

IMPLEMENTATION OF THE ICCA AND INTERNATIONAL CONVENTIONS ON SOUND MANAGEMENT OF CHEMICALS

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PRESENTATION OUTLINE

2

- Introduction
- Genesis of Global Actions for Sound Chemicals Management
- Main Conventions on Sound Management of Chemicals
- Implementation of the ICCA and Domestication

INTRODUCTION

Global Concerns and Classification of Dangerous of Chemicals

1. Health Risks

- Toxic or Very Toxic
- Corrosive
- Harmful
- Irritant
- Cancer causing
- Effect reproduction
- Effect on other systems (Endocrine.....)

Global Concerns and Classification ...

2. Physical Hazards

- Fire and explosion hazard
- Explosive
- Flammable

3. Dangerous to the Environment

- Toxic to living organisms
- Persistence in the environment
- Bioaccumulation

GENESIS OF GLOBAL ACTIONS FOR SOUND CHEMICALS MANAGEMENT

- Because of Global Risks resulting from chemicals,
 - Agenda 21 chapter 19 to address the need for environmentally sound management of chemicals (ESMC),
 - This was at the United Nations Conference in Rio de Janeiro, 1992
- At the that Conference, it was noted that:
 - Many countries has in place programmes for the promotion of chemical safety.
 - Such work has international implications, as chemical risks do not respect national boundaries.
 - A need for strengthening national and international efforts to achieve an ESMC.

GENESIS ... RIO CONFERENCE RECOMMENDATIONS

The Rio Conference Come-up with Six Recommendations

1. Expanding and accelerating international assessment of chemical risks;
2. Harmonization of classification and labeling of chemicals;
3. Information exchange on toxic chemicals and chemical risks;
4. Establishment of risk reduction programmes;
5. Strengthening of national capabilities and capacities for management of chemicals;
6. Prevention of illegal international traffic in toxic and dangerous products.

MAIN CONVENTIONS

Main Conventions

1. Stockholm
2. Rotterdam
3. Basel
4. Minamata
5. Chemical Weapon
6. Montreal Protocol

Stockholm

- Protection of human health and the environment against POPs
- Operating Principles of the SC:
 - Eliminate or restrict the production, use, import and export of POPs.
 - Substitution by better alternatives
 - Eliminate POPs stockpiles and wastes
 - Procedure for adding new POPs for action
 - Promote BAT/BEP technologies to reduce unintentional POP emissions
- Elimination
 - 15 industrial chemicals
 - 16 Pesticides
 - 2 both industrial and pesticides use
- 7 Unintentional Production Chemicals

Main Conventions ...

Rotterdam

- The Convention on PIC
- Aimed to protect human health and the environment from potential harm.
- promotes exchange through:
 - proper labeling and directions on safe handling,
 - inform purchasers of any known restrictions or bans.
- Signatory countries can decide whether to:
 - allow or ban the importation of chemicals in the treaty,
 - exporting countries are obliged to notify the importing Party

Main Conventions ...

Rotterdam

- 55 chemicals and Pesticides under the Annex III
- URT issued import Response to 47.
- Final Decisions:
 - *No Consent to Import 24 pesticides and Consent to Import 3.*
 - *No Consent to Import 12 industrial Chemicals.*
- Interim Decisions:
 - *Consent to Import under specific conditions 7 pesticides.*
 - *Consent to Import under specific conditions 2 industrial Chemicals*

Main Conventions ...

Basel

- Designed to reduce the movements of hazardous waste from one state to another
- Aimed to protect human health and the Environment
- The State of export has to notify in writing, the competent authority of the State of import
- The State of import shall respond to the notifier in writing,
 - consenting to the movement with or without conditions,
 - denying permission for the movement, or
 - requesting additional information.
- A final response of the State of import shall be sent to the State of export.

Main Conventions ...

Minamata

- Aimed to controls, reduce and phaseout use of mercury
- The focus is all range of
 - products,
 - processes,
 - industries where mercury is used,
 - Releases and
 - emission.
- The concerns is because of its adverse health effects.
- Mercury is currently in a phasedown period.

Main Conventions ...

Minamata

- Prohibit development of new mercury mining after coming into force
- Production industries has grace period of 15 since 2018 after coming into force
- Prohibit production, importation and export of articles containing mercury by 2020.



Main Conventions ...

Minamata

- Deadline for further importation and use of articles containing mercury was 2020.
- Exemption is open for any State Party.
- Exemption is for 5 years and not be more 10 years
- Recommended to reduce and if visible eliminate use of mercury for gold extraction.
- There is no limit time.



Main Conventions ...

Chemical
Weapons
(CW)

- Prohibition of toxic chemicals and their precursors,
 - except where intended for purposes not prohibited under this Convention
- Each State Party shall never undertake under any circumstances:
 - use chemical weapons;
 - develop, produce, otherwise acquire, stockpile or retain CWs,
 - transfer, directly or indirectly, CWs to anyone;

Main Conventions ...

Chemical
Weapon
(CWs)

- engage in any military preparations to use CW
- assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party.
- Each State Party shall undertake to destroy:
 - CWs it owns or possesses, or that are located in any place under its jurisdiction or control.
 - all CWs it abandoned on the territory of another State Party.
 - any CWs production facilities it owns or possesses, or that are located in any place under its jurisdiction or control.

Main Conventions ...

Montreal Protocol

- On Substances that Deplete the Ozone Layer.
- Developed in response to scientific findings on depletion of the atmosphere ozone layer,
 - due to chlorine and bromine emissions from human activities
- Aimed to reduce and eliminate:
 - consumption and emissions of Ozone Layer Depleting Substances (ODS) and
 - by setting freeze and phase out schedules
- Each Party have to:
 - have to comply with the schedule for ODS phase out
 - Introduce control measures

Main Conventions ...

- Regulations, Control of imports
- Cleaner Production programmes
- Awareness, training

- Some of the phased-out ODS include:
 - Chlorofluorocarbons
 - Carbon Tetrachloride
 - 1,1,1-Trichloroethane (Methyl Chloroform)
 - Bromochloromethane, and
 - Methyl Bromide (exemption on specific use).
- Each Party have to:
 - Work on the phase down of hydrochlorofluorocarbon known as HCFC-22, or R-22.
 - Phase out the use of R-22 in all cooling systems by 2030.

Montreal
Protocol

ICCA Implementation

- The overall purpose of the ICCA is protection of human health and the environment.

Pillars for
implementation
of the ICCA are:

- Registration and Certification
- Inspection
- Permit issuance
- Restriction and prohibition

ICCA Implementation ...

20

Who has to be:

- registered
- and certified
- Inspected
- Issued with
- imports or transport permits

- Producer
- User
- Importer
- Exporter
- Transporter
- Distributor
- Storage/Warehouse
- Disposal facility

ICCA Implementation ...

21

What has to be registered or Inspected.

- Chemical from HS-Codes 22:07:00 – 40:05:00
- Premises
- Certificate holder

Category of chemicals for registration, restriction or prohibition.

- 3rd Schedule
- 6th Schedule
- 7th Schedule
- 8th Schedule

Implementation of the ICCA and Domestication of the Conventions

22

Domestication of the Conventions

- 3rd Schedule category are general chemicals requiring registrations
- Covers both industrial and consumer chemicals and public health pesticides
- Table 1.0 of the 3rd Schedule covers
 - List of Chemicals Requiring Registration
- Table 2.0 of the 3rd Schedule covers
 - Threshold quantities for non- hazardous chemicals not requiring registration

Domestication of the Conventions ...

6th Schedule
chemicals

**Cover Highly
Hazardous Chemicals**

1. Health Risks
2. Physical Hazards
3. Dangerous to the Environment

- Chemicals registered under 6th Schedule are
 - Controlled under the Rotterdam Convention depending of import response filed by the country
 - Controlled under the Minamata Convention
 - Under phase down of the Montreal Protocol

Domestication of the Conventions ...

- Highly controlled precursor chemicals are those used as ingredients in the manufacturing of drugs of abuse.
 - *N- Acetylanthranilic acid*
 - *Acetic anhydride*
 - *Isosafrole*
 - *Lysergic acid*
 - *3,4 – Methylenedioxyphenyl – 2 –propanone*
 - *4-Anilino-N-phenethylpiperidine (ANPP)*
 - *N-phenethyl-4-piperidone (NPP)*
 - *alpha-phenylacetoacetonitrile (APAAN)*
 - *1-Phenyl -2 – propanone*
 - *Piperonal*
 - *Safrole*

7th Schedule

Domestication of the Conventions ...

7th Schedule

- Highly controlled precursor chemicals are those used as ingredients in the manufacturing of drugs of abuse.
 - *Sassafras oil*
 - *O-amino benzoic acid*
 - *Hydroxylamine and its salts*
 - *1-phenyl-2-bromo-1-propanol*
 - *2-chlorophenyl cyclopentyl ketone*
 - *3-oxo-2-phenylbutyronitrile*
 - *4-peridinamine, N-phenyl-1- (2-phenylethyl)*
 - *N-Methyl-1-phenyl-1-chloro-2-amines*
 - *Phenyl acetic acid*
 - *Potassium Permanganate*
 - *Sodium Permanganate*
 - *Methyl alpha - Phenylacetoacetate (MAPA)*
 - *3,4-MDP-2-p Methyl glycidate (PMK glycidate).*
 - *3,4-MDP-2-p Methyl glycidic acid (PMK glycidic acid).*
 - *18 under process for inclusion*

Domestication of the Conventions ...

- Highly controlled precursor chemicals are those used as solvents in the manufacturing of drugs of abuse.
 - *Anthranilic acid*
 - *Acetone*
 - *Ethyl ether (Diethyl Ether)*
 - *Hydrochloric acid (Hydrogen Chloride)*
 - *Methyl ethyl ketone (Butanone)*
 - *Bromine*
 - *Sulphuric acid*
 - *Toluene*
 - *Chloroform*
 - *Propiophenone*
 - *Ethyl alcohol*
 - *Iodine*

7th Schedule

Domestication of the Conventions ...

List of precursor chemicals for chemical weapons

- **Category I** of Prohibited CW Precursors

- *DF: Methylphosphonyldifluoride*
- *QL: O-Ethyl O-2-diisopropylaminoethyl methylphosphonite*

- **Category II** of Prohibited CW Precursors

- *Methyl phosphonyl dichloride*
- *Dimethyl methylphosphonate*
- *Fonofos: O-Ethyl S-phenyl ethylphosphonothiolothionate*
- *2- (N, N-Dimethylamino) ethylchloride hydrochloride*
- *2- (N, N-Diethylamino) ethylchloride hydrochloride*

7th Schedule

Domestication of the Conventions ...

- **Category II** of Prohibited CW Precursors
 - 2- (N, N-Diisopropylamino) ethylchloride hydrochloride
 - N, N-Dimethylaminoethanol and corresponding protonated salts
 - N, N-Dimethylaminoethanol and corresponding protonated salts
 - 2- (N, N-Dimethylamino) ethylchloride hydrochloride
 - 2- (N, N-Diethylamino) ethylchloride hydrochloride

7th Schedule

Domestication of the Conventions ...

- **Category III** of Prohibited CW Precursors

- *Phosphorus oxychloride*
- *Phosphorus trichloride*
- *Phosphorus pentachloride*
- *Trimethyl phosphite*
- *Triethyl phosphite*
- *Dimethyl phosphite*
- *Diethyl phosphite*
- *Sulfur monochloride*
- *Sulfur dichloride*
- *Thionyl chloride*
- *Ethyldiethanolamine*
- *Methyldiethanolamine*
- *Triethanolamine*
- *Sodium Cyanide*
- *Potassium Cyanide*

7th Schedule

Domestication of the Conventions ...

- **List of Severely Restricted Banned/ Eliminated Chemicals**

- *List of chemicals with ban import response under the Rotterdam Convention*
- *List of chemicals with import response Importation Subject to Specific Conditions under the Rotterdam Convention*
- *List of chemicals banned under the Stockholm Convention*
- *List of chemicals with Specific Exception under the Stockholm Convention*
- *List of chemicals banned under the Chemical Weapons Convention*
- *List of chemicals Phased out under the Montreal Protocol*

8th Schedule

I Thank You For Your Attention
