



#### **ROTTERDAM** CONVENTION

#### Elements of a National framework for the sound management of industrial chemicals for Jordan

#### **1. Principles and Objectives:**

Protection of man and or environment from harmful effects of industrial chemicals and biocides by appropriate management of expected chemicals problems (through preventive assessment and action) and management of actual chemical problems, protecting biodiversity, contributing to sustainable development. Covering the whole life cycle of industrial chemicals for high priority chemicals.

#### **Required definitions for example:**

Chemical, mixture, article, industrial chemical, pesticide, biocide, lifecycle stages: production, marketing, import/export, use, recycling, waste producer, importer, exporter.

#### Chemicals regulated in the framework are all industrial chemicals.

**Pesticides** could be covered in the framework for their classification and labeling and for their risk assessment methodology for banning or restrictions.

#### **Exemptions for certain industrial chemicals:**

- Industrial chemicals registration only for hazardous chemicals
- Classification and labeling for all industrial chemicals and pesticides
- Life cycle risk assessment only for high priority industrial chemicals
- Assessment and management of all other hazardous industrial chemicals
- No specific assessments for chemicals used in Laboratories for analytical purposes or research and development. For the safe work in laboratories consider to use good working practices developed by other countries adapted as necessary to Jordan's situation after discussion with stakeholders

## The impact of the framework on other existing legal chemicals management instruments for different sectors needs to be identified

(Possible sectors affected by framework: export/import, laboratories, industry/worker, consumer, environment – air, water, soil-, transport, storage, chemical accidents, poison centers, waste management, industry control through compliance monitoring and enforcement, effectiveness evaluation of regulatory system by monitoring chemicals in man and the environment) A comparison of the intended framework and existing legislation is required to avoid gaps and overlaps in chemicals management. An analysis of existing chemicals legislation is available from the National Profile, the legal study and the table developed during the workshop with information as to which stakeholders are responsible for which step of the life cycle of an industrial chemical.

#### 2. Responsibilities and Organization:

Roles, obligation and rights of Government, industry (importer, producer, user, distributor) and other stakeholders

#### **Government: Roles**

o Legislative

- Monitoring, inspection and evaluation
- o Implementation and enforcement
- Training and awareness raising

#### Obligations and rights

- Transparency, sharing information
- o Provide incentives
- Frequent review of the framework
- o Compliance with the international conventions and encourage the international trade
- Provide the alternatives
- o Qualified personnel, competency

#### **Industry: roles, obligation and rights**

- Compliance with the national regulation
- Self monitoring
- Social corporate responsibility
- Training and awareness
- Notification of government as per the framework
- Provide technical support to the government
- Implement comprehensive risk assessment and management
- Documentation, document control system
- Partner in the decision making process
- Support research and development
- Receive the government and community support
- Protect the national right
- Transparency

#### Other stakeholders: roles, CSOs, private and media

- Awareness raising and education
- Advocacy campaigns
- Training
- Research
- Information giving
- Consultancy
- Donations
- Investigative reporting

## Cooperation between stakeholders implementing the framework (National Coordination mechanism) through the National Technical Committee of Hazardous and Harmful waste provided:

- Change the name
- Extend membership
- Create something like SAICM

Cooperation between stakeholders implementing the framework (National Coordination mechanism needed)

#### 3. Technical Content:

#### **3.1** National information system on industrial chemicals in the country

#### 3.1.1 Information collection from industry by Government through registration

**Objective**: to register all the industrial chemicals entering Jordanian borders, and to make reports on these chemicals, to facilitate the decision-making for the related authorities and to make a clear vision

on the situation of industrial chemicals in Jordan after a specific period of time (e.g. after a year). How much of the chemicals end up as waste? Quantities of unused chemicals?

Consider that each company has an internal data base of all chemicals produced/imported and used. This can be controlled by Government inspections. Consider to request industry to register only the hazardous chemicals to Government to save resources.

**Content:** identification of the company, identification of the chemical (IUPAC name, CAS No. physical and chemical properties?), quantity of the chemical, classification and label of the chemical, intended use, accident precautions.

**Process**: governmental authorities shall oblige the (importers, exporters, producers) to register their chemicals, and to notify these authorities on the quantities they import/ export and use, how much wastes are made out of these chemicals, and to notify about the accidents caused by these chemicals.

**Responsibilities**: the responsibility of the government is to enforce its regulations (registration and reporting) on the importers, exporters and the producers, and to monitor this process, then to collect and classify the data and make it available and accessible when needed. The confidentiality of the data collected shall be protected to improve the trust between the government and industry.

**Coordination**: data base shall be accessible for all authorities, there should be an information exchange system between them, and there shall be cooperation and coordination between private and governmental sectors.

#### 3.1.2 Information storage and dissemination through a National data base

**Objective**: to perform a data base (which is accessible for the government and the companies) on all hazardous chemicals in the country to identify the priority chemicals for bans and restrictions.

**Content**: identification of the company, identification of the chemical (IUPAC name, CAS No. physical and chemical properties, etc.), quantity of the chemical, classification and label of the chemical, intended use, accidents precautions. Update of the data shall be made when new information becomes available.

**Process**: Regular notifications, data from importers and producers, data from conventions. The data is directly input into the data base.

**Responsibilities**: The data should be provided by the industry (importers, producers), governmental authorities shall collect and classify these data and update them regularly. The HMS data base under MOENV could be amended to store the data.

**Coordination**: The data base shall be accessible for all authorities, there should be an information exchange system between them, and there shall be cooperation and coordination between private and governmental sectors.

Consider to identify data that are confidential business information for industry such as quantity used. This information should not be made public. Consider to have a public data base with all non-confidential information and an internal Government data base with all information.

#### 3.2 Hazard assessment

(GHS implementation for industrial chemicals and pesticides priority according to work plan, Draft outline of GHS implementation and request for external support by MOENV, support by external donors/implementation agencies such as UNITAR required.)

Implementation of the GHS (classification and labelling, material safety data sheets for chemicals) for worker, consumer, agriculture, transport, emergency response.

Implement the GHS (classification and labeling for all hazards of industrial chemicals and pesticides, material safety data sheet for industry/worker)for worker, consumer, agriculture, transport, emergency response and monitor it through the different responsible Government authorities.

## Hazard assessment/GHS implementation in Jordan (classification and labeling, safety data sheets) - worker, consumer, agriculture, transport)

Actor	Labeling	Classification	MSDs
Government	X	X	X
Industry	Х	Х	Х
Others			
Worker	Х		Х
Consumer	Х		
Agriculture	Х		
Transport	X		X

## A national scheme for classification and labeling of industrial chemicals for supply and use in Jordan

	Industrial chemicals	Pesticides	Biocides
Objective	Identify hazards	Identify pesticides hazards, prevent high hazards and the ones impact health	Protect consumers
Content	Hazard categories	Pesticides classification	Pesticides classifications
Process	Activate monitoring on importer and exporters	Regulation, inspection,	Regulation, inspection, awareness
Responsibilities	Provide alternatives	Implement the regulation support the privet sector	Implement the regulation support the privet sector, awareness the user and consumer
Coordination	International National (private sector and government) Intergovernmental coordination	MOA ,MOE	MOA,MOE,MOH

**3.3 Risk assessment for industrial chemicals and pesticides** (Risk evaluation or assessment for ban and restriction of industrial chemicals and pesticides priority according to the work plan, industrial chemicals discussion in Technical Committee with invited participants of this WS, Pesticide discussion in Committee for pesticide registration. Exchange on progress between MOENV and MOA)

At present the assessment of certain chemicals and pesticides to decide to ban or restrict them is based on their hazards and the availability of efficient and cost effective alternatives. Introduce in the frame work a general requirement for industry to do risk assessment for certain priority chemicals. Determine the criteria for priority like high toxicity and high exposure to man and/or the environment. The legislation of the frame work will describe the principle of risk assessment that is applicable to industrial chemicals and pesticides and can be used by industry and Government. The legislation could give several tiers of risk assessment;

- Tier1: general exposure assumption for public use
- Tier 2: qualitative exposure and hazard assessment
- Tier 3: bridging other countries risk assessments

• Tier 4: full life cycle quantitative or semi quantitative risk assessment that can be applied for risk assessment.

Initiate the scientific studies from academia and evaluate the effect of these chemicals on human health in all the stages of life cycles for these chemicals.

#### Planned national system for assessment of chemicals in Jordan

**Objective:** To evaluate the hazards to health and the environment caused by use or exposure of hazardous chemicals and pesticides and biocides.

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Required Assessment	Pesticides and Biocides	Hazardous Chemical	Non Hazardous Chemical
Tier1 (Simple)			
Tier2 (Qualitative)			
Tier3(Bridging)	X	Х	
Tier4 (Full)			

**Process:** When new chemicals enter the country (not registered in GHS or HSMS systems), based on CAS no. customs direct any new chemical to concerned governmental department, which decides to direct it to the technical committee (all this happens in one stop shop: one window located in customs locations). Any articles/chemical that fails the Jordanian standard or specifications to enter the country will remain with customs.

**Responsibility:** Two technical committees will be responsible for the risk assessments, ministry of agricultural committee for pesticides and biocides and Moenv committee for hazardous chemicals. **Coordination:** Customs will direct the non registered chemicals to MoH, MoH then directs the new chemical to the concerned technical committee. MoH will take the responsibility to register the Hazardous chemical, MoA will register pesticides and biocides .

Special expertise of industry and Government is needed to do risk assessments for chemicals.

Draft Road map for Risk Assessment in Jordan:



**3.4** Risk management (banning or restricting industrial chemicals for health or environmental reasons)

**3.4.1** Provision to ban or restrict industrial chemicals whose risks in all relevant stages of the life cycle have been assessed in planned framework legislation required.

**Objective:** To manage the risks of Banned or restricted and hazardous chemicals along with Pesticides and Biocides based on the risk assessment recommendation.

#### **Content:**

Requires Management by	Restricted and Banned Chemical	Hazardous Chemicals and Pesticides and Biocides
Government Sector	MoH, MoA, Moenv and MoI	MoH, MoA, Moenv

#### **Process:**

*For banned and restricted:* As defined in agreement and conventions, if required to evaluate, add, or review concerned government sector will take the lead for administration.

*For hazardous chemicals:* Management through putting procedures after reviewing the risk assessment and standards for MSDS, Classification. Labeling, packaging, storage, transportation, disposal (through identified risk in the life cycle, as evaluated in Risk assessment)

**Responsibility:** The national committee, technical committees and MoH, Moenv, MoA and MoI **Coordination:** The national committee for industrial chemicals to do the administration and give guidance to the technical committees and the governmental sections to do the registrations and surveillance.

# 3.4.2 Assessment and management for other hazardous industrial chemicals priority P2 according to the work plan, discussion in Technical Committee with invited participants of this WS

#### 3.5 Industry control through compliance monitoring and enforcement

Risk assessment by industry can be controlled by third party audits, inspections on site Encourage the industrial sector to follow the legislations and reward the companies for that as well as fine who is not following legislation.

#### Systematic control of industry

**Process:** National authorities shall enforce their obligations and oblige the economic operators and users to implement these obligations

National authorities shall monitor the compliance of the obligations by economic operators and users through inspections and registration of the industrial chemicals

In the case of violation, national authorities shall oblige the violators to compensate for the damage and to pay penalties.

**Responsibilities:** Each governmental authority is responsible of enforcing and monitoring the compliance of their obligations (MOH, JSMO, JFDA, civil defense, environment, Customs, others) Private sector shall provide the governmental authorities with the needed data, and shall fully comply with the regulations.

**Coordination:** Private and governmental sectors shall cooperate together to insure the compliance of the regulations.

All governmental authorities shall coordinate their work to prevent overlapping and interference. There shall be rapid information exchange system between the national authorities to integrate the work.

## **3.6** Awareness raising about hazards and risks from industrial chemicals by all relevant stakeholders

#### 3.7 Fees, charges for industry

Consider to request new fees from industry for example for registrations of hazardous industrial chemicals to finance the National data base.

Consider to use new fees to industry for technical support in GHS implementation by Government authorities or other experts to finance part of the GHS implementation.

## **3.8** Effectiveness evaluation of regulatory system by Government through monitoring chemicals in man and the environment

Consider to use laboratories to identify the concentrations of selected banned or restricted industrial chemicals in environment media – air, water, soil - and in human body liquids (for example blood).

#### 4. Other Elements:

Consider to implement the Rotterdam Convention (Banned or severely restricted chemicals from Annex III of the Convention) and the Stockholm Convention (ban or restriction of POPs from Annexes A, B or C of the Convention) through the framework