rail (RID);
- (e) European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN).

Use

In principle the GHS covers all hazardous chemicals. The need for GHS labels and/or Safety Data Sheets is expected to vary by product category or stage in the chemical's lifecycle: from research/production to end use. For example, pharmaceuticals, food additives, cosmetics and pesticide residues in food will not be covered by the GHS at the point of consumption, but will be covered where workers may be exposed (workplaces) and during their transport. The exact requirements for labels and Safety Data Sheets will continue to be defined in national regulations.

Application of the GHS to classify and label wastes is in principle only possible when:

- The waste is sufficiently characterized, i.e., the composition of the waste considered for classification is known and well documented. With due care, exception may be made for inert and other components of the waste that are known to be non-hazardous;

- From the characterization of the waste there is sufficient evidence that components of the waste will not interact to form (a) new component(s) or cause (b) synergistic effect(s);
- The waste composition is stable and will not vary appreciably over time;
- The waste composition is homogeneous throughout the total volume of the waste considered; and
- Once characterized and documented, no other or similar wastes have been added to the characterized waste unless from documented characterization of the waste to be added it can be concluded that both wastes are substantially equivalent with respect to their composition.

Considering the above, it is therefore generally not possible to use the GHS to assign a particular hazard classification to a waste.

Evidence relevance

GHS can be used as an input for a risk assessment process. It will support the decision whether or not to open the container or packaging and under which conditions – for instance for a visual screening or to take samples.

C. Safety information sheets

Purpose

Article 13 of the Rotterdam Convention requires that in case of exports of chemicals listed in Annex III and banned or severely restricted at the national level, a safety data sheet that follows an internationally recognized format, containing the most up-to-date information, is sent to each importer. A Safety Data Sheet (SDS), also known as an MSDS (Material Safety Data Sheet) or a PSDS (Product Safety Data Sheet) is a form with data regarding the properties of a particular substance, such as physical data (melting point, boiling point, flash point, etc.), toxicity, health effects, first aid, reactivity, storage, disposal, protective equipment, and spill-handling procedures. They are designed to provide both workers and emergency personnel with the proper procedures for handling or working with a particular substance. Safety Data Sheets are one of the key tools in hazard communication. A good Safety Data Sheet provides the user with the information needed to carry out a suitable risk assessment for specific applications. Safety Data Sheets are published under several names, including:

International chemical safety card (ICSC)

(An International Chemical Safety Card provides essential health and safety information on chemicals to promote their safe use. On the cards, information is included on the intrinsic hazards of specific chemicals together with first-aid and fire-fighting measures, and information about precautions for spillage, disposal, storage, packaging, labelling and transport. ICSCs have no legal status and may not reflect in all cases the detailed requirements included in national legislation. The ICSC is designed to complement a Material Safety Data Sheet, and to be used by individual workers rather than safety specialists.

<http://www.inchem.org/pages/icsc.html>

- **Chemical safety card** (<http://www.cdc.gov/niosh/ipcsneng/neng0000.html%20>)
- Chemical info-sheet
- **Material safety data sheet** <http://www.ilpi.com/msds/#Internet> and <http://siri.org/msds/>
- **Product safety data sheet** <http://data.energizer.com/Static.aspx?Name=ProductSafety>
- **Health and safety data** <http://ntp.niehs.nih.gov/index.cfm>

If these documents do not accompany the transport itself, the exporter or importer should be able to provide the Customs officer this information.

Use

The SDS should accompany the transport of Annex III chemicals and chemicals banned or severely restricted at the national level under the Rotterdam convention. The Basel Convention does not specifically refer to MSDS. In many cases a MSDS refers only to a product or a hazardous chemical, and not to a waste. A waste can expose other hazardous characteristics than in the product phase – for example due to contamination with other (unknown) substances, expiration of substances, history of the waste or a mixture of wastes. Using the information on a MSDS to identify and classify waste is therefore not recommended, unless the MSDS is specifically drafted for that specific waste stream.

Evidence relevance

In a transport situation, placards on the transport medium or labels on the packaging can provide information about the contents. Together with other relevant paperwork, this will help determine if the shipment or trade is legitimate or not.

It will also support the decision as whether or not to open a shipment and under what conditions – for instance for a visual screening or to take samples.

4.4.3 Safety of the Customs officer

• Personal protection equipment

Depending on the kind of physical examination, the Customs officer needs to use personal protection equipment.

Basic equipment would be:

- Safety vest or jacket for visibility
- Safety helmet
- Safety gloves
- Safety shoes or boots
- Safety clothes

If hazardous substances are likely to be present:

- Appropriate chemical clothing based upon the suspected chemical hazard.
- Steel-toed, chemical-proof boots.

- Appropriate chemical gloves based upon the suspected chemical hazard.
- Several pairs of surgical gloves.
- A Self-Contained Breathing Apparatus with a full 60-minute air bottle.



Photo: Inspection of a shipment by officers wearing protective equipment (Source: © Huib Van Westen, Human Environment and Transport Inspectorate, the Netherlands)

- **Radiation**

Some loads, such as metal scrap, might contain radioactive materials. It is recommended to screen the container beforehand with a Geiger teller or other equipment suitable to measure radiation.

- **Fumigated containers**



Photo: sticker indicating a fumigated container (source: © Nancy Isarin)

- **Loading methods**

Watch out for unstable loads. Some loads may have moved during transport, and may fall out when opening the container. In some cases, containers are loaded while being placed upright; for example with metal scrap. If these containers are opened, the material can fall out and injure the Customs officer. The use of a container chain is therefore always recommended. If X-ray scans are available, the container could be scanned first to see how it is loaded.

- **Confined space**

A confined space is defined as any space which by design has limited openings for entry and exit; and unfavourable natural ventilation which could contain or produce dangerous air contaminants. Examples of confined spaces include trailers, holds of ships, storage tanks and process vessels, all of which may be encountered by Customs officers. Officers can keep themselves and others safe at a scene if they follow and do not exceed the limits of their training. Injuries and damage may have already occurred prior to the officer's arrival. It is the officer's responsibility to prevent further injuries or damage by keeping themselves and others safe and awaiting assistance.

Under no circumstances should an officer without proper training and equipment enter a confined space. When encountering a suspected hazardous wastes crime scene, approach from an upwind direction, and remain a reasonably safe distance away from a potential release. Stabilize the situation until someone with more training arrives and then follow their direction.

- **Pressure**

Containers or drums can be under pressure. Take note of the physical state of a container. Always open a drum or container slowly, so that the pressure can adjust to atmospheric pressure.



Photo: examples of drums under pressure (source: © Nancy Isarin)

- **Tank containers**

Physical inspection of tank containers (with liquid wastes, e.g. waste oil, waste solvents) requires specific knowledge and skills.

- **Wind direction**

If performing an inspection outside, work up-wind as much as possible.

Do not take action unless you have been trained in handling hazardous substances. Improper action may have devastating health effects and compromise the investigation.

Unless you have proper training:

- Do not open trailer doors of trucks suspected of containing hazardous substances;
- Do not open tanks, drums, or other containers that may contain hazardous substances;
- Do not presume that what is marked on a label, drum or container is what is inside. (Illegal traffickers often 'cocktail' or mix hazardous wastes with other materials.)

- Do not enter confined spaces that may contain hazardous substances.

4.5 Conclusion

There are various ways to identify hazardous chemicals and wastes that are subject to the control measures under the three conventions. The administrative examination should focus on who is involved, the origin and destination of the chemicals or waste, the description and the composition of the load. Important indicators are for example: HS codes, waste codes and trade names. A visual screening, labels, packaging and appearance all provide information that helps the Customs officer with the identification of the load. Sampling and testing are also an option, although it is strongly recommended that these be performed by specialists.

It needs to be stressed that during the identification of the load, the safety of the Customs officers and others is of paramount importance. UN, GHS and IMDG codes as well as data information sheets give information about possible hazardous characteristics of the load, which should be taken into account. Before performing a visual inspection of the content of a container, relevant safety issues should be taken into account.

MODULE FIVE

**Dealing with suspicious
or illegal trade/traffic**

Dealing with suspicious or illegal trade/traffic

About this module

In this module the Customs officer will learn about the steps that could be taken in case he/she comes across a possible illegal shipment of hazardous chemicals or wastes, including detaining the load, storing it and gathering evidence. Further the module will explain what may thereafter happen to the illegal load.

Upon completion of this module, Customs will be able to:

- Understand what initial actions to take once a shipment appears to be illegal;
- Understand what evidence to gather and why; and
- Understand what key steps may, or should, be taken as a result of an illegal shipment.

Resources

Name	Where to find
Basel Convention	
Illegal traffic under the Basel Convention	http://www.basel.int/Portals/4/Basel%20Convention/docs/pub/leaflets/leaflet-illegtraf-2010-en.pdf
Instruction manual on the prosecution of illegal traffic in hazardous wastes	http://www.basel.int/TheConvention/Publications/GuidanceManuals/tabid/2364/Default.aspx
Guidance Elements for Detection, Prevention and Control of Illegal Traffic in Hazardous Wastes	http://archive.basel.int/legalmatters/illegtraffic/ge_e.doc

Introduction

The administrative examination and visual screening as part of the investigation will lead to one of the following conclusions: either the movement or trade is considered legal or it is suspected to be illegal. This module will deal with the next steps that may or must be taken by Customs.

Lesson 5.1 What to do?

What Customs should do when faced with a possible illegal shipment depends very much on the powers entrusted to them under the applicable rules and regulations. The authority to control documents, to stop, open and physically inspect vehicles/containers, and to detain shipments for further investigation seems to

be commonplace. On the other hand, Customs may not have the authority to take administrative, civil or criminal investigation/enforcement measures, for instance taking samples or gathering additional evidence. The national legal and institutional framework also specifies the responsibilities of other relevant authorities and may clarify how such authorities should cooperate.

For more information on cooperation, see lessons 6.1 and 6.2

5.1.1 Detaining the shipment

Pending the outcome of an investigation, the shipment may be detained in order to avoid further transportation of the suspicious load into the country or out of the country. Detaining a container has financial consequences and may be seen as disrupting legitimate trade. It is therefore important that the various stakeholders concerned (i.e. the exporter or importer, the shipping line, shipping agent, port authority, handling companies) be, if possible, informed about this action; for example by issuing a 'stop notice'.

5.1.2 Storing the load

During the time of the investigation, the load should be stored in a safe and protected area where it cannot harm human health and the environment and where evidence cannot be tampered with. Generally, it is only with the explicit approval of the authority that ordered the detainment that a shipment can be released.

As stated in lesson 4.1, the offloading of the container followed by the visual inspection and storage depends on how the container is transported: by vessel, truck or train. Port and train terminals are expected to provide the required storage facilities at the points of loading and offloading. In case the container is being transported by truck, it could be required to have the container moved (preferably under escort) to an appropriate location to perform the inspection and store the load safely.

5.1.3 Evidence gathering and case documentation

The gathering of evidence aims first to support a decision by the responsible authority with respect to the suspicious shipment and whether to allow the import, transit or export to proceed or not. Secondly, in the event the shipment is deemed illegal, the investigation aims at identifying the various elements associated with the shipment: the nature of the shipment, the stakeholders involved (States, individuals, companies) and where

the responsibilities may lie. This latter point is especially important when it comes to the financial consequences of the illegal trade (i.e. who is to cover the costs for: storing a load, taking it back or its disposal). The third aim is to collect as much evidence as possible, keeping in mind possible future steps: the take-back of the shipment by the exporter or its environmentally sound disposal in the case of hazardous wastes; and possible administrative, civil or criminal proceedings.

It is important to collect and report as much relevant information as possible. Elements to be gathered may include:

- A written report of the findings: describe all the steps of the investigation and the evidence gathered. It is important to include what triggered the inspection in the first place;
- Originals or copies of documents that contain evidence: shipping documents or information available from the exporter, importer, shipping lines and shipping agent. All the paperwork should be assessed carefully;
- Statements from persons involved or witnesses (e.g. shipping agents, truck drivers, the exporter or importer);
- Photographs or footage of the load itself, labels, placards, container, etc;
- Results of analysis if samples have been taken.

These elements could also be used in the framework of enforcement actions by a prosecutor. Preferably, Customs should develop and implement a procedure on how to store the elements that have been gathered and on how these should be communicated to other authorities.

Lesson 5.2 What are the consequences of illegal shipments?

5.2.1 Introduction

The negative impacts of illegal trade and traffic in hazardous chemicals and wastes are not confined to human health and the environment. Economic crime, and thus economic harm, is usually associated with environmental crimes. Among the three conventions under consideration, only the Basel Convention clearly defines what amounts to "illegal traffic". The Convention also stipulates that Parties consider illegal traffic as criminal:

it requires that Parties take the appropriate measures to prevent and punish this crime, and it also provides for the consequences of a transboundary movement deemed to constitute illegal traffic. The Rotterdam and Stockholm conventions, for their part, do not contain similar provisions. Ultimately, it is the national legal framework that will specify the consequences of illegal trade/traffic in hazardous chemicals and wastes and although such legal frameworks should not go below the minimal requirements contained in a treaty, they may go beyond and, for instance, provide for the consequences of the illegal trade of POPs. Such consequences may be of an administrative, civil or criminal nature.

5.2.2 Wastes

The Basel Convention specifies some of the consequences of transboundary movements deemed to amount to illegal traffic.

A. Exporter or generator's responsibility

In the event of a transboundary movement of hazardous wastes or other wastes deemed to be illegal traffic as the result of conduct on the part of the exporter or generator, the State of export shall ensure that the wastes in question are:

- Taken back by the exporter or the generator or, if necessary, by itself into the State of export; or, if impracticable,
- Otherwise disposed of in accordance with the provisions of this Convention within 30 days from the time the State of export has been informed about the illegal traffic, or such other period of time as States concerned may agree. To this end the Parties concerned shall not oppose, hinder or prevent the return of those wastes to the State of export.

B. Importer or disposer's responsibility

In the event of a transboundary movement of hazardous wastes deemed to be illegal traffic as the result of conduct on the part of the importer or disposer, the State of import shall ensure that the wastes in question are disposed of in an environmentally sound manner by the importer or disposer or, if necessary, by itself within 30 days from the time the illegal traffic has come to the attention of the State of import or such other period of time as the States concerned may agree. To this end, the Parties concerned shall cooperate, as necessary, in the disposal of the wastes in an environmentally sound manner.

C. Unclear assignment of responsibilities

In the event the responsibility for the illegal traffic cannot be assigned either to the exporter or generator or to the importer or disposer, the Parties concerned or other Parties, as appropriate, shall ensure, through cooperation, that the wastes in question are disposed of as soon as possible in an environmentally sound manner either in the State of export or in the State of import or elsewhere, as appropriate.

D. Additional guidance

The Convention does not provide details on how, concretely, the consequences of a potential case of illegal traffic will unfold, beyond the general duty of each State to cooperate with one another. Some individual States have thus developed their own rules and practices in this regard, including for instance with respect to the take back procedure. There is value in a harmonized approach to the implementation of the take back provision. Guidance, including best practices, on the **take back procedure** is expected to be developed by 2015 in the framework of the Basel Convention. <http://www.basel.int/Implementation/LegalMatters/Compliance/GeneralIssuesActivities/Activities201213/IllegalTrafficTakeBackProvision/tabid/3195/Default.aspx>

In the case of a transboundary movement of a shipment that should be taken back by the State of export, the following information may, for instance, be collected by Customs and communicated to the Competent Authority:

- The date of the interception of the shipment and the precise location of the container;
- The name, address and contact details of the individuals or legal entities involved in the export (e.g. exporter, shipping agent, shipping line);
- Specific details of the shipment: type, quantity, container number(s) (including why it is suspected to be waste and its waste classification);
- Name, address and contact details of the consignee in the country of import;
- Details of intended disposal operation (if any or if known);
- Whether there are any shipping documents or photographic evidence;

- Whether there is a Movement Document;
- The reasons why the shipment is deemed to be illegal;
- Evidence that the conduct of the exporter or generator resulted in the case of illegal traffic;
- Evidence that the State requested to take back the shipment is the State of export.

Unofficial return

In practice, Customs or other relevant authorities may decide to order a ship to take back an illegal shipment of waste directly to the country of export without the container being offloaded or without involving the competent authorities of the States concerned. This is referred to as an 'unofficial return'. Such returns may not be in line with the objectives of the Basel Convention as they may lead to new cases of illegal traffic and the dumping of the wastes in contravention to the Convention.

Example: Take back in the EU

Simplified notification process in case of a take back shipment - an example of best practice in the European Union

In case of an illegal shipment of waste within the European Union, the competent authority of the original State of export will require a notification document and movement document with a unique reference number (which must contain the country code of the country where the waste has been detained) to be provided by the competent authority of the State where the waste has been detained (State of transit or State of import). The competent authority of the State of export will liaise with the exporter/waste generator to ensure the notification package is completed. The competent authority of the State of export may require specific information from the investigating officer in the State of detention to ensure the notification package is duly completed: it is thus essential that close communication is maintained between competent authorities.

Once the notification of the proposed movement (take back) of the contentious shipment has been issued by the State of detention, the competent authority of the State of export will acknowledge the notification and circulate to all relevant competent authorities. The competent authorities from all the countries involved are not allowed to object to the return of the waste.

When the movement proposed in the notification has been consented to by all competent authorities, the investigating officer in the State of detention must ensure that the container is re-sealed and that the following details are provided to the competent authority of the State of export:

- The date upon which the waste is released for return
- The seal number on the container
- The name of the ship that will transport the container back to the State of export
- The estimated date and time of arrival of the ship in the State of export.

The person responsible in the State of detention for returning the waste must complete the movement document and inform all the relevant competent authorities three working days before the container is re-shipped. The movement document must accompany the returned waste. The competent authority of the State of export must ensure that the receipt of the returned wastes is acknowledged on the movement document, that the disposal of the waste takes place and that this information is reflected on the movement document, and that a copy of the movement document evidencing that these steps were taken is sent to all the relevant competent authorities.

Source: "Manual on the return of illegal shipments of waste"; IMPEL (2007)

<http://impel.eu/projects/manual-on-the-return-of-illegal-shipments-of-waste>

Example: ship back of shipments in Hong Kong SAR, China

Hong Kong's Strategic Control Scheme on Hazardous Waste

To halt the illegal transboundary movements of hazardous wastes in Hong Kong SAR, China, the Customs and Excise Department has, since 4 July 2007, joined forces with the Environmental Protection Department (EPD) in running a "Strategic Control Scheme on Hazardous Waste". The key feature of the Scheme is to detect and return illegal shipments of hazardous wastes to the exporting States. Detailed procedures and conditions are set out in the laws and Customs administrative rules.

In 2009, the EPD, with the strong support of the Customs and Excise Department, intercepted 61 containers of hazardous wastes deemed to be illegal shipments and successfully returned all of them to the exporting States. This illustrates that the Scheme is highly effective in guarding Hong Kong SAR, China, against illegal transboundary movements of hazardous wastes.

Moreover, 52 pieces of seizure information pertaining to hazardous waste shipments were relayed to UNEP, the RILO A/P and overseas counterparts for intelligence sharing and risk profiling purposes. The EPD will continue to report suspicious shipments and seizures of hazardous wastes to the RILO A/P.

Between March and May 2009, the EPD also participated in a 50-day joint operation codenamed "DEMETER". Launched and coordinated by the World Customs Organization, this operation aimed at combating illegal transboundary movements of wastes at sea between Europe, Asia-Pacific and Africa. Acting on the information provided by the Customs Administrations in Europe, the EPD examined 26 suspicious waste containers and no irregularities were detected.

Source: "Customs and Excise Department - Controlling Officer's Environmental Report 2009", Hong Kong Environmental Protection Department (2009). http://www.epd.gov.hk/epd/english/how_help/tools_epr/files/C&ED_er2009e.pdf

5.2.3 Other consequences

The national legal framework can provide for other consequences in cases of illegal trade/traffic, bearing in mind that, under the Basel Convention, illegal traffic is to be considered a crime. Prosecuting the offender is an important step in the enforcement chain. Successful prosecution of environmental crimes has to be achieved through the cooperation of multiple agencies nationally and internationally, bringing together different enforcement approaches and varying levels of available powers. The investigation of a case of illegal traffic of wastes or chemicals may involve various Competent Authorities of the countries of export and of import, Customs agencies and police services. Cases may be linked to other crimes and also organized crime through the generation of substantial income from illegal trade (a prime driver for the crime). This complex dynamic is amplified by possible language barriers and the fact that information, witnesses or even suspects may be located in a different country.

In case of an illegal movement of chemicals or wastes, the countries involved will need to determine where criminal procedures will be initiated: the country of export, the country of transit or the country of import.

It is the role of law enforcement authorities, for instance possibly Customs, to collect and provide evidence that will support an enforcement procedure, whether it is of an administrative, civil or criminal nature.

Guidance on the prosecution of illegal traffic of wastes has been developed by the Parties to the Basel Convention. <http://www.basel.int/TheConvention/Publications/GuidanceManuals/tabid/2364/Default.aspx>

5.3 Conclusion

When a Customs officer is confronted with a possible illegal shipment of hazardous chemicals or wastes, there are some crucial points to be taken into account. First, to secure the potentially illegally shipped cargo by stopping it and moving it to a secure area for detention. Second, to build the case by gathering administrative and physical evidence and contacting involved players. A well documented case is essential in view of a possible prosecution, either in the country of export or in the country of import. Contact with the involved authorities in the countries of export and import is very likely throughout the investigation process, in particular if the wastes are to be taken back by the State of export.

MODULE **SIX**

Cooperation

Cooperation

About this module

The module 'Cooperation' will demonstrate the advantages of national and international cooperation in the fight against illegal trade in hazardous chemicals and wastes. The module deals with the various ways inter-agency cooperation can be promoted at the national level. Furthermore, the module elaborates on which organizations and systems are in place to facilitate cooperation and information exchange at the regional and global levels. Lastly it explains the possible involvement of the private sector in facilitating legal trade and combating illegal trafficking.

Upon completion of this module, Customs will be able to:

- Apprehend the roles and responsibilities of the various governmental agencies it may be required to cooperate with;
- Understand how formal inter-agency cooperation at the national level can be promoted and what the advantages of such cooperation are;
- Identify which organizations and systems are in place to facilitate international cooperation and information exchange; and
- Understand and appreciate the role of the private sector.

Resources

Name	Where to find
Basel Convention	
Fact sheets of organizations and networks focused on preventing and combating the illegal traffic in hazardous and other wastes	http://www.basel.int/Implementation/LegalMatters/IllegalTraffic/InternationalCooperation/tabid/3425/Default.aspx
ENFORCE	http://www.basel.int/Implementation/LegalMatters/IllegalTraffic/Enforce/tabid/3479/Default.aspx
Basel Convention Regional and Coordinating Centres	http://www.basel.int/Portals/4/Basel%20Convention/docs/pub/broch-bcrc-270508.pdf
The Basel Convention Partnerships Programme	http://www.basel.int/Portals/4/Basel%20Convention/docs/pub/leaflets/leafPartn.pdf
The Partnership for Action on Computing Equipment	http://archive.basel.int/pub/leaflets/leafPACE.pdf

Mobile Phone Partnership Initiative	http://archive.basel.int/pub/leaflets/leafMPPI.pdf
Rotterdam Convention	
Guidance to Designated National Authorities on the operation of the Rotterdam Convention	http://www.pic.int/Portals/5/ResourceKit/B_Guidance%20information/a_Guidance%20to%20DNAs/E_DNA%20Guidance_040906.pdf (page 30-31)
Stockholm Convention	
Frequently Asked Questions on the PCBs Elimination Network (PEN)	http://chm.pops.int/Portals/0/download.aspx?d=UNEP-POPS-PCBPEN-GUID-PENFAQ.English.PDF

Introduction

Preventing and combating illegal trade in hazardous chemicals and wastes requires in many cases the cooperation of several enforcement agencies at the national and international levels, for instance in the ports and at the borders. Customs officers are not alone in undertaking this task and they might rely on the relevant national environmental agencies to provide them with the appropriate legal and technical information, equipment and facilities. Similarly, national environment and enforcement agencies often need the support of the Customs agencies to properly enforce the legal frameworks implementing the Basel, Rotterdam and Stockholm conventions.

Obviously it is up to the individual Parties to decide how they will organize themselves internally. This manual only includes suggestions on how to promote cooperation between the involved agencies.

Lesson 6.1 National cooperation

6.1.1 Who is involved and with what rights and responsibilities?

Various agencies, including environmental, public health, agricultural, trade and safety, are involved in regulating and enforcing the laws regarding the import, transit and export of substances, goods or wastes. Through good cooperation and coordination between Customs and these agencies at the national level an adequate response can be formulated to promote the legal and safe trade and to prevent dangerous or unlawful trade. In addition, cooperation with agencies at the international level is also of particular importance.

Customs officers usually have the competence to detain any goods crossing borders, for instance in a shipping container, and have access to relevant data, for instance shipping data. Environmental authorities are expected to have particular legal and technical expertise pertaining to the international trade of specific kinds of chemicals or wastes. They may also have

some competences in the field of the enforcement of environmental legislation. Police services have certain specific competences, such as detaining persons, tactical and strategic investigation skills and access to closed sources of information. Public prosecutors are responsible for the actual prosecution of potential offenders and may lead to a criminal investigation. If authorities wish to ensure that the skills and competences of every relevant agency strengthen one another, appropriate mechanisms may be developed and implemented to organize the effective monitoring and enforcement within a country. Generally speaking, the objectives of preventing and combating illegal traffic are best achieved if they are based on a complete picture of who is involved in the enforcement chain and with what rights and responsibilities.

6.1.2 How can other authorities support Customs?

As a Customs officer you might not have all the technical know-how in relation to chemicals and wastes. It is essential to know which national, regional and even local authorities are involved in matters pertaining to the import, transit and export of chemicals and wastes. In addition to being aware of their role in enforcing legal frameworks regulating the international trade of hazardous chemicals and wastes, Customs officers need to know who to contact in case of doubt, for support or if there is a need for more information. An up-to-date contact list of relevant authorities would therefore be useful to Customs.

These relevant authorities can support you with, for instance:

- Training and capacity building
- Technical and legal information
- Information about licenses and consents
- Identification and classification issues
- Sampling and testing

- Contacting authorities in other countries
- Follow-up, such as the take back procedure or prosecution
- Up- or downstream investigation
- Historical data from previous inspection or enforcement actions.
- Pre-arrival and pre-departure information
- Historical shipping data
- Alert system through profiles in the Customs systems
- Power to detain, open, break seals and inspect containers
- Access to off-loading facilities and equipment and storage areas
- X-ray scanner
- Access to ships, trains or trucks.

6.1.3 How can Customs support other authorities?

Customs officers have access to relevant data concerning import, export and transit of goods. Customs' mandate and legal powers may extend to the following kind of information and activities:

Example of inter-agency collaboration in Hong Kong SAR, China

Inter-agency collaboration Hong Kong SAR, China

The Hong Kong Environmental Protection Department (EDP) has been working closely with Hong Kong Customs and Hong Kong Police in combating illegal transboundary movements of hazardous wastes. From 2007 to 2009, the EPD prosecuted more than 270 illegal traffic cases in this respect. The following collaborative activities have been conducted among EPD, Hong Kong Customs and Hong Kong Police as a regular practice within the Hong Kong SAR, China:

- Convening regular meetings
- Intelligence sharing
- Joint operations and spot
- Investigations
- 24h designated contact points
- Training and seminars

Subject to tight resources constraints, a risk management approach has been adopted in order to assess second-hand/waste shipments and an effective intelligence network is now up and running to improve enforcement efficiency in the front line. Experience shows that close collaboration with overseas' authorities as well as international networks such as "Asia Network for Prevention of Illegal Transboundary Movement of Hazardous Wastes" and "Implementation and Enforcement of Environmental Law (IMPEL)" under the European Union is crucial to control waste imports and exports that necessarily involve enforcement authorities at both ends of any dubious shipments. Partnership programmes with other stakeholders also enhance access to information about the development of relevant trades for strategic planning of enforcement activities.

Source: "**Hong Kong SAR's practice of effective joint enforcement with Customs and police authority**", E-handbook of Good Practice, Asian Network for the Prevention of Illegal Transboundary Movements of Hazardous Wastes (March 2010) http://www.env.go.jp/en/recycle/asian_net/Information_Tools/E-Handbook_Hong_Kong_SAR.pdf

Lesson 6.2 How to organize inter-agency cooperation?

6.2.1 Introduction

There are various ways of setting up inter-agency collaboration: either on an informal basis or on a formal basis. The formal or informal nature of the cooperation will depend on the specificities of the national or local context. Agreeing on a formal basis for cooperation may take more time than establishing informal modes of cooperation. However, formal cooperation has the

advantage of clarity and legal certainty. It also usually means that a higher level of management is involved in the process, with the associated benefit of stability in the joint or shared efforts that are to be undertaken to enforce environmental rules and regulations.

Examples of formal cooperation are: the signing of an agreement between relevant agencies (e.g. a Memorandum of Understanding); the establishment of rules of procedure for communication between relevant authorities; and the adoption of joint-guidelines.

6.2.2 Phases

Useful steps to set up the cooperation between agencies that have responsibilities for the monitoring of chemicals and wastes import, transit and export and the enforcement of associated rules and regulations are to:

- Identify ministries, concerned agencies, and within these organisations the key personnel with (environmental) enforcement responsibilities;
- Establish communication channels;
- Clarify the relevant competences of each agency;
- Discuss and develop means of cooperation;
- Formalize cooperation by agreeing upon, signing and implementing an agreement.

6.2.3 Essential elements of an MOU

If a Party has decided to draft an MOU as a means to formalize collaboration, the content of it will depend on its objective. In some instances, agencies will aim at establishing a framework for cooperation at the strategic level, while in other cases operational cooperation will be the primary objective. An MOU may also be of a long term nature or aim at addressing short term needs. For instance, agencies may partner to undertake one inspection exercise. In that case, the participating agencies will probably form a “task force” and describe when the action will take place and what will be their amplitude. The “task force” prepares an inspection action in the port, the members of the “task force” meet and agree on the details of such an action and specify these in an MOU.

In every case, the MOU should specify the legal bases for cooperation:

- What legal basis specifies the responsibilities of the parties entering the MOU
- What are the specific rights and responsibilities for each party to the MOU in relation to the international trade of hazardous chemicals and wastes
- How are these rights and responsibilities exercised (e.g. geographical, temporal scope)

MOUs focusing on *operational* cooperation will specify, for instance, how to:

- Designate focal points for cooperation and exchange of information
- Develop risk indicators and profiling methods
- Conduct inspections & import/export control measures
- Provide legal and technical support
- Deal with the take back of illegally imported hazardous wastes

MOUs aimed at putting in place *strategic* cooperation will for instance allow partners to:

- Set common priorities
- Develop an enforcement plan
- Ensure that staffs of both agencies are appropriately trained and equipped
- Evaluate the value of the cooperation and update the MOU as needed

Example of a cooperative agreement between Environmental Authorities and Customs: the Netherlands

**Framework agreement for cooperation between the Inspectorate of the
Ministry of Housing, Spatial Planning and the Environment and the
Directorate-General of the Tax Administration of the Ministry of Finance**

The Director-General of the Tax Administration of the Ministry of Finance and the Inspector-General of the Ministry of Housing, Spatial Planning and the Environment:

Whereas:

- The Minister of Housing, Spatial Planning and the Environment is responsible for the policy, implementation and enforcement of the statutory regulations ('the regulations') contained in the annexes to this framework agreement;
- The mandate given by the Minister of Housing, Spatial Planning and the Environment charges the Inspectorate for Housing, Spatial Planning and the Environment with determining the enforcement policy and enforcing the regulations and that to enforce the regulations it cooperates with other enforcement agencies that, additional to the Inspectorate for Housing, Spatial Planning and the Environment, have been designated as supervisory bodies for the regulations concerned;
- The cooperation of the Tax Administration with other enforcement agencies, in this instance with the Inspectorate of the Ministry of Housing, Spatial Planning and the Environment, contributes to fulfilment of its core tasks, i.e. maintaining supervision over and enforcing compliance with fiscal laws and Customs obligations, as well as compliance with non-fiscal Customs laws;
- Cooperation may further stem from specific responsibilities of the Minister of Finance or specific projects where interfaces exist with the policy fields of the Ministry of Housing, Spatial Planning and the Environment;
- It is necessary to agree arrangements for cooperation and for the content, priority, intensity and quality of the performable activities in order to discharge the responsibility for the proper performance of tasks through consultation between the Inspectorate for Housing, Spatial Planning and the Environment and the Tax Administration;
- It is further necessary to agree which information about the activities will be exchanged periodically in order to maintain an overview of the activities undertaken and the result of the activities so as to allow timely adjustment of the policy and/or its implementation,

Parties hereby agree as set forth below:

Article 1 Objective

The Director-General of the Tax Administration and the Inspector-General of Housing, Spatial Planning and the Environment (hereafter 'parties') have entered into this framework agreement to fulfil the objectives described below.

1.1

In consultation with the Tax Administration, the Inspectorate for Housing, Spatial Planning and the Environment shall ensure that instructions are issued properly to the Tax Administration with regard to activities that stem from the regulations mentioned in the annexes to this framework agreement.

1.2

In consultation with the Inspectorate for Housing, Spatial Planning and the Environment, the Tax Administration shall ensure proper performance of the activities assigned to it and feedback on the results of such activities.

Article 2 Structure

2.1

This framework agreement contains general arrangements agreed by parties with regard to their cooperation and sets out frameworks for the contents of the annexes mentioned in article 1.

2.2

Arrangements shall be agreed in the annexes to this framework agreement for each regulation or interrelated cluster of regulations. Annexes shall be added, removed or amended in consultation between and by signature of the annex by the Director of Strategy and Policy or the Head of the Policy Development and Communication Cluster of the Inspectorate for Housing, Spatial Planning and the Environment and the chief of the management team of the Tax or Customs region concerned.

Article 3 Content of arrangements agreed in the annex

3.1

The annexes deal with the following elements:

- Naming of the legislation and of the supervisory tasks and powers of the Tax Administration;
- The way tasks shall be performed (enforcement and handling of violations);
- Planning, evaluation and accountability;
- Information exchange and training;
- Consultation and contact persons.

Article 4 Development and projects

4.1

When warranted by cases parties shall cooperate to promote the development of new working methods and to reduce administrative costs for the business community.

4.2

Parties shall inform each other about specific projects in relation to the aforementioned legislation and shall agree arrangements for the required cooperation.

Article 5 Work instructions

5.1

In agreement with the Inspectorate for Housing, Spatial Planning and the Environment, the Tax Administration shall set down in work instructions the procedures that shall be followed by its employees.

5.2

The Inspectorate for Housing, Spatial Planning and the Environment shall co-initial the above-mentioned work instructions.

Article 6 Planning, finance and control

6.1

Each year the Ministry of Housing, Spatial Planning and the Environment shall set the enforcement priorities that shall be the spearheads for the annual plan objectives of the Tax Administration in respect of the subjects concerned. On this basis parties shall decide in consultation with each other, if possible before 1 October and not later than 1 December of the current calendar year, the annual plan objectives for the coming calendar year. The Tax Administration shall report periodically nationally and, insofar as relevant, for each organisational entity on the progress of activities performed under the regulations in the way described in the annexes.

6.2

Unless otherwise stated in the annex, any costs incurred for matters regulated under this framework agreement shall be divided over parties in the following way:

- Personnel costs: each party shall bear the costs of its own employees;
- Materiel costs: each party shall bear the costs for its own operations;
- Training: parties shall not charge each other any costs for their share in the development of training materials and the supply of instructors;
- Exceptional costs: as and when necessary, parties shall determine and divide each year any exceptional costs, i.e. costs incurred over and above those for the regular performance of tasks.

6.3

Parties shall ensure reliable and complete recording of audits and the results thereof.

Article 7 Consultation and exchange of information

7.1

The Ministry of Housing, Spatial Planning and the Environment shall ensure that the Ministry of Finance is informed at the earliest possible stage about the establishment, amendment or repeal of national and international legislation in the fields of the regulations in the annexes, if and to the extent that the Tax Administration is involved, or if a relationship exists with fiscal or Customs laws. The Customs and Consumer Taxes Department of the Directorate-General for Fiscal Affairs shall act as a coordinator on behalf of the Ministry of Finance.

7.2

The exchange of information, accountability information and information about risk analysis between parties shall take place in accordance with the arrangements set down in this framework agreement and its annexes for each regulation or cluster of regulations.

7.3

Answers to legal questions and information about the interpretation of legislation by the Ministry of Housing, Spatial Planning and the Environment shall be addressed to the Tax Administration/Process and Product Development Centre. Instructions from the Inspectorate for Housing, Spatial Planning and the Environment to the Tax Administration about supervision of the regulations shall be addressed to the responsible regional office. This office shall ensure that the information is made available to the officials charged with implementation. These arrangements shall not affect the direct exchange of information between employees of the Inspectorate for Housing, Spatial Planning and the Environment and units of the Tax Administration, insofar as the information concerns individual cases or special projects.

7.4

If one of the parties receives a request under the Government Information (Public Access) Act that in part concerns information obtained from the other party, the request shall be met in consultation with the other party, insofar as it concerns that particular information.

Article 8 Information and contacts with the media

8.1

Each party shall be responsible for its own legislation for the purpose of providing information to the public and to the business community, both for the introduction of new legislation and with a view to specific circumstances.

8.2

Insofar as information activities and media contacts are maintained with regard to matters regulated under this framework agreement, there shall be liaison between the press officer of the Ministry of Housing, Spatial Planning and the Environment and the press officer of the Ministry of Finance before any contact occurs with the media.

Article 9 Introduction, term and transitional provision

9.1

This framework agreement shall enter into force on 1 April 2009 for an open-ended period of time. On signature this agreement shall supersede the framework agreement signed on 1 April 2004.

9.2

Each party shall have the right to cancel this agreement, subject to written notice of one month, stating the reason for requiring its cancellation.

9.3

Each year the Inspectorate for Housing, Spatial Planning and the Environment and the Tax Administration shall jointly evaluate the text of this framework agreement and the functioning of their cooperation as set out in the annexes.

9.4

This framework agreement and its annexes may be amended at any time as soon as parties have reached agreement on such amendments.

Date and Place

Name

Organization

Signature

Example of inter-agency collaboration: Belgium

Inter-agency collaboration in Belgium

In December 2010, the Belgian Cabinet agreed to a formal collaboration agreement between the environmental authorities, Customs, Police, the Ministry of Justice and the Public Prosecutors Office. Due to an increased political awareness and attention by the media concerning illegal exports of hazardous wastes, it was recognized that collaboration between all relevant authorities was key to tackling this problem. The content of the agreement was negotiated over a period of two years.

Amongst others, the agreement includes the following elements:

- (i) Customs will give increased focus on activities aimed at detecting illegal waste shipments
- (ii) The involved authorities will provide mutual support in terms of training, technical assistance and physical support
- (iii) Information will be exchanged and shared.

A taskforce was established to further elaborate the procedures for inspections, enforcement and prosecution, to agree on joint priorities, to streamline the exchange of information and to share policy positions.

Lesson 6.3 International cooperation

6.3.1 Introduction

Due to the international nature of transboundary movements of hazardous chemicals and wastes, collaboration at the international level is inevitable. This section will introduce some of the international mechanisms in place to collaborate and exchange information between countries. **Fact sheets** on individual entities and organizations engaged in preventing and combating illegal traffic in hazardous and other wastes are available on the website of the Basel Convention.

<http://www.basel.int/Implementation/LegalMatters/IllegalTraffic/InternationalCooperation/tabid/3425/Default.aspx>

6.3.2 Formal collaboration mechanisms at the international level

A. Basel Convention

The Basel Convention requires that its Parties designate two kinds of entities that will have a role at the international level: Focal Points are responsible for sharing information through the Basel Convention Secretariat; Competent Authorities are governmental authorities responsible for receiving the notification of a transboundary movement of hazardous wastes or other wastes and for responding to such a notification. For the purpose of controlling transboundary movements of hazardous and other wastes, Competent Authorities are thus the entities with the primary responsibility under the Convention. The exchange of information between Competent Authorities is crucial to ensure that Parties are equipped with the necessary information to allow them to take informed decisions on the transboundary movement and subsequent management of hazardous wastes. The Competent Authorities can also be contacted by other countries in case of questions or concerns related to potentially illegal transboundary movements of wastes. The Secretariat of the Basel Convention is also mandated to assist Parties upon request in their identification of cases of illegal traffic.

The list of **Focal Points and Competent Authorities** is available at the website of the Basel Convention.

<http://www.basel.int/Countries/CountryContacts/tabid/1342/Default.aspx>

B. Rotterdam Convention

Under the Rotterdam Convention, the Designated National Authority (DNA) plays a crucial role in the implementation of the Convention for the dissemination of information concerning the provisions of the Convention to the relevant government departments as well as to other partners such as export and importing industries and Customs officers. The DNA is also the key contact point for matters related to the Convention for other Parties and the Secretariat.

One important task is to communicate import responses to stakeholders in the country. DNAs are specifically informed of all import responses from all countries that are Parties to the Convention through the PIC Circular every 6 months, and the information is also available at any time on the Convention's website. DNAs are expected to disseminate this information to all relevant agencies that may be involved in the regulation, production and trade of chemicals in the country, e.g. government departments, manufacturers, export industries, etc. This is to enable those entities to take the appropriate actions to ensure that exports do not occur contrary to the import responses of other Parties.

Another important task of the DNA is to send and acknowledge export notifications. When a Party has banned or severely restricted a chemical but continues to export it, the Convention requires that prior to the first shipment after the action or before the first shipment in a calendar year, the DNA must send an export notification to the importing Party. The importing Party must send an acknowledgement that it has received the export notification. This is usually done between DNAs.

The list of **DNAs** is available on the Rotterdam Convention website.

<http://www.pic.int/Countries/CountryContacts/tabid/3282/language/en-US/Default.aspx>

C. Stockholm Convention

In accordance with Article 9 of the Stockholm Convention, each Party shall designate a National Focal Point (NFP) for the exchange of information specified in the article. Non-Party States may also designate such NFPs and are encouraged by the Secretariat to do so.

The list of **NFPs** is available on the Stockholm Convention website.

<http://chm.pops.int/Countries/Contact%20Points/tabid/304/Default.aspx>

D. Regional offices and centres associated with the conventions

The Basel Convention provides for the establishment of Regional Centres for Training and Technology Transfer (**BCRCs**) regarding the management of hazardous and other wastes, and the minimization of their generation. 14 such Centres are therefore part of the institutional framework of the Basel Convention at the regional level. The main purpose of the BCRCs is to assist the Parties they serve in their efforts to implement the Convention. Supporting Parties in their efforts to prevent and combat illegal traffic is part of the BCRCs' mandate.

<http://www.basel.int/Partners/RegionalCentres/DirectorsContactPersons/tabid/1558/Default.aspx>

The Rotterdam Convention works with a range of partners and, in particular, the existing regional entities including **FAO regional offices** and Stockholm and Basel conventions regional centres. The FAO regional and sub-regional offices through the technical officers have supported the Rotterdam Convention Secretariat in developing and delivering technical assistance activities, including awareness raising and training, development of national action plans, thematic activities on

proposals for severely hazardous pesticide formulations, trade related issues and working with individual countries. The regional and sub-regional officers have taken the initiative in following up with a substantive number of countries on progress in the implementation of the national action plans for the Rotterdam Convention. They also promote the ratification of the Convention when working with non-Parties within their regions and sub-regions through their regular work with these countries.

<http://www.pic.int/Partners/RegionalOffices/tabid/1363/language/en-US/Default.aspx>

The Stockholm Convention also calls for the establishment of **regional and subregional centres**. These centres are to provide capacity-building and promote the transfer of technology to assist developing country Parties and Parties with economies in transition to fulfil their obligations under the Stockholm Convention. 15 centres have been designated for a period of 4 years to-date. Six of them are also Basel Convention Regional Centres.

<http://chm.pops.int/Implementation/RegionalCentres/Overview/tabid/425/Default.aspx>



Photo: world map of regional centres under the Stockholm Convention (source: SC website)

E. ENFORCE

The Environmental Network for Optimizing Regulatory Compliance on Illegal Traffic (ENFORCE) was established by the Conference of the Parties to the Basel Convention in 2013. The mission of the Environmental Network for Optimizing Regulatory Compliance on Illegal Traffic (ENFORCE) is through a network of relevant experts, to promote parties' compliance with the provisions of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal pertaining to preventing and combating illegal traffic in hazardous wastes and other wastes through the better implementation and enforcement of national law.

This will be achieved by bringing together existing resources and enhancing and improving cooperation and coordination between relevant entities with a specific mandate to deliver capacity-building activities and tools on preventing and combating illegal traffic.

<http://www.basel.int/Implementation/LegalMatters/IllegalTraffic/Enforce/tabid/3479/Default.aspx>

F. INTERPOL

INTERPOL is the world's largest international police organization, with 190 member countries that facilitates cross-border police co-operation, supports and assists all organizations and authorities whose mission it is to prevent or combat international crime, including environmental crime. INTERPOL has a General Secretariat and seven regional bureaus strategically placed around the world and at the national level, INTERPOL is connected to the National Central Bureau. INTERPOL has developed the Ecomessage system, specifically for the exchange of information related to environmental crime. Law enforcement officers that come across an

illegal shipment of wastes are encouraged to complete the Ecomessage form and submit it to the INTERPOL Environmental Crime Programme, via their National Central Bureau. For more information you can contact: environmentalcrime@interpol.int.

<http://www.interpol.int/Crime-areas/Environmental-crime/Environmental-crime>

G. World Customs Organisation

The **World Customs Organization** also provides a global network for Customs officers. As information and intelligence exchange is one of the pillars of the WCO's enforcement strategy, the WCO has set up a global network of Regional Intelligence Liaison Offices (RILOs). 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 mechanism is supported by the Customs Enforcement Network (CEN), a global data and information-gathering, analysis and communication system for intelligence purposes. The aim of this mechanism is to enhance the effectiveness of global information and intelligence exchange as well as co-operation between all the Customs services tasked with combating transnational crime.

The WCO ENVIRONET, launched in June 2009, is an internet-based global communication tool dedicated to environmental protection. It provides a secure platform for officers from Customs, law enforcement authorities, and international organizations as well as their regional networks, to cooperate with each other and share real-time information in the course of their daily operations. In order to get access to ENVIRONET, you can contact the WCO.

<http://www.wcoomd.org/en.aspx>

Example of international enforcement actions: WCO Operation Demeter

WCO Operation Demeter

Between 23 March and 11 May 2009, Customs administrations of 65 countries participated in Operation Demeter, an enforcement operation targeting the illicit transboundary movement of hazardous and other waste from Europe to countries in the Asia/Pacific and Africa. The primary targets were 16 types of wastes that are most frequently traded and smuggled. Customs officers in more than 300 seaports and other selected locations intensified their risk assessment and profiling. More than 2,000 physical controls were carried out to identify high risk shipments. Participating Customs administrations notified each other of suspicious shipments across continents. They were supported by their national environmental agencies, police forces, the SBC, the EU IMPEL TFS, and 7 WCO Regional Intelligence Liaison Offices (RILOs) from the participating regions. The Operation led to seizures of over 45,641,000 kg plus 1,830 pieces of wastes in 86 reported cases, ranging from metal scrap, household waste, waste tires, and end-of-life vehicles, to non-functioning or "used" electrical and electronic equipment, granite and silicon barrels.

Source: "**Operation Demeter yields tons of illegal shipments of hazardous waste**" Press release World Customs Organization (July 2009) <http://www.wcoomd.org/en/media/newsroom/2009/july/operation-demeter-yields-tons-of-illegal-shipments-of-hazardous-waste.aspx>

6.3.3 Informal cooperation networks

A variety of informal networks and partnerships have been developed at the regional and global levels to prevent and combat the illegal trade in environmentally sensitive goods, for instance hazardous chemicals and wastes. These include inter alia:

A. Green Customs Initiative

The Green Customs Initiative (**GCI**) is an unprecedented informal partnership of international organisations including for instance MEA secretariats, Interpol and WCO cooperating to prevent the illegal trade in environmentally-sensitive commodities - such as ozone depleting substances (ODS), toxic chemical products, hazardous wastes, endangered species and living-modified organisms - and to facilitate their legal trade. Green Customs is designed to complement and enhance existing Customs training efforts under the respective agreements.

<http://www.greencustoms.org>

Example - INECE SESN Inspection Action

INECE SESN Inspection Action

A simultaneous environmental inspection initiative at seaports in June and July 2010 involving authorities from Africa, the Americas, Asia, and Europe resulted in the detection of illegal hazardous and electronic wastes and confirmed the benefits of informal international cooperation to respond to illegal transboundary movement of hazardous wastes through seaports.

Initial results indicate that, of the 72 total targeted inspections conducted during the inspection month, 54% infringed relevant legal frameworks. The illegal waste streams most often encountered during the event were: e-waste wrongly declared as second hand goods, waste batteries wrongly described as plastic or mixed metal scrap, and cathode ray tubes from television and computer monitors wrongly classified as metal scrap. In 19 of the reported cases of infraction, the illegal shipments of waste were returned to the country of origin. In 9 further cases, the detected waste was treated in the country of detection.

More than one dozen countries participated in the International Hazardous Waste Inspections Exercise at Seaports, an initiative coordinated by the International Network for Environmental Compliance and Enforcement's (INECE) Seaport Environmental Security Network (SESN). Involved authorities, which included Customs, environment, police and port officials, conducted inspections at seaports across the globe.

Project participants employed a variety of inspections techniques, including intelligence-led enforcement, at-random inspections, and bilateral information-sharing. Close communication between officials in importing and exporting countries and coordination of agencies at the national level proved to be critically important in detecting and stopping illegal shipments.

Source: "**International Hazardous Waste Inspection Project at Seaports – Results and Recommendations**" INECE Seaport Environmental Security Network (21 December 2010)

http://inece.org/seaport/exercise/INECE_SeaportInspectionProjectOutcomes_22dec.pdf

C. IMPEL

An example of a regional enforcement network is the European Network for the Implementation and Enforcement of Environmental Law (**IMPEL**). This network is committed to contribute to a more effective application of European environmental law by building capacity, raising awareness, sharing good practices, providing guidance and tools, cooperating on enforcement and providing feedback to lawmakers and regulators on the practicabil-

B. INECE

The International Network for Environmental Compliance and Enforcement (INECE) is a global network of environmental compliance and enforcement practitioners dedicated to raising awareness of compliance and enforcement; developing networks for enforcement cooperation; and strengthening capacity to implement and enforce environmental requirements.

Under the umbrella of INECE, the Seaport Environmental Security Network (SESN) has been established. The SESN is an operational network of professionals involved in the inspection and monitoring of transboundary movements of hazardous waste through seaports. SESN participants work together to build capacity, raise awareness, and facilitate enforcement collaboration on ways to detect and control illegal and dangerous transboundary shipments of environmentally-regulated goods through seaports, including hazardous materials, electronic waste, and ozone depleting substances.

www.inece.org

ity and enforceability of environmental legislation. One of the clusters of IMPEL, the IMPEL TFS cluster, focuses solely on the area of transboundary movements of waste. The IMPEL TFS cluster brings together National Contact Points in most EU member countries. Together they perform joint inspection projects throughout the EU, seek collaboration with non-EU countries and share practical experiences, information and best practices.

www.impel.eu

Example - IMPEL TFS Enforcement Actions II project

IMPEL TFS Enforcement Action (2008-2011)

Regulatory authorities from 28 European countries have joined forces to better tackle the problem of illegal waste shipments. Throughout the three-year project, 28 countries reported 26,705 inspections that were executed at random or as target-oriented inspections on roads, in seaports or on rails. Of these, 3,897 concerned trans-frontier shipments of waste. The inspectors discovered that 21% of these shipments were in violation of the European Waste Shipment Regulation. In approximately one third of the cases, the violation resulted from a breach of an export ban or missing notification documents. This type of offense mainly concerned waste electrical or electronic equipment and end-of-life vehicles destined for Africa or (contaminated) plastics and paper waste to Asia. The other observed violations were discrepancies between the paperwork and the actual nature of the shipment as well as non-compliance with related national rules.

Source: Project report “**Enforcement Actions II - Enforcement of EU Waste Shipment Regulation: Learning by doing**”, European Network for the Implementation and Enforcement of Environmental Law (28 April 2011) Link to

<http://impel.eu/wp-content/uploads/2012/01/IMPEL-TFS-EA-II-Project-Final-report-adopted-v1-4.pdf>

D. Asian Network for Prevention of Illegal Transboundary Movement of Hazardous Wastes

The Asian Network for Prevention of Illegal Transboundary Movement of Hazardous Wastes (**AN**) is a Japan-led initiative that brings together countries in the Asian region with the objectives of: 1) sharing information and creating a common understanding on the status of illegal transboundary movements (TBM) of hazardous wastes; 2) assisting countries to take national actions to prevent and control illegal TBM of hazardous wastes; and 3) contributing to development of a common approach for preventing illegal traffic as well as ESM in the region. Annual face-to-face Asian Network workshops have been organized since 2004. 11 countries participate in the network (Brunei, Cambodia, China including Hong Kong SAR, Indonesia, Japan, Malaysia, Philippines, Republic of Korea, Singapore, Thailand, Vietnam) and cooperation has been developed with other regional and global networks (IMPEL TFS and INECE).

http://www.env.go.jp/en/recycle/asian_net/

E. REN project

The Regional Enforcement Network (REN) is a project from UNEP’s Regional Office for Asia and the Pacific that aims at initiating an integrated regional cooperation between countries in North East, South and South East Asia. This improved cooperation will enable the participating countries to gain better control over their import and export of chemicals and wastes by promoting further regional co-operation for the control of trans-boundary movement of those chemicals.

The project establishes improved communication channels for informal information exchange and develops common tools for data management and collaboration, through extending the existing enforcement

networks by integrating control of trans-boundary movements on chemicals covered by the Montreal Protocol, and the Rotterdam, Stockholm and Basel conventions.

Lesson 6.4 Involvement of private partners

6.4.1 Private Actors

The private sector, including manufacturers, disposers, the transport/shipping sector and service industries, plays a fundamental role in achieving the objectives of the conventions. In the case of the Stockholm Convention, the goal of reducing and/or eliminating the production of POPs and their release into the environment will be easier to achieve if investments are made for the development of alternatives. In the case of the Basel Convention, a commitment to the requirement of environmentally sound management will go hand in hand with the development of technologies that will minimize the adverse impact of waste management on human health and the environment. When it comes to controlling the international trade of hazardous chemical and wastes, the private sector also has an important role to play. In the case of transboundary movements of hazardous wastes, both ends of the international trade chain will most likely be industries from the private sector (waste generators or waste disposers) while the carrier of the waste will most likely be a private transport/shipping company.

In a globalized world, it is in the interest of the private sector to benefit from the facilitation of legal trade and from an equal level playing field. Such objectives go hand in hand with the objectives of preventing illegal trafficking and trade in hazardous chemicals and wastes.

Actors in the chemicals, wastes and transport industry all have (pieces of) information that can facilitate legal trade while at the same time providing some indication of possible illegal activities.

Some examples of private actors that are involved in the international trade chain are:

- Producers/generators of goods, chemicals, wastes
- Treatment/disposal facilities
- Brokers and traders
- Shipping lines
- Shipping/booking agents

- Freight forwarder/forwarder/forwarding agent
- Carrier/hauliers
- Port and train terminal facilitators

Creating awareness among the different actors in the international trade chain will contribute to a better understanding of the legislation and therefore a better compliance with the rules pertaining to the transboundary movements of hazardous chemicals and wastes. During the tenth meeting of the Conference of the Parties to the Basel Convention, the Parties to the Convention have highlighted the importance of raising the awareness of all relevant stakeholders, including those in the shipping industry, and waste generators and disposers about illegal traffic in hazardous and other wastes and applicable national legal frameworks.

Example of public awareness campaign in Japan

Public awareness campaign in Japan

In response to the growing demand for recyclable resources and second-hand goods in Asian developing countries, the export of used materials from Japan to these countries has been increasing. However, some cargos of such materials have been shipped back to Japan due to alleged violations of the Basel Convention requirements or of national regulations applicable in importing countries.

The low level of awareness of Japanese exporters' about the requirements of the Basel Convention, coupled with a lack of understanding of existing import restrictions in importing countries, contribute to illicit transboundary movements.

To increase the knowledge of the control procedure for transboundary movements of hazardous wastes under the Basel Convention, annual workshops are organised by the Japanese Ministry of Environment in cooperation with the Ministry of Economy, Trade and Industry. The objectives of these workshops are:

- (i) To raise awareness of the Basel Convention and national waste regulations
- (ii) To enhance understanding of the scope and procedures of the Basel Convention and national waste regulations (the Basel Law and the Waste Management Law)

The target group for these meetings include all the stakeholders that may be involved in the transboundary movement of hazardous waste and other waste, including importers, exporters, as well as waste generators, junk dealers, Customs agents etc.

Source: "**Japan's practice of awareness raising of importers/exporters**", E-handbook of Good Practice, Asian Network for the Prevention of Illegal Transboundary Movements of Hazardous Wastes (March 2010)

http://www.env.go.jp/en/recycle/asian_net/Information_Tools/E-handbook_Japan.pdf

6.4.2 Public-Private Partnerships

Public-Private partnerships allow government officials and private stakeholders to address an issue collectively and more efficiently. Involving public and private entities helps to:

- Tap into a broader pool of expertise and knowledge
- Bring together experts and policy makers to develop guidance and guidelines together, thus

maximizing the use of scarce resources as well as efforts geared towards a common goal

- Increase the acceptance, by the private sector, of guidance and thus its actual impact on the ground.

Under the Basel and Stockholm Conventions, several Public-Private partnerships have been set up. Partnerships can be used to address complex and emerging waste streams by creating a forum under which a range of decision-makers are committed to providing

technically viable options and suggest policy solutions. Partnerships offer a mechanism for enhancing and capitalizing on the dialog and practical interaction between

stakeholders to address particular issues. Often the result is a voluntary action avoiding the initiation legislation or regulation by government.

Examples of public private partnerships: PACE and PEN

Basel Convention - Partnership for Action on Computing Equipment (PACE)

The Partnership for Action on Computing Equipment (**PACE**) is a multi-stakeholder partnership that provides a forum for governments, industry, non-governmental organisations and academia to tackle the environmentally sound management, refurbishment, recycling and disposal of used and end-of-life computing equipment.

The Partnership is intended to increase the environmentally sound management of used and end-of-life computing equipment, taking into account social responsibility and the concept of sustainable development, and promoting the sharing of information on life cycle thinking.

For example they have developed guidelines for the environmentally sound testing, refurbishment and repair of used electric and electronic equipment (UEEE). A guideline on the transboundary movement of UEEE and end of life EEE is currently being developed under the Basel Convention.

<http://www.basel.int/Implementation/PartnershipProgramme/PACE/Overview/tabid/3243/Default.aspx>

Stockholm Convention - PCBs Elimination Network (PEN)

In May 2009, the Conference of the Parties to the Stockholm Convention took the decision to initiate the establishment of a collaborative framework to promote and facilitate information exchange to support the delivery of the obligations of the Stockholm Convention on the environmentally sound management of PCBs. The PCBs Elimination Network (**PEN**) is a voluntary arrangement for information exchange and aims at improved coordination and cooperation among stakeholders from different sectors with an interest in the ESM of PCBs.

According to Annex A part II of the Stockholm Convention, Parties to the Convention are obliged to eliminate equipment and oils containing PCBs from use by 2025 and bring these under environmentally sound waste management by 2028. Main obstacles encountered by developing countries and countries with economies in transition concerning the environmentally sound management (ESM) PCB oils and equipment containing PCBs are lack of capacities, poor inventories, limited resources and inaccessible information.

Efforts to manage PCBs in an environmentally sound manner are already under way. Donor countries and financial institutions, holders of PCBs, NGOs and International Organisations all provide support to developing countries and countries with economies in transition to manage PCB oils and contaminated equipment. However, there is a lack of global coordination and even linkages at the regional level.

In order to harmonize and coordinate these activities and facilitate information exchange, the PEN will:

- Record and disseminate information on the activities of the PEN through the Clearing House Mechanism of the Stockholm Convention;
- Provide a link between members and promote local networking;
- Promote the Stockholm Convention and the achievement of its PCB-related objectives;
- Raise awareness on successful ESM activities;
- Promote the research, development and the transfer of environmentally sound techniques to developing countries;
- Establish annual awards for contribution to the ESM of PCBs using donations from members.

In 2011, the Conference of the Parties to the Stockholm Convention requested the Secretariat to transfer the PEN to other United Nations agencies with a broader mandate to continue the expansion of its undertakings.

<http://chm.pops.int/Implementation/PCBs/PCBsEliminationNetworkPEN/tabid/438/Default.aspx>

Of course these kinds of Public-Private partnerships can also be developed at the national level and aim

in particular at preventing and combating the illegal trade/traffic in hazardous chemicals and wastes.

Example of the UK Environment Agency's work with shipping lines

The UK Environment Agency's work with shipping lines

As part of the Securing Compliant Waste Export Project the UK Environment Agency (EA) has built up working relationships with shipping lines, relevant to the potential illegal export of waste.

In the UK, in approximately 85% (depending on the line) of the cases, the shipping line also facilitates (at an additional cost) the transport of the container from the port to the loading site for the container to be loaded (allowing 3hrs free loading time), and from the loading site back to the port for shipping. Note: this is different in many other countries!

The shipping lines are served with an information notice to provide data for the previous month, and this information includes;

- Booking reference and/or container number(s)
- Customer name (the booking party)
- Customer address (the booking party)
- Loading point or collection point address of the specified container(s) or the booking party if merchant haulage
- A description of the contents (given by booking party)
- The port of dispatch/destination

To ensure that the EA has a realistic and workable amount of data they ask the shipping lines to provide them only with containers which have contents that match certain descriptives. These lists of descriptives are intelligence led.

On receipt of the data the project's Intelligence team analyses the data. Once the formatting has been undertaken the data is then cross referenced with the Environment Agency's internal intelligence system and other database systems. This cross referencing creates 'hits' i.e. sites that cause suspicion, due to what the Environment Agency know about a site/company and what the shipping line data is telling them.

When suspicious sites are identified an action is created for a field intelligence officer to visit the site and when necessary further investigation is undertaken.

6.5 Conclusion

Cooperation and coordination are key principles for effectively preventing and combating illegal practices associated with transboundary movements of hazardous chemicals and wastes. Collaboration at the national, regional and international levels is therefore strongly recommended. At the national level, cooperation can be organised in various ways. A formal basis for cooperation has obvious advantages to bring together the unique skills and competences of the various relevant entities. By combining those forces, an effective

monitoring and enforcement strategy can be developed and implemented.

At the international level, various organizations and systems mechanisms are in place to support and facilitate the exchange of knowledge, capacity building, as well as the sharing of information and intelligence. The involvement of private partners is also an important way for governments and industry to collectively address complex issues. The knowledge and information in the hands of private partners can further enhance the understanding of trade which can be used to optimise a monitoring and enforcement strategy.

ANNEX I

Glossary of terms and abbreviations

Glossary of terms and abbreviations

Basel Convention	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. Adopted in 1989, entered into force in 1992.
Banned chemical	A chemical all uses of which within one or more categories have been prohibited by final regulatory action, in order to protect human health or the environment. It includes a chemical that has been refused approval for first-time use or has been withdrawn by industry either from the domestic market or from further consideration in the domestic approval process and where there is clear evidence that such action has been taken in order to protect human health or the environment. (Article 2 (b) of the Rotterdam Convention)
BAT	Best available techniques.
BCRCs	Basel Convention Regional Centres. Centres established under the Basel Convention to assist developing countries and countries with economies in transition (CEITs), within their own region, to achieve the objectives of the Convention, through training and technology transfer regarding the management of hazardous and other wastes and the minimization of their generation.
(P)BDE	(Poly)brominated diphenyl ethers; compounds used as flame retardants.
BEP	Best environmental practices.
Best available techniques.	Most effective and advanced technique, the environmental impacts of which are limited.
Best Environmental practices	The application of the most appropriate combination of environmental control measures and strategies.
CA	Competent authority under the Basel Convention.
CAS	Chemical abstracts service.
CEN	Customs enforcement network.
CFC	Chlorofluorocarbon; for example used as cooling medium in refrigerators. A category of chemical substances that contributes to the depletion of the ozone layer. Regulated under the Montreal Protocol.
Chemical	A substance whether by itself or in a mixture or preparation and whether manufactured or obtained from nature, not including any living organism. (Article 2 (a) of the Rotterdam Convention)
Chemical Review Committee	The Chemical Review Committee (CRC) is a subsidiary body of the Rotterdam Convention established to review chemicals and pesticide formulations according to the criteria set out by the Convention in Annexes II and IV respectively and make recommendations to the Conference of the Parties for listing such chemicals in Annex III.
Chemicals and wastes conventions	Generic expression to designate the Basel, Rotterdam and Stockholm conventions.

Competent authority	Governmental authority designated by a Party to be responsible for receiving the notification of a transboundary movement of hazardous wastes or other wastes, and any information related to it, and for responding to such a notification (article 2 paragraph 6 of the Basel Convention).
Compliance	Fulfillment by a Party of its obligations under an international agreement.
Conference of the Parties	One of the designations for the supreme body of an international agreement. All three chemicals and wastes conventions are governed by a Conference of the Parties (COP). The COP is composed of all the Parties to the Convention. It meets at regular intervals and keeps under continuous review and evaluation the effective implementation of the Convention.
Convention	One type of legally binding instrument adopted by two or more States.
COP	Conference of the Parties.
CRC	Chemical review committee (Rotterdam Convention).
CRT	Cathode-ray tube.
DDT	Dichlorodiphenyltrichloroethane, a pesticide.
Decision guidance document	Document that provides information that would assist a country in making an import decision on a chemical listed in Annex III to the Rotterdam Convention.
Designated national authority	The focal point in a country for the Rotterdam Convention (Article 4). DNAs can be a person, a specific position, or an office within a government ministry.
DGD	Decision guidance document.
Dioxins	Polychlorinated dibenzo-p-dioxins (PCDD). Dioxins are a class of chemical contaminants that are formed as by-product during combustion processes such as waste incineration and the incineration of chlorine-containing substances such as PVC (polyvinyl chloride). But also during forest fires, backyard trash burning, as well as during some industrial processes such as paper pulp bleaching and herbicide manufacturing.
Disposal	Any operation specified in Annex IV to the Basel Convention: operations which may and operations which do not lead to the possibility of resource recovery, recycling, reclamation, direct re-use or alternative uses of wastes.
DNA	Designated national authority under the Rotterdam Convention.
EA	Environment Agency.
EEE	Electronic and electrical equipment.
Enforcement	The range of procedures and actions taken by a State and its competent authorities to ensure that persons or organizations failing to comply with laws or regulations are brought back into compliance.
Environmentally sound management	Under the Basel Convention: taking all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against adverse effects which may result from such wastes (article 2 paragraph 8).
EPA	Environmental protection agency.
EPD	Environmental protection department.
ESM	Environmentally sound management.
EU	European Union.
E-waste	Waste from electrical and electronic equipment.
FAO	Food and Agriculture Organization of the United Nations. The UN specialized organization for agriculture, forestry, fisheries and rural development. Established in 1945.
Flame retardants	Flame retardants are chemicals used in thermoplastics, thermo sets, textiles and coatings that inhibit or resist the spread of fire.

FP Focal Point	Focal point (Basel Convention). Entity of a Party responsible for receiving and submitting information as provided in articles 13 and 16 of the Convention (article 2 paragraph 7 of the Basel Convention)
Furans	Polychlorinated dibenzofurans (PCDF) are a group of halogenated organic compounds which are toxic environmental pollutants. They are known as teratogens, mutagens, and suspected human carcinogens. PCDF tend to co-occur with polychlorinated dibenzo-p-dioxins (PCDD). PCDF can be formed by pyrolysis or incineration at temperatures below 1200 °C of chlorine containing products, such as PVC, PCB, and other organochlorides, or of non-chlorine containing products in the presence of chlorine donors.
GCI	Green customs initiative.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals.
HKSAR	Hong Kong special administrative region, China.
HS	Harmonized Commodity Description and Coding System in the WCO (or short: Harmonized System).
ICSC	International chemical safety card.
IMPEL	European network for the implementation and enforcement of environmental law.
Implementation	For a Party to an international agreement, all relevant laws, regulations, policies, and other measures and initiatives, that Parties adopt and/or take to meet their obligations under that agreement.
INECE	International network for environmental compliance and enforcement.
INTERPOL	International Criminal Police Organization
NFP	National focal point under the Stockholm Convention.
Management of waste	Collection, transport and disposal of waste, including after-care of disposal sites (article 2 paragraph 2 of the Basel Convention).
MEA	Multilateral environmental agreement.
MEA-REN	The multilateral environmental agreements regional enforcement network.
MOU	Memorandum of understanding.
MSDS	Material safety data sheet.
NGOs	Non-governmental organizations.
OCP	Official contact point under the Rotterdam and Stockholm Conventions.
OECD	The Organisation for Economic Co-operation and Development is an organization of 30 advanced economies in North America, Europe, and the Pacific region that share a commitment to democratic government and a market economy.
Official contact point	Under the Stockholm Convention the official contact point is responsible for the performance of administrative functions and all formal communications under the Convention through their Ministry of Foreign Affairs or their diplomatic missions. Under the Rotterdam Convention the Secretariat communicates with an official contact point of a Party on official issues such as notices regarding participation in meetings of the Conference of the Parties, circulation of the reports of these meetings, proposals for the addition of chemicals to Annex III of the Convention and inclusion in the PIC procedure and the nominations of experts to subsidiary bodies.
PACE	Partnership for Action on Computing Equipment under the Basel Convention.
Party	Refers to a State (or regional economic integration organization such as the European Union) that has ratified, acceded to, or otherwise formally indicated its intent to be bound by an international agreement, and for which the agreement is in force.
PCB	Polychlorinated biphenyl.
PCWG	INTERPOL's Pollution Crime Working Group

PEN	PCBs Elimination Network.
Persistent organic pollutants	Also referred to as POPs. Chemicals that remains intact in the environment for long periods of time. Regulated under the Stockholm Convention.
Persistent organic pollutants review committee	The Persistent Organic Pollutants Review Committee (POPRC) is a subsidiary body to the Stockholm Convention. The objective of the POPRC is to review proposals submitted by Parties to the Convention for listing new chemicals in Annex A, B, and/or C.
Pesticide	Any substance or mixture of substances intended for preventing, destroying or controlling any pest, including vectors of human or animal disease, unwanted species of plants or animals causing harm during or otherwise interfering with the production, processing, storage, transport or marketing of food, agricultural commodities, wood and wood products or animal feedstuffs, or substances which may be administered to animals for the control of insects, arachnids or other pests in or on their bodies.
PFOS	Perfluorooctane sulfonic acid
PFOSF	Perfluorooctane sulfonyl fluoride.
PIC chemicals	Chemicals listed in Annex III of the Rotterdam Convention.
PIC circular	A key document in the implementation of the Rotterdam Convention, both for the operation of the Prior Informed Consent (PIC) procedure and as a mechanism for the exchange of information on hazardous chemicals. It is published in June and December in English, French and Spanish.
PIC procedure	Prior informed consent procedure.
POPs	Persistent organic pollutants.
POPRC	Persistent organic pollutants review committee.
PPP	Public-private partnership.
Prior informed consent	Generic expression given to the procedure that has to be followed in order to obtain the consent of concerned entities prior to taking specific action. Such a procedure is provided under the three chemicals and wastes conventions in the context of the international trade of chemicals and of the transboundary movements of hazardous and other wastes.
PSDS	Product safety data sheet.
Public-private partnership	A cooperative initiative between public (i.e., governmental) and private entities (including businesses, NGOs, etc.) toward a specific goal.
R12	Dichlorodifluoromethane is a colourless gas, and usually sold under the brand name Freon-12. It is a chlorofluorocarbon halomethane (CFC), used as a refrigerant and aerosol spray propellant. Complying with the Montreal Protocol, its manufacture was banned in many other countries in 1994 due to concerns about damage to the ozone layer.
Rotterdam Convention	Rotterdam Convention on the Prior Informed Consent Procedure For Certain Hazardous Chemicals and Pesticides in International Trade. Also referred to as the "PIC Convention." Adopted in 1998, entered into force in 2004.
RILO	Regional intelligence liaison office.
Secretariat	The entity established under an international agreement to, for instance, arrange and service meetings of the governing bodies of that agreement, to manage information, to communicate and cooperate with Parties and other stakeholders, to provide support services (such as legal and technical support, resource mobilization and public relations and outreach) and to carry out a programme of capacity-building to support the implementation of the Convention. Also performs other functions as assigned to it by the agreement and the decisions of the governing body.
SESN	Seaport environmental security network, under the INECE network.
Severely hazardous pesticide formulation	A chemical formulated for pesticidal use that produces severe health or environmental effects observable within a short period of time after single or multiple exposure, under conditions of use (article 2 (d) of the Rotterdam Convention)

Severely restricted chemical	A chemical virtually all use of which within one or more categories has been prohibited by final regulatory action in order to protect human health or the environment, but for which certain specific uses remain allowed. It includes a chemical that has, for virtually all use, been refused for approval or been withdrawn by industry either from the domestic market or from further consideration in the domestic approval process, and where there is clear evidence that such action has been taken in order to protect human health or the environment (article 2 paragraph (c) of the Rotterdam Convention)
Stockholm Convention	Shorthand for the Stockholm Convention on Persistent Organic Pollutants. Adopted in 2001, entered into force in 2004. Also referred to as the "POPs Convention."
Synergies	In the context of the chemicals and wastes conventions, refers to a process to enhance the coordination and cooperation among the Basel, Rotterdam and Stockholm conventions. Synergies pertain to actions taken by Parties at the national and regional levels, actions taken by the secretariats and other organizations to support Parties' synergies efforts, technical issues under the conventions (national reporting, compliance mechanisms and technical and scientific issues), information management and public awareness, administrative issues pertaining to the Secretariats (management, finance), and decision making by the three Conferences of the Parties.
TBM	Transboundary Movement
Transboundary movement	Under the Basel Convention, movement of hazardous or other wastes from an area under the national jurisdiction of one State to or through an area under the national jurisdiction of another State or to or through an area not under the national jurisdiction of any State, provided at least two States are involved in the movement (article 2 paragraph 3 of the Basel Convention).
UN numbers	Four-digit numbers that identify hazardous substances, and articles (such as explosives, flammable liquids, toxic substances, etc.) in the framework of international transport.
Wastes	Under the Basel Convention, substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law (article 2 paragraph 1 of the Base Convention) .
WCO	World Customs Organization.

ANNEX III

Basel convention identification tool for customs

Introduction

The Basel Convention Waste Identification Tool has been developed to enhance the ability of national authorities to check and enforce regulations related to transboundary movements of hazardous wastes and other wastes.

This tool is preliminary guidance and requires further work to complete the relevant information and include all wastes. The wastes features in this version are the ones most treated and are classified by alphabetic order. Besides the appearance of the wastes, the tool also includes information about the classification and waste codes that apply. In some cases examples from mis-declarations (either done intentionally or unintentionally) are included.

The aim of these documents is to give a first indication about the most traded waste streams to officers responsible for monitoring and enforcement waste shipment registration.

The content of this guidance is based on the Waste(s) Watch developed by the European Network for the Implementation and Enforcing of Environmental Law (IMPEL). The content does not necessarily represent the view of the national administrations involved in IMPEL.

No rights can be derived from this Waste Identification Tool.



Asbestos Waste



Description	Asbestos (dusts and fibres).
Colour	Fibres are white, brown or blue.
Physical chemical properties	Solid plates, tubes, etc. or fragments, (mineral) wool or dusty material; naturally occurring fibrous mineral. Material is heat and chemical resistant.
Basel code	A2050
HS Code	Ex 2524
Remarks	
Major uses: The fibres are applied in fabrics used for fireproof garments and curtains, in construction fabrics roofing, paper, insulation and moulded products. Re-use of asbestos (construction) material is prohibited; therefore all removed asbestos has to be considered as waste.	
Examples of mis-declarations	
– Demolition waste	

Batteries (non-hazardous/hazardous)



Description	Used batteries or accumulators.
Colour	Various
Physical chemical properties	Solid or crushed batteries or accumulators. Also waste materials of manufacturing processes of batteries or accumulators.
Basel Code	Non-hazardous: B1090, B4030 (Single use cameras containing batteries not included on list A) Hazardous: A1170, A1180 (Single use cameras containing batteries included on list A)
HS code	Ex 8548 10
Remarks	Distinction between hazardous and non hazardous: lead, Ni-Cd and mercury-containing batteries are considered hazardous. Waste batteries conforming to a specification, excluding those made with lead, cadmium or mercury, whereas the others are considered non-hazardous. Some countries consider all batteries as hazardous wastes, because of electrolytes.
Examples of mis-declarations	

Bituminous materials (non-hazardous/hazardous)



Description	Bituminous materials (asphalt waste) from road construction and maintenance.
Colour	Black.
Physical chemical properties	Solid; greasy, oily, or sticky; possibly containing pieces of asphalt.
Basel Code	Non-hazardous (not containing tar): B2130 Hazardous: A3200
Hs Code	Customs Harmonised Code: Ex 3825
Remarks	
<p>Distinction between hazardous and non hazardous: Bituminous materials (asphalt waste) with a concentration level of Benzol (a) pyrene >50 mg/kg (ppm) is considered hazardous waste.</p> <p>Points of attention:</p> <ul style="list-style-type: none"> • Age and origin • Composition: chemical analysis needed to make distinction 	
Examples of mis-declarations	

Coal-fired power plants fly ash (non-hazardous/hazardous)



Description	Coal-fired power plants fly ash.
Colour	Grey / black.
Physical chemical properties	Powdery; very fine ash: 10-200 micron.
Basel Code	Non-hazardous: B2050 Hazardous: A2060
HS Code	Ex 2621

Remarks

Fly ash from coal fired power plants is normally classified non- hazardous. If in exceptional cases, coal- fired power plants fly ash is hazardous (containing Annex I substances in concentrations sufficient to exhibit Annex III characteristics) it should be classified A2060

Differentiate from hazardous ashes:

Similar optical appearance can be found also in case of some hazardous wastes or wastes requesting notification for other reasons; e.g.:

- Fly ash from municipal waste incineration plants (Y 47)
- Fly ash from hazardous waste incineration/pyrolysis plants, from wood industry or oil firing devices

A4100

- Ashes from coal power plants co-incinerating hazardous wastes A2060
- Dusts and residues from flue gas cleaning in copper smelters A1100

Examples of mis-declarations



Construction and demolition waste (non-hazardous/hazardous, non listed mixture)



Description	(Mixed) construction and demolition waste.
Colour	Various
Physical chemical properties	Physical-chemical properties: solid, mostly inorganic materials in various sizes and shapes.
Basel Code	Non-hazardous : B2040 or non listed Hazardous: not listed
HS Code	Non-hazardous: no specific; 25309000, 25171080 might be used Hazardous : 3825 69 00, Ex 6809, 2621, Ex 2503 00, Ex 2521 00 00, Ex 2827, Ex 2849 20 00, Ex 2530 90, Ex 7001 00
Remarks	

- Depending on level of separation and composition C&D waste is classified as hazardous or not;
- Waste from the demolition of buildings containing principally inorganic constituents: broken concrete, waste gypsum wall-board or plasterboard is considered B2040;
- Untreated construction and demolition waste, where concrete bricks and tiles are mixed with other fractions such as soil and stones, wood or plastic, residues from accidental fires, soils and stones, dredging sludge are considered non-listed.

General

Numerous kinds of building and demolition wastes can be identified, based on the type of (basic) material. In general the types of building and demolition waste can be subdivided into stony, woody (ligneous), metallic and other materials.

B2040 comprises principally inorganic constituents: broken concrete, waste gypsum wallboard or plasterboard; natural stones, terracotta, reinforced concrete; fibre concrete (if proven recent EU production)

Other, more specific types of building and demolition wastes which are discussed separately are:

- B3050: untreated cork and wood waste and scrap;
- B1010: metal and metal alloys wastes in metallic, non-dispersible form.
- B2130: Bituminous material (asphalt waste) from road construction and maintenance, not containing tar (< 50 mg/kg) and A3200: Bituminous material (asphalt waste) from road construction and maintenance, containing tar (> 50 mg/kg);
- AB130: used blasting grit;
- A2050: waste asbestos (dust and fibres);

Criteria

Main criteria for distinguishing these categories are the composition, potential contamination and last operation. Even if in an early process stage (collection) building and demolition wastes are separated and relatively clean, later operations like sorting, crushing, mixing and recovery can lead to mixed building and demolition wastes containing hazardous substances. Mixtures of C&D waste are not listed, notification is required.

Points of attention

Based on these criteria, attention should be paid to the following properties of the waste and/or aspects:

- origin c.q. last operation;
- level of separation (Untreated construction and demolition waste, where concrete bricks and tiles are mixed with other fractions such as soil and stones, wood or plastic, residues from accidental fires, soils and stones, dredging sludge are not listed and request notification)
- potential contamination (Be aware of concrete contaminated with asbestos; contamination will render separated fraction hazardous).

In case of doubts take samples of the waste to be analysed.

Examples of mis-declarations



End-of-life vehicles or parts thereof (non-hazardous/hazardous)



Description	Waste end-of-life vehicles.
Colour	Various
Physical chemical properties	Solid waste of motor vehicles. Variable sizes.
Basel Code	Non hazardous: B1250
Hazardous: No Basel code assigned	
Hs code	Ex 7204
Remarks	

Distinction between hazardous and non-hazardous: End-of-life vehicles, containing neither liquids nor other hazardous components are considered as non hazardous.

Clarification waste of end-of-life vehicles (ELV)

General

Car wrecks and spare parts can be subdivided into three categories:

1. damaged cars and occasions/historical vehicles;
2. car wrecks;
3. (spare) parts

The major decision to take is the classification as waste or second hand product. The second important decision is the classification as hazardous or non hazardous

Criteria

Main criteria for distinguishing these categories are:

- the technical state of the vehicle (parts);
- reparability at reasonable costs is viable;
- the presence of absence of liquids or hazardous components

Points of attention

- Attention should be paid to the following properties of the vehicle (parts) and/or aspects:
- Does the vehicle meet the legal requirements to drive on public roads?
- Are any essential car parts missing or damaged?
- Are there a sales contract and or a certificate on functionality of a registered trader/technician/garage?
- can the vehicle be repaired at reasonable costs (use a recommended price list for occasions and/or a price list for standard car repairs);

-
- Spare parts: how are they disassembled, packed and documented, in what technical state are they, what is the destination?
 - Are there official vehicle (parts) registration certificates and sales contracts?
 - Does the vehicle (or parts) contain any liquids (oils, fluids, diesel, petrol, etc.) or hazardous components (air bags, car battery, LPG tank, oil filter, cooling liquids/agents, condensers, lamps, etc.)? Check reservoirs, tubes, draw-off valves, etc.;

Examples of mis-declarations

- Used goods
 - Used cars
 - Second-hand cars
 - Second hand spare parts
 - Waste car parts can be hidden in second hand or end-of-life vehicles
-



E-waste



Description	Waste electrical and electronic assemblies or scrap containing components such as accumulators and other batteries included on list A, mercury-switches, glass from cathode-ray tubes and other activated glass and PCB-capacitors, or contaminated with Annex I constituents (e.g., cadmium, mercury, lead, polychlorinated biphenyl) to an extent that they possess any of the characteristics contained in Annex III.
Colour	Colour: various
Physical chemical properties	Physical-chemical properties: various, depending on the type of equipment, but in general electrical and electronic equipment or parts thereof with dangerous components.
Basel Code	Hazardous: A1180 Non-hazardous: B1110
HS Code	Hazardous: 8548, Ex 8471, Ex 8473, Ex 8528, Ex 8529 Non-hazardous: 8548, Ex 85, Ex 7602, Ex 7802, Ex 7902, Ex 8002, Ex 7404, Ex 7503, Ex 7112
Remarks	

Attention should be paid to the following properties of e-waste and/or aspects:

- Intention or necessity to discard; completeness, damaging, packaging, production date, regular market, documents
- Check for dangerous parts
- Check for hazardousness of toner cartridges and drum-driven cartridges
- PCBs at a concentration level of 50 mg/kg (ppm) or more

Equipment would normally be considered waste if:

- a) The product is not complete; essential parts are missing;
- b) It shows physical damage that impairs its functionality or safety,
- c) The packaging for protecting it from damage during transport and loading and unloading operations is insufficient;
- d) The appearance is generally worn or damaged, thus reducing the marketability of the item(s);
- e) The item has among its constituent part(s) anything that is required to be discarded or is prohibited under community or national legislation³;
- f) The equipment is destined for disposal or recycling instead of re-use;
- g) There is no regular market for the equipment; or
- h) It is old or out-dated equipment destined for cannibalization (to gain spare parts).

Equipment would not normally be considered waste

- a) If it is fully functioning and is not destined for any recovery or disposal operations and is directly reused for the purpose for which it was originally intended or presented for sale or exported for the purpose of being put back to direct reuse or sold to end consumers for such reuse, or
- b) if it is sent back as defective batches for repair to the producer or repair centres (e. g. under warranty) with the intention of re-use.

Examples of electronic hardware (or parts thereof) with dangerous components:

- list A batteries,
- PCB-capacitors,
- accumulators,
- condensers (PCB concentration level of 50 mg/kg (ppm) or more),
- mercury switches,
- glass from cathode-ray tubes or other activated glass,
- toner cartridges,
- monitors, TV screen with cathode ray tubes,
- plasma screen or LCD-screen, big LCD displays;
- printer drums containing heavy metals,
- toner cartridges

Examples of mis-declarations

- Used goods
 - Second-hand goods
 - Household appliances
 - Warranty goods
 - Charity or donations
 - Plastic or metal scrap
-

Glass waste and scrap



Description	Cullet or other waste and scrap of glass except for glass from cathode-ray tubes and other activated (with coatings) glasses.
Colour	Green, brown, colourless (other colours possible as well).
Physical chemical properties	Solid waste formed as bottles, pots, plates, or pieces thereof.
Basel Code	B2020
HS Code	Ex 7001 00
Remarks	Glass bottles are generally classified as non-hazardous; glass of other origin however, might be hazardous. Coated (mirrors) or activated (cathode ray tubes) glass is classified A 2010.
Examples of mis-declarations	

Iron or steel scrap



Description	Iron or steel scrap.
Colour	Mostly grey.
Physical chemical properties	Solid metal waste (iron or steel) which occurs in different kind of properties.
Basel Code	B1010
HS Code	Ex 7204

Remarks

Iron and steel scrap can arise from production, transport packaging, construction and demolition, waste treatment plants (separation) or separately collected fraction from municipal waste. Major criterion for classification is a potential contamination. Ferrous metals may be pure iron, like wrought iron, or they may be alloys of iron and other elements. Steel, being an alloy of iron and carbon, is therefore a ferrous metal. Ferrous metals are often magnetic, but this property is not in and of itself sufficient to classify a metal as ferrous or non-ferrous. Austenitic stainless steel, a ferrous metal, is non-magnetic, while cobalt is magnetic but non-ferrous.

Criteria

Main criteria for distinguishing these categories are the composition and last operation of the metals.

Points of attention

- Be aware of potential radioactivity
- Look for potential contamination that would render the waste hazardous
- Origin or last operation (sorting, mixing, shredding and recovery can lead to contamination)
- In case of doubts take samples of the waste to be analysed.

Examples of mis-declarations



Lead-acid batteries



Description	Lead-acid batteries, whole or crushed.
Colour	Black, white, greyish often with colourful stickers.
Physical chemical properties	Solid or crushed boxes of variable size; easily recognizable. Relatively large batteries (also accumulators) – e.g. used for cars – containing liquids in non-sealable or semi-sealable containers; relatively heavy weight.
Basel Code	A1160
HS Code	Ex 8548 10
Remarks	

Note: Lead acid batteries are to be considered as hazardous! Be aware of leaking acids!

Examples of mis-declarations

- Lead scrap
- Lead waste

Mixed municipal waste



Description	<p>Wastes collected from households. Hazardous wastes most commonly found in municipal waste include for instance:</p> <ul style="list-style-type: none"> - Batteries - Medical waste - Outdates medicines or chemicals - Residues of solvents, oil, paints, chemicals, sterilizing agents and bleaches - Small electronic appliances, which may contain mercury - Contaminated plastics, papers and metals
Colour	Various
Physical chemical properties	Solid. Mixed fractions of household or similar waste comprising paper, plastics, organics, etc; easily recognizable.
Basel Code	Y46
HS Code	Ex 3825
Remarks	

Examples of mis-declarations



Mixed non-ferrous metal



Description	Mixed non-ferrous metal, heavy fraction scrap.
Colour	Mainly dark blue/grey.
Physical chemical properties	Mixture of non ferrous metals and alloys in various sizes and shapes (shredder output). This material is relatively soft and mouldable.
Basel Code	B1050
HS Code	Ex 7802, Ex 7404, Ex 7503, Ex 7602, Ex 7902, Ex 8002
Remarks	

Mixed non ferrous scrap is not uniform in material and metal type. The classification is depending on potential contamination with dangerous compounds. Be aware of radioactivity.

General

Numerous kinds of non ferrous metals can be identified, based on the composition. Common non-ferrous metals include aluminium, tin, copper, zinc, and brass, an alloy of copper and zinc. Some precious metals such as silver, gold, and platinum are also non-ferrous.

Ferrous metals may be pure iron, like wrought iron, or they may be alloys of iron and other elements. Steel, being an alloy of iron and carbon, is therefore a ferrous metal. Ferrous metals are often magnetic, but this property is not in and of itself sufficient to classify a metal as ferrous or non-ferrous. Austenitic stainless steel, a ferrous metal, is non-magnetic, while cobalt is magnetic but non-ferrous.

Sorted fractions of non ferrous metals are classified under specified waste codes such as:

- B1010
- B 1020
- The characteristics of B1050 are the mixed metal composition.

Criteria

Main criteria for distinguishing these categories are the composition and last operation of the metals. Points of attention

- Contamination with dangerous substances (e.g. contaminated C&D waste or A 1010 e.g. lead waste)
- Origin or last operation (sorting, mixing, shredding and recovery can lead to contamination)
- In case of doubts take samples of the waste to be analysed.
- Radioactivity

Examples of mis-declarations

Paper and paperboard wastes



Description	Paper, paperboard and paper product wastes of: unbleached paper or paperboard or of corrugated paper or paperboard, other paper or paperboard, made mainly of bleached chemical pulp, not coloured in the mass, paper or paperboard made mainly of mechanical pulp (for example, newspapers, journals and similar printed matter), other, including but not limited to laminated paperboard and unsorted scrap.
Colour	Various.
Physical chemical properties	Solid. Paper or cardboard (including bleached, non-bleached, corrugated and laminated).
Basel Code	B3020
HS Code	4704
Remarks	
Composition: is it mixed or not and if so with what kind of waste?	
Examples of mis-declarations	
Commingled or mixed household waste can be disguised as paper waste.	



PCB, PCT or PBB containing waste



Description	<p>Wastes, substances and articles containing, consisting of or contaminated with polychlorinated biphenyl (PCB), poly- chlorinated terphenyl (PCT), polychlorinated naphthalene (PCN) or polybrominated biphenyl (PBB), or any other polybrominated analogues of these compounds, at a concentration level of 50 mg/kg or more.</p> <p>The following materials can contain PCBs:</p> <ul style="list-style-type: none"> - Transformers - Capacitors - Plasticizers - PVC coatings - Pesticide extenders - Cutting oil - Flame retardants - Lubricating oil - Hydraulic oil - Sealants - Adhesives - Wood floor finishes - Paints - Contaminated soil
Colour	Mainly black/dark brown.
Physical chemical properties	Liquid oil. Viscous.
Basel Code	A3180
HS Code	Ex 3825
Remarks	

Many different substances and articles can be contaminated with PCB, PCT, PCN, and PBB at a concentration level of 50 mg/kg or more. The most important categories are big transformers and capacitors filled with PCB containing oil (from power stations). However PCB, PCT, PBB or any other polybrominated analogues in corresponding concentrations can also be found in for example waste electrical and electronic equipment (WEEE), assemblies or scrap containing components, coated cables and in construction and demolition wastes.

Main criteria for distinguishing these categories are:

- the concentration level (> 50 mg/kg);
- the application (e.g. in transformers, capacitors or cables)
- the origin
- the production year of the equipment

Attention should be paid to the following properties of the waste and/or aspects:

- Content: is the PCB containing substance still in the product or article and does it need to be tapped off yet, or is it tapped off already and needs to be disposed off;
- Transformers refilled with PCB free oil can still contain high concentrations of PCB's, because of absorbed PCB's in especially wood and paper; existence of oil or oily liquid in old transformers/ capacitors should always be considered suspicious
- Since it can be lucrative to mix PCB containing oil (e.g. with fuel oil), check these kind of shipments too;
- In case of doubts take samples of the oil to be analyzed.

Examples of mis-declarations

- Metal scrap
- Copper scrap

Stags, ashes and residues of metal refinery (non-hazardous/hazardous)



Description	Metal slags, ashes and residues.
Colour	Various, mainly grey.
Physical chemical properties	Solid blocks or granular waste.
Basel Code	Non hazardous: B1100, B1150, B1170, B1210, B1230 Hazardous: A1020, A1100, A1150
HS Code	Non-hazardous: 7112, 262030, 262090, 261900, 262050, 810420, ex 810430, and other Hazardous: 7112, 262030, 262090, 261900, 262050, 810420, ex 810430, and other
Remarks	

General

Numerous kinds of slag, dross and ashes can be identified, based on the type of production process and composition. Slags and ashes and other residues from metallurgical processes can be either hazardous or non hazardous; the colour and composition (powdery, particulate, blocky) sometimes helps in differentiation

Hazardous:

A1020: Metal waste (ashes and residues) having as constituents or contaminants, excluding metal waste in massive form, any of the following: Antimony, Beryllium, Cadmium, Lead, Selenium or Tellurium compounds;

- A1100: Dusts and residues (ashes) from gas cleaning systems of copper smelters;
- A1150: Precious metal ash from incineration of printed circuit boards;
- A2060: Coal fired power plants fly ash containing Annex I substances in concentrations sufficient to exhibit Annex III characteristics
- A3090: Waste leather dust, ash, sludges and flours when containing hexavalent chromium compounds or biocides (note the related entry on list B, B3100);
- A 4100: Fly ash from HWI, wood and paper industry or oil firing installations
- Y47: Residues from incineration of household (municipal) waste

Non-hazardous

- B1100: Metal-bearing wastes from melting, smelting and refining of metals: — Hard zinc spelter— Zinc-containing drosses:— Galvanising slab zinc top dross (>90 % Zn)— Galvanising slab zinc bottom dross (>92 % Zn)— Zinc die casting dross (>85 % Zn)— Hot dip galvanisers slab zinc dross (batch) (>92 % Zn)— Zinc skimmings— Aluminium skimmings (or skims) excluding salt slag— Slags from copper processing for further processing or refining not containing arsenic, lead or cadmium to an extent that they exhibit Annex III hazard characteristics (see also GB 040)— Wastes of refractory linings, including crucibles, originating from copper smelting— Slags from precious metals processing for further refining— Tantalum bearing tin slags with less than 0,5 % tin
- B1150: Precious metals and alloy wastes (gold, silver, the platinum group, but not mercury) in a dispersible, non-liquid form with appropriate packaging and labelling
- B1170: Precious-metal ash from the incineration of photographic film
- B1210: Slag arising from the manufacture of iron and steel including slags as a source of TiO₂ and Vanadium
- B1230: Mill scaling arising from the manufacture of iron and steel



Criteria

Main criteria for distinguishing these categories are:

- the origin (metal industry, power plants and others);
- the composition of the slag, dross or ashes

Points of attention

Attention should be paid to the following properties of the waste and/or aspects:

- colour
- composition
- In case of doubts take samples of the waste to be analyzed.

Examples of mis-declarations

Textile wastes (carpets and floorings)



Description	Textile wastes, provided they are not mixed with other wastes and are prepared to a specification and waste textile floor coverings, carpets.
Colour	Various
Physical chemical properties	Solid, soft, flexible, but also tough and prickly materials (tissue, textile ropes or cables and animal hair by specification; worn clothing, rags).
Basel Code	B3030, B 3035 (floor coverings, carpets)
HS Code	5003 (10); 5003 90; 5103; 5103 10; 5103 20; 5103 30; 5202; 5202 10; 5202 91; 5202 99; 5301 30; Ex 5302 90; Ex 5303 90; Ex 5304 90; Ex 5305 19; Ex 5305 29; Ex 5305 99; 5505; 5505 10; 5505 20; 6309 00; Ex 6310; Ex 6310 10; Ex 6310 90
Remarks	

Textiles are generally considered non hazardous, but mixing with other wastes and hidden contamination can request notification or result in export ban.

General

Numerous kinds of textile wastes can be distinguished based on the type of material (composition) and origin. In general a subdivision can be made between textile wastes from textile industry (treated and untreated textile fibres), worn (-out) textile wastes from households and textile floor coverings. Most of the textile wastes are being re-used, recycled or recovered, also as secondary fuel.

Criteria

A priority decision is the question whether the material is a product or waste; intention or necessity to discard and functionality (appropriateness for direct reuse) are the major parameters for distinction.

Main criteria for distinguishing these categories are:

- Type of material (silk, wool, hair, cotton, yarn, flax, true hemp, manmade, synthetic or artificial fibres);
- Origin: worn clothing and other textile articles, used and worn-out rags, twine, cordage, rope (sorted and unsorted) and waste textile floor coverings.

Points of attention

- Distinction second hand product versus waste
- Mixing with other wastes; textile wastes pre-eminently can be used to 'hide' other (hazardous) waste during transport. So make sure physically check a cargo with textile wastes.
- Sorted or unsorted textile wastes;
- Contamination: Carpet waste should not be contaminated with glue, tar, PCB, asbestos, etc; rags may not be contaminated with oil, solvent or heavy metals).

Examples of mis-declarations



Waste metal cables (non-hazardous/hazardous)



Description	Waste metal cables coated or insulated with plastics.
Colour	Various.
Physical chemical properties	Solid with metal wires and plastic coating.
Basel Code	Non-hazardous : B1115 Hazardous : A1190
HS Code	Ex 7404, Ex7602, Ex 7802

Remarks

Distinction between hazardous and non-hazardous: waste metal cables coated or insulated with plastics containing or contaminated with coal tar, PCBs, lead, cadmium, other organohalogen compounds or other Annex I constituents, to the extent that they exhibit Annex III characteristics are considered hazardous waste.

Waste metal cables coated or insulated with plastics, not included in list A1190, excluding those destined for Annex IVA operations or any other disposal operations involving, at any stage, uncontrolled thermal processes, such as open-burning are considered non-hazardous.

Main criteria for distinguishing the two categories are the composition and last operation of the cables. Based on these criteria, attention should be paid to the following properties of the waste and/or aspects:

- Origin; (unknown origin or underground cables are commonly contaminated);
- Destination: (Waste destined to Annex IVA operations or any other disposal operations involving, at any stage, uncontrolled thermal processes, such as open-burning is not covered by B1115);
- Composition; (plastics containing or contaminated with coal tar, PCB, lead, cadmium, other organohalogen compounds or other Annex I constituents).
- In case of doubts take samples of the waste to be analysed.

Examples of mis-declarations

- Copper scrap
- Aluminium scrap
- Plastic waste/scrap

Waste Mineral oils



Description	Waste mineral oils unfit for their originally intended use or waste oils/water, hydrocarbons/water mixtures, emulsions.
Colour	Mainly black/dark brown.
Physical chemical properties	Liquid oil. Viscous.
Basel Code	A3020, A4060
HS Code	Ex 2710; Ex 271099
Remarks	
<p>Edible oils are in principle non-hazardous waste. Main criteria for distinguishing the two categories are:</p> <ul style="list-style-type: none"> – Origin (mineral, synthetic) – Composition (pure, mixed and contamination) <p>Attention should be paid to the following properties of the waste oils and/or aspects:</p> <ul style="list-style-type: none"> • type of transport (e.g. tanker); • type of containment (e.g. tank, barrels); • destination (Disposal or Recovery); for example incineration as secondary fuel in cement kilns is generally accepted in many countries; <p>In case of doubts take samples of the oil to be analyzed. Waste oils can be used easily to mix and blend other hazardous substances.</p>	
Examples of mis-declarations	
<ul style="list-style-type: none"> – Off spec material/fuel – B-quality oil 	



Waste plastics
(non hazardous/hazardous/non-listed mixture/ household waste)



Description	Solid plastic waste, scrap plastic of non-halogenated polymers and co-polymers, cured waste resins or condensation products, and certain fluorinated polymers.
Colour	Various.
Physical chemical properties	Solid plastics. Variable size and form including shredded, milled material or granulate of polymers and copolymers (e.g. PE, PS, PP, PET, PU foams, resins, and certain fluorinated polymer.
Basel Code	B3010, non listed, Y46
HS Code	3915; 3915 10; 3915 30; 3915 90 80; 3915 90
Remarks	

Classification depends on the contamination with other wastes, like household waste. Plastic waste can be classified non-hazardous, hazardous, non-listed mixture or household waste depending on the type of plastic shipped and the quality of separation. There are many plastic fractions which in most cases may be considered non hazardous if sufficiently separated to a specification.

Major criteria to distinguish categories are material (optical appearance) and the level of separation:

- Plastic may not be considered B3010 if other materials e.g. metals, wood, paper, composite packaging are mixed in;
- Heavily contaminated plastics from separate household collection should be considered as non listed mixture or household waste;
- Foams that contain CFCs are considered hazardous;
- PC waste (CDs ,DVDs) mixed with larger quantities of paper (shredded covers, booklets) are considered a non listed mixture of waste;
- Waste mixtures of (PMMA), polyester resins and wood (production residues from wood industry) are considered non listed mixture;
- Waste floorings, cable isolations containing PCB or asbestos are considered hazardous;
- Not fully emptied plastic packaging with dangerous content are considered hazardous (A4130);
- Not cleaned lead accumulator housings are considered hazardous (A1160 or A1020);
- Olyacrylmethacrylate (PMMA) lacquers are considered hazardous (A4070).

Examples of mis-declarations

Waste pneumatic tyres



Description	Waste pneumatic/end-of-life tyres, excluding those destined for final disposal operations (Annex IV A of the Convention).
Colour	Dark grey/black.
Physical chemical properties	Solid, not granulated, flexible material (for example: inner pneumatic tyres).
Basel Code	B3140
HS Code	Ex 4012 20
Remarks	Waste non waste; waste tyres are often intended to be shipped under product codes as used tyres. The national requirements of tread depth could be used in decision making whether the tyre is waste or second hand products.
Examples of mis-declarations	– Second hand tyres

ANNEX III

Stockholm convention identification tool for customs

Background

The Stockholm Convention on Persistent Organic Pollutants (the Stockholm Convention) is a global treaty to protect human health and the environment from chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of humans and wildlife, and have adverse effects to human health or to the environment. The Stockholm Convention, which was adopted in 2001 and entered into force in 2004, requires Parties to take measures to eliminate or reduce the release of Persistent Organic Pollutants (POPs) into the environment.

The Stockholm Convention identification tool has been developed to enhance the ability of national authorities, in particular customs officers, to enforce regulations related to the trade of POPs. It consists of data sheets for each of the chemicals listed in Annexes A and B of the Stockholm Convention text.

The aim of this document is to:

- Give hands-on information about the various methods used to identify POPs;
- Increase enforcement authorities' understanding of the control measures required at the

international level when POPs are subject to trade; and

- Stress the importance of safety measures when dealing with POPs chemicals, e.g. when further investigation has to be performed by customs officers (e.g. chemical sampling and analysis).

Precautions and First aid

All the substances presented in this Identification Tool can be absorbed **THROUGH THE SKIN, THROUGH INGESTION AND INHALATION**.

AVOID ALL CONTACT! AVOID EXPOSURE OF PREGNANT AND BREASTFEEDING WOMEN!

Precautions

Avoid inhalation of dust. Use protective gloves and clothing. Face shield or eye protection in combination with breathing protection if powder. Do not eat, drink, or smoke during work. Wash hands before eating.




First aid

- In case of inhalation, get fresh air and rest. Seek medical attention if you feel unwell (headache, nausea, vomiting, dizziness, diarrhea, etc.)



- Protective gloves should be worn when administering first aid.
- In case of skin contact, remove contaminated clothes using protective gloves. Rinse skin with water then wash skin thoroughly with water and soap. Refer for medical attention.
- In case of ingestion, rinse the mouth, induce vomiting if conscious, and drink an activated carbon suspension added to water (except for PCBs), but NOT if convulsions occur. Refer immediately for medical attention.
- In case of eye contact, first rinse with plenty of water for several minutes (remove contact lenses if possible), then take to a doctor.
- In case of fire, dry powder fire extinguishers, water fire extinguishers, foam fire extinguishers and CO2 fire extinguishers are authorized. For PCBs, only dry powder fire extinguishers and CO2 fire extinguishers are authorized. Keep drums, etc., cool by spraying with water.

ALDRIN

Substance name	Hexachloro-1,2,3,4,10,10-hexahydro-1,4,4a,5,8,8a-exo-1,4-endo-5,8-dimethanonaphthalene. 1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-endo-1,4-exo-5,8-dimethanonaphthalene.		
Chemical type	Pesticide		
CAS number	309-00-2		
Harmonized System Code	<i>Pure</i>	<i>Mixture</i>	
	2903.52	3808.50	
Physical appearance	Solid, formed of colorless crystals	Solid, from light brown to dark brown crystals Powder Emulsifiable concentrate Oily solution Granules Wettable powder	
Uses	Aldrin is a pesticide applied to soils to kill termites, grasshoppers, corn rootworm, and other insect pests.		
Packaging	Packaging is likely to be: drums, bottles (if substance liquid) or bags, packets (if solid)		
Pictograms			
	Chronic health hazard	Environmental hazard	Acute toxicity
Handling Precautions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.		
Storage conditions	<ul style="list-style-type: none"> • Use a device to stop the flow in any possible situation (fire, outflow, spillage) • Separate from incompatible substances (fuel, other toxic substances), food and food products • Close properly • Keep in well-ventilated premises 		
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country		

References:

Project “development of Customs assistance materials aimed at enhancing the enforcement and national implementation of the Stockholm Convention” in Senegal, COTECNA (May 2006).




International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>



ALPHA HEXACHLOROCYCLOHEXANE (alpha-HCH)

Chemical name	Alpha-hexachlorocyclohexane (alpha-HCH)		
Synonyms/ abbreviations	1,2,3,4,5,6-hexachlorocyclohexane, alpha isomer, (1alpha,2alpha,3beta,4alpha,5beta,6beta)-1,2,3,4,5,6-hexachlorocyclohexane, alpha-1,2,3,4,5,6-Hexachlorocyclohexane; alphabenzene hexachloride, alpha-BHC, alpha-HCH, alpha-lindane, benzene-transhexachloride, Hexachlorocyclohexane-Alpha		
Chemical type	Pesticide; by-product		
CAS number	319-84-6		
Harmonized System Code	<i>Pure</i>	<i>Mixture</i>	
	2903.51	3808.50	
Physical appearance	Brown to white crystalline powder, with characteristic odor.		
Uses	Although the intentional use of alpha-HCH as an insecticide was phased out years ago, these chemicals are still produced as an unintentional by-product of lindane.		
Pictograms	 Acute toxicity	 Chronic health hazard	 Environmental hazard
	Handling precautions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.	
Storage conditions	<ul style="list-style-type: none"> • Well closed • Store in an area without drain or sewer access • Provision to contain effluent from fire extinguishing • Separated from bases, metals, food and feedstuffs 		
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country		

References:




Risk Profile on alpha-hexachlorocyclohexane (UNEP/POPS/POPRC.3/20/Add.8), POPs Review Committee, 2008.

International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>

BETA-HEXACHLOROCYCLOHEXANE (Beta-HCH)

Chemical name	Beta-hexachlorocyclohexane (beta-HCH)		
Synonyms/ abbreviations	Beta-1,2,3,4,5,6-Hexachlorocyclohexane; Beta-Benzenehexachloride; beta-BHC, benzene-cis-hexachloride; beta-HCH; beta-Hexachlorocyclohexane; beta-Hexachlorocyclohexane; beta-isomer; beta-lindane; Hexachlorocyclohexane-Beta; trans-alpha-benzenehexachloride; betabenzenehexachloride		
Chemical type	Pesticide; by-product		
CAS registry number	319-85-7		
Physical appearance	White crystalline powder		
Uses	Although the intentional use of beta-HCH as an insecticide was phased out years ago, these chemicals are still produced as an unintentional by-product of lindane.		
Harmonized System Code	Pure	Mixture	
	2903.51	3808.50	
Pictograms			
	Acute toxicity	Chronic health hazard	Environmental hazard
Handling precautions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.		
Storage	<ul style="list-style-type: none"> • Well closed • Store in an area without drain or sewer access • Provision to contain effluent from fire extinguishing • Separated from bases, metals, food and feedstuffs 		
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country		

References:

Risk Profile on beta-hexachlorocyclohexane (UNEP/POPS/POPRC.3/20/Add.9), POPs Review Committee, 2007.



International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>



CHLORDANE

Substance name	1,2,4,5,6,7,8,8-Octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methano-1H-indene	
Chemical type	Pesticide	
CAS number	57-74-9	
Harmonized System Code	Pure	Mixture
	2903.52	3808.50
Physical appearance	Solid, formed of colorless crystals	Powder Emulsifiable concentrate Oily solution Granules Wettable powder
Uses	Chlordane is used extensively to control termites and as a broad-spectrum insecticide on a range of agricultural crops.	
Packaging	Packaging is likely to be: drums, bottles (if substance liquid) or bags, packets (if solid)	
Pictograms	 Environmental hazard	 Chronic health hazard
	Handling precautions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.
Storage conditions	<ul style="list-style-type: none"> • Use a device to stop the flow in any possible situation (fire, outflow, spillage) • Separate from incompatible substances (fuel, other toxic substances), food and food products • Close properly • Keep in well-ventilated premises 	
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country	

References:



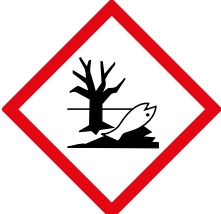
Project “development of Customs assistance materials aimed at enhancing the enforcement and national implementation of the Stockholm Convention” in Senegal, COTECNA, (May 2006)

International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>

CHLORDECONE

Chemical name	1,1a,3,3a,4,5,5,5a,5b,6-Decachloro-octahydro-1,3,4-metheno-2H-cyclobuta(cd)pentalen-2-one		
Synonyms and abbreviations	Decachloropentacyclo-[5,2,1,02,6,03,9,05,8]-decan-4-one, Decachlorooctahydro-1,3,4-metheno-2H,5H-cyclobuta-[cd]-pentalen-2-oneDecachloroketone		
Chemical type	Pesticide		
CAS registry number	143-50-0		
Physical appearance	Tan – to white – colored solid crystals		
Uses	Chlordecone was mainly used as an agricultural pesticide. It was first produced in 1951 and introduced commercially in 1958. Currently, no use or production of the chemical is reported.		
Harmonized System Code	None		
Pictograms	 Acute toxicity	 Chronic health hazard	 Environmental hazard
Handling precautions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.		
Storage	<ul style="list-style-type: none"> • Provision to contain effluent from fire extinguishing • Separated from acids 		
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country		

References:

Risk Profile on Chlordecone (UNEP/POPS/POPRC.3/20/Add.10), POPs Review Committee, 2007.




International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>



COMMERCIAL OCTABROMODIPHENYL ETHER (HEXABROMODIPHENYL ETHER AND HEPTABROMODIPHENYL ETHER)

Chemical name	Commercial mixture of octabromodiphenyl ether has four major components: 2,2',4,4',5,5'-hexabromodiphenyl ether 2,2',4,4',5,6'-hexabromodiphenyl ether 2,2',3,3',4,5,6'-heptabromodiphenyl ether; and 2,2',3,4,4',5,6'-heptabromodiphenyl ether		
Synonyms/ abbreviations	octabromobiphenyl oxide; octabromodiphenyl oxide; octabromo phenoxybenzene and benzene; 1,1' oxybis-, octabromo derivative		
Chemical type	Industrial chemical		
CAS registry number	68631-49-2 (for 2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)) 207122-15-4 (for 2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)) 446255-22-7 (for 2,2',3,3',4,5,6'-heptabromodiphenyl ether (BDE-175)) 207122-16-5 (for 2,2',3,4,4',5,6'-heptabromodiphenyl ether (BDE-183))		
Uses	Used mainly as flame retardants principally in the plastics industry for flame-retarded polymer products, which are typically used for housings of office equipment and business machines. They inhibit or suppress combustion in organic material.		
Harmonized System Code	None		
Pictograms	 Acute toxicity	 Chronic health hazard	 Environmental hazard
Handling precautions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.		
Storage	<ul style="list-style-type: none"> • Well closed • Store in an area without drain or sewer access • Provision to contain effluent from fire extinguishing • Separated from bases, metals, food and feedstuffs 		
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country		

References:




Risk Profile on commercial octabromodiphenyl ether (UNEP/POPS/POPRC.3/20/Add.6), POPs Review Committee, 2007.

International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>

COMMERCIAL PENTABROMODIPHENYL ETHER (TETRABROMODIPHENYL ETHER AND PENTABROMODIPHENYL ETHER)

Chemical name	Commercial pentabromodiphenyl ether has two major components: 2,2',4,4'-tetrabromodiphenyl ether and 2,2',4,4',5-pentabromodiphenyl ether		
Synonyms/ abbreviations	Pentabromodiphenyl ether (PeBDPE and PentaBDPE), Benzene, 1,1'-oxybis-, pentabromo derivative, Pentabromophenoxybenzene, Pentabromobi(s)phenyl ether; biphenyl ether, pentabromo derivative = PeBBE, Pentabromobi(s)phenyl oxide = PeBBO, Pentabromodiphenyl oxide = PeBDPO = PentaBDPO		
Chemical type	Industrial chemical		
CAS registry number	5436-43-1 (for 2,2',4,4'-tetrabromodiphenyl ether (BDE-47)) 60348-60-9 (for and 2,2',4,4',5-pentabromodiphenyl ether (BDE-99))		
Uses	Bromodiphenyl ether congeners are a group of brominated organic substances that inhibit or suppress combustion in organic materials, which are used as additive flame retardants. Brominated diphenyl ethers are mainly manufactured as commercial mixtures where several isomers, congeners and small amounts of other substances occur. Used almost exclusively in the manufacture of flexible polyurethane (PUR) foam for furniture and upholstery in homes and vehicles, packaging, and non-foamed PUR for parts of electronic equipment.		
Pictograms	 Acute toxicity	 Chronic health hazard	 Environmental hazard
Harmonized System Code	None		
Handling precautions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.		
Storage	<ul style="list-style-type: none"> • Well closed • Store in an area without drain or sewer access • Provision to contain effluent from fire extinguishing • Separated from bases, metals, food and feedstuffs 		
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country		

References:

Risk Profile on commercial pentabromodiphenyl ether (UNEP/POPS/POPRC.2/17/Add.1), POPs Review Committee, 2007.




International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>



DDT

Substance name	Dichlorodiphenyltrichloroethane 1,1,1-Trichloro-2,2-bis(4-chlorophenyl)ethane; 2,2-bis(p-Chlorophenyl)-1,1,1-trichloroethane		
Chemical type	Pesticide		
CAS number	50-29-3		
Harmonized System Code	Pure	Mixture	
	2903.62 / 2909.30	3808.50	
Physical appearance	Colourless crystals or white powder odourless or with a slight odor	<ul style="list-style-type: none"> - Waxy solid - Solution in Xylene - Emulsifiable concentrate - Aerosol - Granules - Wettable powder 	
Uses	DDT is still used against mosquitoes to control malaria in several countries. It is infamous for decimating bald eagle, osprey, and other predatory bird populations and for contaminating nursing mothers' milk.		
Packaging	Packaging is likely to be: drums, bottles (if substance liquid) or bags, packets (if solid)		
Pictograms			
	Environmental hazard	Chronic health hazard	Acute toxicity
Handling precautions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.		
Storage conditions	<ul style="list-style-type: none"> • Use a device to stop the flow in any possible situation (fire, outflow, spillage) • Separate from incompatible substances (fuel, other toxic substances), food and food products • Close properly • Keep in well-ventilated premises 		
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country		

References:




Project "development of Customs assistance materials aimed at enhancing the enforcement and national implementation of the Stockholm Convention" in Senegal, COTECNA (May 2006).

International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>

DIELDRIN

Substance name	Dieldrin		
Chemical type	Pesticide		
CAS number	60-57-1		
Harmonized System Code	Pure	Mixture	
	2910.40	3808.50	
Physical appearance	White crystals or pale tan flakes, odourless to mild chemical odour.	Powder Emulsifiable concentrate Granules Wettable powder	
Uses	Used principally to control termites and textile pests, dieldrin has also been used to control insect-borne diseases and insects living in agricultural soils. Its half life in soil is approximately five years. The pesticide aldrin rapidly converts to dieldrin, so concentrations of dieldrin in the environment are higher than dieldrin use alone would indicate.		
Packaging conditions	Packaging is likely to be: drums, bottles (if substance liquid) or bags, packets (if solid).		
Handling precautions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.		
Pictograms			
	Chronic health hazard	Environmental hazard	Acute toxicity
Storage conditions	<ul style="list-style-type: none"> • Use a device to stop the flow in any possible situation (fire, outflow, spillage) • Separate from incompatible substances (fuel, other toxic substances), food and food products • Close properly • Keep in well-ventilated premises 		
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country		

References:

Project “development of Customs assistance materials aimed at enhancing the enforcement and national implementation of the Stockholm Convention” in Senegal, COTECNA (May 2006).



International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>



TECHNICAL ENDOSULFAN AND ITS RELATED ISOMERS (ENTRY INTO FORCE 27 OCTOBER 2012)

Substance name	6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3-oxide	
Chemical type	Pesticide	
CAS number	Technical endosulfan: 115-29-7 Related isomers: 959-98-8 and 33213-65-9	
Harmonized System Code	<i>Pure</i>	<i>Mixture</i>
	2920.90	-
Physical appearance	Colourless crystals	Brown crystalline flakes
Uses	Endosulfan is an insecticide that has been used since the 1950s to control crop pests, tsetse flies and ectoparasites of cattle and as a wood preservative. As a broad-spectrum insecticide, endosulfan is currently used in a number of countries to control a wide range of pests on a variety of crops including coffee, cotton, rice, sorghum and soy.	
Packaging	Packaging is likely to be: drums, bottles (if substance liquid) or bags, packets (if solid)	
Pictograms	 Acute toxicity	 Environmental hazard
	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.	
Storage conditions	<ul style="list-style-type: none"> • Provision to contain effluent from fire extinguishing • Separated from acids, bases, iron, food and feedstuffs • Dry • Well closed 	
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country	

References:



Risk profile on endosulfan (UNEP/POPS/POPRC.5/10/Add.2), POPS Review Committee, 2009.

International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>

ENDRIN

Substance name	3,4,5,6,9,9,-Hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-2,7:3,6-dimethanonaphth[2,3-b]oxirene.	
Chemical type	Pesticide	
CAS number	72-20-8	
Harmonized System Code	Pure	Mixture
	-	3808.91
Physical appearance	White, odourless, crystalline solid.	Solid of light brown colour with a light odor of chemical
Uses	This insecticide is sprayed on the leaves of crops such as cotton and grains. It is also used to control rodents such as mice and voles.	
Packaging	Packaging is likely to be: drums, bottles (if substance liquid) or bags, packets (if solid).	
Pictograms		
	Environmental hazard	Acute toxicity
Handling precautions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.	
Storage conditions	Use a device to stop the flow in any possible situation (fire, outflow, spillage) Separate from incompatible substances (fuel, other toxic substances), food and food products Close properly Keep in well-ventilated premises	
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country	

References:

Project “development of Customs assistance materials aimed at enhancing the enforcement and national implementation of the Stockholm Convention” in Senegal, COTECNA (May 2006).




International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>



HEPTACHLOR

Substance name	1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetrahydro-4,7-methanol-1H-indene.		
Chemical type	Pesticide		
CAS number	76-44-8		
Harmonized System Code	<i>Pure</i>	<i>Mixture</i>	
	2903.52	3808.50	
Physical appearance	White or brownish yellow crystals with a camphor-like odour	<ul style="list-style-type: none"> - Powder - Emulsifiable concentrate - Granules - Wettable powder 	
Uses	Primarily used to kill soil insects and termites, heptachlor has also been used more widely to kill cotton insects, grasshoppers, other crop pests, and malaria-carrying mosquitoes.		
Packaging	Packaging is likely to be: drums, bottles (if substance liquid) or bags, packets (if solid).		
Pictograms			
	Chronic health hazard	Environmental hazard	Acute toxicity
Handling precautions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.		
Storage conditions	<ul style="list-style-type: none"> • Use a device to stop the flow in any possible situation (fire, outflow, spillage) • Separate from incompatible substances (fuel, other toxic substances), food and food products • Close properly • Keep in well-ventilated premises 		
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country		

References:



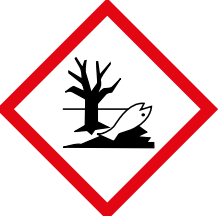
Project “development of Customs assistance materials aimed at enhancing the enforcement and national implementation of the Stockholm Convention” in Senegal, COTECNA (May 2006).

International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>

HEXABROMOBIPHENYL

Chemical name	Hexabromo-1,1'-biphenyl		
Synonyms/abbreviations	Hexabromocyclododecane and 1,2,5,6,9,10-hexabromocyclododecane		
Chemical type	Industrial chemical		
CAS registry number	36355-01-8		
Physical Appearance	Solid, composed of white and odourless crystals.		
Uses	Hexabromobiphenyl is an industrial chemical that has been used as a flame retardant, mainly in the 1970s. According to available information, it is no longer produced or used in most countries.		
Harmonized System Code	None		
Pictograms	 Acute toxicity	 Chronic health hazard	 Environmental hazard
Handling precautions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.		
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country		

References:

Risk Profile on Hexabromodiphenyl (UNEP/POPS/POPRC.2/17/Add.3), POPs Review Committee, 2006.



International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>



HEXACHLOROBENZENE

Substance name	Hexachlorobenzene	
Chemical type	Pesticide; industrial chemical; by-product	
CAS number	118-74-1	
Harmonized System Code	<i>Pure</i>	<i>Mixture</i>
	2903.62	3808.50
Physical appearance	Colourless solid formed by crystals	Powder Dry seed treatment Gruel for wet seed treatment Combined to other products for seed protection
Uses	First introduced in 1945 to treat seeds, HCB kills fungi that affect food crops. It was widely used to control wheat bunt. It is also a by-product of the manufacture of certain industrial chemicals and exists as an impurity in several pesticide formulations.	
Packaging conditions	Packaging is likely to be: drums, bottles (if substance liquid) or bags, packets (if solid).	
Pictograms	 Environmental hazard	 Chronic health hazard
	Handling precautions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.
Storage conditions	Plan a device to stop the flow in any possible situation (fire, outflow, spillage) Separate from incompatible substances (fuel, other toxic substances), food and food products Close properly Keep in well-ventilated premises	
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country	

References:




Project “development of Customs assistance materials aimed at enhancing the enforcement and national implementation of the Stockholm Convention” in Senegal, COTECNA (May 2006).

International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>

LINDANE

Chemical name	gamma, 1,2,3,4,5,6-hexachlorocyclohexane		
Synonyms/abbreviations	gamma benzene hexachloride; gamma-BHC		
Chemical type	Pesticide		
CAS registry number	58-89-9		
Physical appearance	White to off-white crystalline powder		
Uses	Lindane was used as a broad-spectrum insecticide for seed and soil treatment, foliar applications, tree and wood treatment and against ectoparasites in both veterinary and human treatments.		
Harmonized System Code	<i>Pure</i>	<i>Mixture</i>	
	2903.51	3808.50	
Pictograms	 Acute toxicity	 Chronic health hazard	 Environmental hazard
	Handling precautions		
Storage	<ul style="list-style-type: none"> • Well closed • Store in an area without drain or sewer access • Provision to contain effluent from fire extinguishing • Separated from bases, metals, food and feedstuffs 		
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country		

References:

Risk Profile on Lindane (UNEP/POPS/POPRC.2/17/Add.4), POPs Review Committee, 2006.



International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>



MIREX

Substance name	1,1a,2,2,3,3a,4,5,5a,5b,6-dodecachloroacta-hydro-1,3,4-metheno-1H-cyclobuta[cd]pentalene	
Chemical type	Pesticide	
CAS number	2385-85-5	
Harmonized System Code	<i>Pure</i>	<i>Mixture</i>
	-	-
Physical appearance	White crystalline, odourless solid.	
Uses	This insecticide is used mainly to combat fire ants, and it has been used against other types of ants and termites. It has also been used as a fire retardant in plastics, rubber, and electrical goods.	
Packaging	Packaging is likely to be: drums, bottles (if substance liquid) or bags, packets (if solid).	
Pictograms	 Chronic health hazard	 Environmental hazard
Handling Precautions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.	
Storage conditions	<ul style="list-style-type: none"> • Use a device to stop the flow in any possible situation (fire, outflow, spillage) • Separate from incompatible substances (fuel, other toxic substances), food and food products • Close properly • Keep in well-ventilated premises 	
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country	

References:



Project “development of Customs assistance materials aimed at enhancing the enforcement and national implementation of the Stockholm Convention” in Senegal, COTECNA (May 2006).

International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>

PCB

Substance name	Polychlorobiphenyls, Polychlorinated Biphenyls	
Chemical type	Industrial chemical; by-product	
CAS number	1336-36-3	
Harmonized System Code	<i>Pure</i>	<i>Mixture</i>
	–	3824.82
Physical appearance	White to tan, odourless, tasteless, as: - Viscous liquid (mixed liquid) - Waxy solid	
Uses	PCB is widely used in electrical transformers and hydraulic equipment.	
Packaging conditions	Electric transformers Electric condensers Any packaging susceptible of containing liquid or solid	
Pictograms	 Environmental hazard	 Chronic health hazard
	Handling precautions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.
Storage conditions	Use a device to stop the flow in any possible situation (fire, outflow, spillage) Separate from incompatible substances (fuel, other toxic substances), food and food products Close properly Keep in well-ventilated premises	
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country	

References:

Project “development of Customs assistance materials aimed at enhancing the enforcement and national implementation of the Stockholm Convention” in Senegal, COTECNA (May 2006).



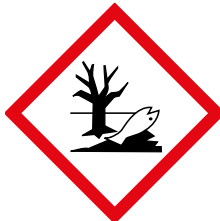
International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>



PENTACHLOROBENZENE (PeCB)

Substance name	Pentachlorobenzene		
Synonyms/ abbreviations	1,2,3,4,5-pentachlorobenzene; benzene, pentachloro-; quintochlorobenzene; PeCB		
Chemical type	Pesticide; industrial chemical; by-product		
CAS registry number	608-93-5		
Physical Appearance	Colorless to white crystals, with characteristic odour		
Uses	Pentachlorobenzene (PeCB) was used in PCB products, dyestuff carriers, as a fungicide, a flame retardant and a chemical intermediate such as the production of quitozene and it may still be used for this purpose. PeCB is also produced unintentionally during combustion in thermal and industrial processes. It appears as an impurity in products such as solvents or pesticides.		
Harmonized System Code	None		
Pictograms	 Acute toxicity	 Physical hazard	 Environmental hazard
Handling precautions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.		
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country		

References:

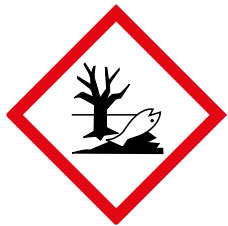


Risk Profile on Pentachlorobenzene (UNEP/POPS/POPRC.3/20/Add.7), POPs Review Committee, 2007.

International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>

**PERFLUOROCTANE SULFONIC ACID AND ITS SALTS (PFOS)
AND PERFLUOROCTANE SULFONYL FLUORIDE (PFOS-F)**

Chemical name	Perfluorooctane Sulfonate (PFOS)		
Synonyms/ abbreviations	1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptafluoro-; 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptafluoro-1-octanesulfonic acid; 1-Octanesulfonic acid, heptafluoro-; 1-Perfluorooctanesulfonic acid; Heptafluoro-1-octanesulfonic acid; Perfluoro-n-octanesulfonic acid; Perfluorooctanesulfonic acid; Perfluorooctylsulfonic acid		
Chemical type	Industrial chemical		
CAS number	PFOS: 1763-23-1 and some of its commercially important salts: Potassium salt: CAS No. 2795-39-3 Diethanolamine salt: CAS No. 70225-14-8 Ammonium salt: CAS No. 29081-56-9 Lithium salt: CAS No. 29457-72-5 PFOS-F: 307-35-7		
Physical appearance	White powder		
Uses	PFOS is both intentionally produced and an unintended degradation product of related anthropogenic chemicals. The current intentional use of PFOS is widespread and includes: electric and electronic parts, fire fighting foam, photo imaging, hydraulic fluids and textiles.		
Harmonized system Code	None		
Handling precautions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.		
Pictograms	 Environmental hazard	 Acute toxicity	 Chronic health hazard
For more information	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country		

References:

Risk Profile on Perfluorooctane sulfonic acid and its salts (PFOS) and perfluorooctane sulfonyl fluoride (PFOS-F) (UNEP/POPS/POPRC.2/17/Add.5), POPs Review Committee, 2006.




International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>



TOXAPHENE

Substance name	Toxaphene		
Chemical type	Pesticide		
CAS number	8001-35-2		
Harmonized System Code	<i>Pure</i>	<i>Mixture</i>	
	-	3808.50	
Physical appearance	Waxy solid with a yellow color and with a smell of turpentine. It can also be in a gaseous state.		
Uses	This insecticide is used on cotton, cereal grains, fruits, nuts, and vegetables. It has also been used to control ticks and mites in livestock. Toxaphene was the most widely used pesticide in the US in 1975. Up to 50% of a toxaphene release can persist in the soil for up to 12 years.		
Packaging	Packaging is likely to be: drums, bottles (if substance liquid) or bags, packets (if solid).		
Pictograms	 Chronic health hazard	 Environmental hazard	 Acute toxicity
	Handling Precautions		
Storage conditions	Protective latex gloves, respiration masks and safety glasses should be worn. Arms and legs should be covered.		
For more information	Use a device to stop the flow in any possible situation (fire, outflow, spillage) Separate from incompatible substances (fuel, other toxic substances), food and food products Close properly Keep in well-ventilated premises		
	International Chemical Safety Cards http://www.inchem.org/pages/icsc.html The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th revised edition 2011 http://www.unece.org/trans/danger/publi/ghs/ghs_rev04/04files_e.html The National Focal Point, Official Contact Point and Competent Authority in your country		

References:

Project “development of Customs assistance materials aimed at enhancing the enforcement and national implementation of the Stockholm Convention” in Senegal, COTECNA (May 2006).

International Chemical Safety Cards (ICSCs) at: <http://www.inchem.org>.

Annex VI to Regulation (EC) No 1272/2008

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>

ANNEX IV

Harmonized System Codes assigned to chemicals in Annex III to the Rotterdam Convention

Harmonized System Codes developed by the WCO provide an international standard for the identification of chemicals listed in Annex III. As many Parties to the Rotterdam Convention are also members of the World Customs Organization, most customs authorities are already familiar with the use of these codes. The assignment of specific HS Codes to the chemicals in Annex III should facilitate integration of work on the Rotter-

dam Convention with the current activities of customs authorities and contribute to the effective implementation of the PIC procedure.

Effective 1 January 2007, a first set of specific HS Codes for most of the chemicals in Annex III came into effect. The accuracy of this information has been verified by the World Customs Organization.

Annex III Chemicals and Pesticides	CAS Number(s)	HS Code Pure Substance	HS Code Mixtures, Preparations containing Substance	Comment
2,4,5-T and its salts and esters	93-76-5	2918.91	3808.50	
Aldrin	309-00-2	2903.52	3808.50	
Binapacryl	485-31-4	2916.36	3808.50	
Captafol	2425-06-1	2930.50	3808.50	
Chlordane	57-74-9	2903.52	3808.50	
Chlordimeform	6164-98-3	2925.21	3808.50	
Chlorobenzilate	510-15-6	2918.18	3808.50	
DDT	50-29-3	2903.62	3808.50	
Dieldrin	60-57-1	2910.40	3808.50	

DNOC and its salts (such as ammonium salt, potassium salt and sodium salt)	534-52-1; 2980-64-5; 5787-96-2; 2312-76-7	2908.99	3808.91 – Insecticides 3808.92 – Fungicides 3808.93 – Herbicides, anti-sprouting products and plant-growth regulators	
Dinoseb and dinoseb salts	88-85-7	2908.91	3808.50	
Dinoseb acetate	2813-95-8	2915.36	3808.50	
1,2-dibromoethane (EDB)	106-93-4	2903.31	3808.50	
Ethylene dichloride	107-06-2	2903.15	3808.50	
Ethylene oxide	75-21-8	2910.10	3808.50 3824.81	
Fluoroacetamide	640-19-7	2924.12	3808.50	
HCH (mixed isomers)	608-73-1	2903.51	3808.50	
Heptachlor	76-44-8	2903.52	3808.50	
Hexachlorobenzene	118-74-1	2903.62	3808.50	
Lindane	58-89-9	2903.51	3808.50	
Mercury compounds including inorganic mercury compounds, alkyl mercury compounds and alkyloxyalkyl and aryl mercury compounds (CAS numbers)	See also: http://www.pic.int/en/CasNumbers/mercury%20compounds%20CAS%20numbers.pdf	2852.00	3808.50	
Monocrotophos	6923-22-4	2924.12	3808.50	
Parathion	56-38-2	2920.11	3808.50	
Pentachlorophenol and its salts and esters	87-86-5	2908.11 – Pentachlorophenol 2908.19 – salts of Pentachlorophenol	3808.50 – only pesticides containing pentachlorophenol 3808.91, 92, 93, 94, 99 – pesticides containing salts or esters of pentachlorophenol	
Toxaphene	8001-35-2	–	3808.50	
Dustable powder formulations containing a combination of: benomyl at or above 7 per cent, carbofuran at above 10 per cent, thiram at or above 15 per cent	17804-35-2; 1563-66-2; 137-26-8	–	3808.92	
Methamidophos (Soluble liquid formulations of the substance that exceed 600 g active ingredient/l)	10265-92-6	2930.50	3808.50	

Phosphamidon (Soluble liquid formulations of the substance that exceed 1000 g active ingredient/l)		2924.12	3808.50	
mixture, (E)&(Z) isomers)	13171-21-6			
(Z)-isomer	23783-98-4			
(E)-isomer	297-99-4			
Methyl-parathion (emulsifiable concentrates (EC) with 19.5%, 40%, 50%, 60% active ingredient and dusts containing 1.5%, 2% and 3% active ingredient)	298-00-0	2920.11	3808.50	
Asbestos		2524.10 - Crocidolite 2524.90 - Other	Articles of asbestos-cement, of cellulose fibre-cement or the like. 6811.40 – Containing asbestos. Fabricated asbestos fibres; mixtures with a basis of asbestos or with a basis of asbestos and magnesium carbonate; articles of such mixtures or of asbestos (for example, thread, woven fabric, clothing, headgear, footwear, gaskets), whether or not reinforced, other than goods of heading 68.11 or 68.13. 6812.91 – Clothing, clothing accessories, footwear and headgear 6812.92 – Paper, millboard and felt 6812.93 – Compressed asbestos fibre jointingm in sheets or rolls 6812.99 - Other Friction material and articles thereof (for example, sheets, rolls, strips, segments, discs, washers, pads), not mounted, for brakes, for clutches or the like, with a basis of asbestos, of other mineral substances or of cellulose, whether or not combined with textile or other materials. 6813.20 – Containing asbestos.	
Crocidolite	12001-28-4	2524.10	6812.80	

Actinolite	77536-66-4	2524.90	Fabricated asbestos fibres; mixtures with a basis of asbestos or with a basis of asbestos and magnesium carbonate; articles of such mixtures or of asbestos (for example, thread, woven fabric, clothing, headgear, footwear, gaskets), whether or not reinforced, other than goods of heading 68.11 or 68.13. 6812.91 – Clothing, clothing accessories, footwear and headgear 6812.92 – Paper, millboard and felt 6892.93 – Compressed asbestos fibre jointing in sheets or rolls 6892.99 - Other	
Anthophyllite	77536-67-5	2524.90		
Amosite	12172-73-5	2524.90		
Tremolite	77536-68-6	2524.90		
Polybrominated biphenyls (PBB)				
(hexa-)	1336-36-3	–	3824.82	
(octa-)	27858-07-7			
(deca-)	13654-09-6			
Polychlorinated biphenyls (PCB)	(1336-36-3) see also: http://www.pic.int/en/CasNumbers/PCB%20CAS%20number.pdf	–	3824.82	
Polychlorinated terphenyls (PCT)	61788-33-8	–	3824.82	
Tetraethyl lead	78-00-2	2931.00	e.g., 3811.11 – Anti-knock preparations based on lead compounds	No amendment in 2007 HS Revision
Tetramethyl lead	75-74-1	2931.00	e.g., 3811.11 – Anti-knock preparations based on lead compounds	No amendment in 2007 HS Revision
Tris (2,3-dibromopropyl) phosphate	126-72-7	2919.10	3824.83	

**Secretariat of the Basel, Rotterdam
and Stockholm Conventions**

United Nations Environment Programme (UNEP)
International Environment House
11-13 Chemin des Anémones
CH-1219 Châtelaine GE, Switzerland
Tel: +41 22 917 87 29
Fax: +41 22 917 80 98
Email: brs@brsmeas.org

**Secretariat of the Rotterdam
Convention**

Food and Agriculture Organization
of the United Nations (FAO)
Viale delle Terme di Caracalla
00153 Rome, Italy
Tel: +39 06 5705 5586
Fax: +39 06 5705 3057
Email: pic@fao.org

**www.basel.int – www.pic.int – www.pops.int
<http://synergies.pops.int/>**

