

## **Proposed National Policy on Chemicals management**

### **1.0 The Rationale for for developing a Policy on Chemical Management in Sri Lanka**

#### **1.1 The need**

Both, production and use of chemicals have been increasing globally along with economic growth. On the other hand, serious concerns over detrimental impacts on human health and the environment as a result of inappropriate production, transportation, storage, use and disposal of chemicals have also arisen.

Sri Lanka with its rapid economic development now faces more and more the adverse impacts of chemicals that occur in particular if no appropriate chemicals legislation and no sustainable chemicals management exist.

It must be noted that at present, chemical production within Sri Lanka is small. However, imports of chemicals to Sri Lanka are growing and imported chemicals are used for various industries. The United Nations, in chapter 19 of its agenda 21 specifically identified "Environmentally Sound Management of Toxic Chemicals" as one of the global priorities to address.

Impacts from chemicals arise during the full life-cycle of substances and products, including downstream use and end-of-life management.

Therefore, a chemicals management strategy that ensures transparency and control of chemicals mass flows from import/production through downstream use, and customers products to waste stage is urgently needed to ensure "Environmentally Sound Management of Toxic Chemicals", preventing harm to the environment or human health.

In Sri Lanka there is currently rather little commitment on the part of individuals and organizations/companies who would either be apathetic or reluctant to take responsibility for the

negative impact on the chemicals on human health and environment. Under these circumstances, the consequences of increasing chemicals consumption without a sound management and updated legal regulations will become a serious national concern. Moreover, the possible costs of mitigating or reversing negative impacts of inappropriate use and disposal of chemicals would be immense and ultimately become a burden to the government.

Therefore, it is utmost importance to introduce a National Policy on Chemicals Management. It will seek to establish the overall structure for chemical management in which relevant measures will be developed and brought into effect, thereby enabling Sri Lanka to curtail potential dangers to the environment while reaping the economic benefits that the industrial sector would offer. In other words, it should seek to harmonize the balance between progress and sustainability and look forward to appropriate alternatives.

## **1.2 Scope of the Policy**

The scope of this Policy includes chemical use and handling in agriculture, industry, services, energy, education, transport and all other relevant sectors. Specially, it addresses toxic agrochemicals and hazardous industrial chemicals, Persistent Organic Pollutants, and persistent bio-accumulative substances (PBT) as well as endocrine disruptors and other man-made chemicals of very high or high concern. It recognizes that many of the chemicals currently in use in Sri Lanka, have not been comprehensively assessed within the country to ascertain the risk they present as well as potential toxicity which may emerge. The suggested policy recommends Sri Lanka to regularly review the hazards and perform risks assessments, and to incorporate new data and information arising from research and monitoring of positive and negative impacts of chemicals as well as possible alternatives and safer chemicals and technologies.

The policy links various existing regulations, such as waste management regulations, occupational health and safety, environmental protection licences etc.

This Policy covers aspects of sound management of chemicals at every stage of their life cycle including import/manufacture, transport and distribution, trade, use, recycling and disposal with

emphasis placed on social, economic, health, labor and environment matters. In particular, it considers hazards and risks elimination , knowledge and information transfer and awareness , governance, compliance and monitoring capacity building and technical cooperation, as well as illegal international traffic of hazardous chemicals and waste. The policy further provides the basis for generating legal instruments for sustainable chemicals management.

It also covers the implementation of the Multilateral Environmental Agreements (MEAs), trade controls, emergency response, waste management, transport, compensation and remediation of sites contaminated by toxic chemicals.

This Policy includes all chemicals falling under the categories of chemical weapons and precursor chemicals as well as all chemical categories where regulation of these special categories will be under respective policy documents .

Laws, regulations and other instruments under this policy are applicable for the chemicals imported, manufactured, stored, transported, used or disposed. It is recommended that the competent authorities apply thresholds for single measures related to hazardousness and risks of the chemicals in order to have a balance between administrative efforts and adverse effect of chemicals on human health and environment.

### **1.3 Definition of Chemicals**

For this policy, Chemicals are considered to be any solid, liquid or gaseous substance or any preparation of substances where the following definitions apply:

*SUBSTANCE*: means a chemical element and its compounds in the natural state or obtained by any manufacturing process, including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent, which may be separated without affecting the stability of the substance or changing its composition.

*PREPARATION*: means a mixture or solution composed of two or more substances.

Articles are not considered to be chemicals where the following definition of an article applies:

*ARTICLE*: means an object, which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition.

Within the chemicals policy articles might be addressed if they can release chemicals with adverse effects to humans or the environment.

## **2. Policy Framework**

The national policy on chemical management shall comply with the National Development Objectives of the government of Sri Lanka and make reference to sustainable chemical alternatives .

### **2.1 Policy Objectives**

The chemical management policy renews the commitment of the Government, in ensuring the management of chemicals in a way to reduce harm to human health and environment.

It shall be based on the precautionary principle and polluter pays principle, within the framework of sustainable development for the benefit of the present and the future generations. This policy supports other related policies and is intended to be complementary and not to replace or undermine them.

The major policy objectives are as follows:

2.1.1 Strengthening, improving and introducing policies regarding chemical management to ensure reduced adverse impacts on human health and the environment without hindering the economic development of Sri Lanka.

2.1.2 Ensure the safe and sustainable management of chemicals at every stage of the chemical life-cycle and in this way saving human lives, protecting human health as well as protecting the environment and reducing resource consumption.

2.1.3 Ensure effective enforcement and implementation of related laws, regulations, guidelines and standards by clear allocation of responsibilities

2.1.4 Foster capacity building and technological cooperation of all stakeholders

2.1.5 Promote and ensure dissemination of knowledge of safe and environment friendly handling of chemicals. This includes establishing a structure to exchange information on chemicals focussing on regulations and laws at national level.

2.1.6 Providing an institutional framework for decision making, training, research and development (R&D) and international cooperation in matters pertaining to chemicals management.

2.1.7 Assure effective coordination of all related Government institutions to cover the chemical requirement of industries and other users.

2.1.8 Establish effective chemical monitoring systems to assess policy efficiency, regulatory compliance and identify emerging risks.

2.1.9 Follow the articles and guidelines stipulated in the chemical related international conventions. Seek international assistance whenever appropriate.

## **2.2 Policy Principles**

2.2.1 Sri Lanka would prioritize the acquisition and development of its own competences in all aspects of chemicals management.

2.2.2 The import, manufacture, use, storage, transportation, sale and disposal of chemicals shall conform with national legislation, and with international conventions as well as agreed policies.

2.2.3 The national regulations and standards should be harmonized and streamlined with international regulations. There should be a balance where international regulations would be adapted to suit local needs. Sri Lanka recognizes the importance of articles and guidelines in the chemical related conventions and multi national agreements. Sri Lanka recognizes the importance of Sustainable Chemistry that reduces the adverse effect of chemicals on human health and environment without jeopardizing the economic development of the country.

2.2.4 Establish extended producer responsibility and the “Polluter Pays Principle”, to internalize the externalities related to chemical management

2.2.5 Sri Lanka shall place utmost importance in enforcement of regulations and implementation of necessary measures. Clear allocation of tasks and responsibilities within different authorities is highly recommended.

2.2.6 Arrangements shall be made for transparency in sharing of the information related to chemical management to the maximum possible level within the legal framework. Public awareness, education and knowledge sharing will be enhanced to ensure stakeholder participation in the decision making, where ever possible.

2.2.7. Strengthen the risk analysis assessment, management and communication at all levels

## **2.3 Policy Statements**

- Recognizing the importance of protecting its people, and its environment while promoting a sustainable development through the implementation of measures for sustainable management of chemicals
- Recognizing the value of human health and the natural resources of the country and also the risk that may be incurred on them due to penetration of obsolete technologies associated with chemicals
- Recognizing the importance of developing capacities in sustainable chemical management through awareness programs and research by relevant authority
- Reaffirming the commitment to the obligations of all chemical related conventions, namely Basel, Rotterdam, Stockholm and Minamata conventions but not limited to them
- Recognizing the importance of close coordination among stakeholder institutions in the management of chemicals and articles containing hazardous chemicals from import/production to final disposal

2.3.1 There shall be a national chemical management secretariat under the relevant line ministry to coordinate all responsible institutions at national and international level for sustainable management of chemicals

2.3.2 Appropriate management of data on chemicals (Chemicals database) is required and adequate funds shall be allocated

2.3.3 Priorities in Human Resource Development such as training, capacity building, competence building for all categories of involved humans in chemicals management shall be identified

2.3.4 Priorities in research with a special focus on risk analysis, assessment, management and communication at all levels including better alternatives, health hazards and adequate funds shall be allocated to relevant authorities.

2.3.5 Sustainable use of chemicals shall be established through new tools and technologies, labelling, introduction of guidelines and prepare monitoring systems at all levels

2.3.6 Systems shall be established to internalize the externalities based on the polluter pays principle and application of market based information considering the nature of the chemicals.

2.3.7 Emergency service team shall be established and attached to existing Disaster Management Centre allocating trained human resources and other required resources

2.3.8 Regular monitoring of application of this policy will be strengthened and institutionalized

2.3.9 Dissemination of relevant information on chemical hazards and risks along the life-cycle to the responsible parties shall be guaranteed through the institutional set up

#### Strategies for Sustainable Chemicals Management

- 1) Establish and activate the Coordinating Secretariat for Management of Chemicals under relevant line ministry
- 2) Introduce technical, technological and managerial tools to all stages of the chemical value chain
- 3) Establish a system for integrated industry inspection by a combined group consisting of officers from relevant authorities. Strengthen factory inspection program through training of inspectors.
- 4) Promote and foster industrial self-assessment capacity in sound management of chemicals and waste
- 5) Coordinate with Central Environmental Authority to promote chemical consumption reporting of industries in EPL Application with special focus on hazardous chemicals used. Suggest to establish "reporting light on non hazardous chemicals".
- 6) Strengthen National Green Reporting System to make reporting chemical related information by involved stakeholders.
- 7) Introduce a Database to collect chemical related information through coordination with all players along the value chain
- 8) Streamline chemical flow from port to warehouses/industries through revised regulations and documentation.



- 9) Coordinate with stakeholders to exchange knowledge on accidents as well as incidents related to chemicals.
- 10) Incorporate regular chemical risk assessment into industries where hazardous chemicals are in use.
- 11) Introduce market based instruments to promote application of analytical tools for hazard identification and risk assessment where necessary.
- 12) Develop and Introduce a rating system for all entities along the value chain based on comprehensive risk assessment
- 13) Strengthen legal framework to fine and prosecute non-compliance and inappropriate chemicals management (e.g. leaching, littering, uncontrolled waste water discharge/dumping/air emissions), along the chemicals value chain. Activity.
- 14) Make arrangements to implement "Polluter Pays system" for all chemical related activities along the chemical value chain. Activity include storage, transportation and sales.
- 15) Establish regulation for transport of dangerous good ( safety measures and labelling of Vehicles and personnel) to ensure safe transport of hazardous chemicals Activity.
- 16) Coordinate with Ministry of Health and Labour Department to encourage and promote dissemination of information on chemical risks from occupational exposure, respectively open and domestic use of chemicals and products containing hazardous chemicals.. Increase public awareness of all stakeholders. Take care about particular risks resulting from chemical exposure to women (Pregnancy, Breast feeding period etc.)
- 17) Encourage and incentivize journalists/media personnel to publish books, booklets, articles and posters on safe sustainable chemical consumption.
- 18) Promote the development of a appropriate collection and recovery/disposal infrastructure for obsolete chemicals at all institutions/industries/end users.
- 19) Improve knowledge management and exchange within stakeholders such as a system to collect information on obsolete chemicals available, development of a appropriate collection and recovery/disposal infrastructure for obsolete chemicals at all institutions/industries/end users and safe collection and disposal of laboratory chemicals from all schools and universities. Establish guidelines for various stages of the chemical life cycle at all institutions and ensure compliance through regular inspections.

- 20) Promote application of sustainable chemistry/green chemistry to substitute hazardous chemicals.
- 21) Establish/Promote industry-university partnerships to encourage research into sustainable chemical practices and approaches
- 22) Establish a chemical symbiosis platform to facilitate exchange on sustainable chemicals by industries
- 23) Publish the obligations of the country under multilateral environment agreements and industry obligations related to them
- 24) Facilitate local training institutions to broaden the training packages on chemicals management to all categories of industry personnel
- 25) Foster standardisation of safety and health equipment
- 26) Coordinate with Disaster Management Centre to establish and train emergency Response teams for chemical hazards at Divisional Secretariat Level.
- 27) Facilitate all entities along the value chain to train their staff and establish emergency preparedness plans

<b>Need to be adapted according to amended strategies above</b>			
<b>Policy Statement</b>	<b>Strategy</b>	<b>Policy Objective</b>	<b>Policy Principle</b>
<b>2.3.1</b>	<ul style="list-style-type: none"> <li>Establish and Activate the coordinating Secretariat for Management of Chemicals under Ministry of Mahaveli Development and Environment</li> </ul>	<b>All</b>	
<b>2.3.2</b>	<ul style="list-style-type: none"> <li>Publicize the obligations of the country under multilateral environment agreements and industry obligations related to to them</li> </ul>	<b>2.1.11</b>	
<b>2.3.3</b>			
<b>2.3.4</b>	<ul style="list-style-type: none"> <li>Coordinate with the National Institute of Education to incorporate knowledge on hazards of chemicals and safe use of chemicals in school curricula</li> </ul>	<b>2.1.4</b>	
	<ul style="list-style-type: none"> <li>Facilitate local training institutions to broaden the training packages on chemicals management to all categories of industry peronnel</li> </ul>	<b>2.1.4</b>	
<b>2.3.5</b>	<ul style="list-style-type: none"> <li>Promote application of sustainable chemistry/green chemistry wherever possible to replace hazardous chemicals with substances with reduced harm.</li> </ul>	<b>2.1.4</b>	
	<ul style="list-style-type: none"> <li>Synergize the industry university partnerships to encourage research into sustainable chemical practises and apporches</li> </ul>	<b>2.1.7</b>	
<b>2.3.6</b>	<ul style="list-style-type: none"> <li>Introduce technical and technological tools to all stages of the value chain</li> </ul>	<b>2.1.4</b>	
	<ul style="list-style-type: none"> <li>Establish guidelines for chemical storage at all institutions and ensure compliance through regular inspections</li> </ul>	<b>2.1.10</b>	
	<ul style="list-style-type: none"> <li>Establish a chemical symbiosis platform to facilitate excahnge of safe chemcials by industries</li> </ul>	<b>2.1.2/2.1.6</b>	

<b>2.3.7</b>	<ul style="list-style-type: none"> <li>Streamline chemical flow from port to warehouses/industries through revised regulations and documentation.</li> </ul>	<b>2.1.2/2.1.8</b>	
	<ul style="list-style-type: none"> <li>Incorporate regular chemical risk assessment into industries where hazardous chemicals are in use.</li> </ul>	<b>2.1.2/2.1.3</b>	
	<ul style="list-style-type: none"> <li>Introduce market based instruments to promote application of analytical tools for hazard identification and risk assessment</li> </ul>	<b>2.1.2/2.1.3</b>	
	<ul style="list-style-type: none"> <li>Introduce a rating system for all entities along the value chain based on comprehensive risk assessment</li> </ul>	<b>2.1.2/2.1.3</b>	
	<ul style="list-style-type: none"> <li>Strengthen legal framework to eliminate irresponsible behavior by persons/entities along the chemicals value chain.</li> </ul>	<b>2.1.3</b>	
	<ul style="list-style-type: none"> <li>Make arrangements to implement “Polluter Pays system” for all chemical related activities along the chemical value chain</li> </ul>	<b>2.1.3</b>	
	<ul style="list-style-type: none"> <li>Streamline chemical handling and transport by introduction of regulation for chemical transport( Vehicles and personnel)</li> </ul>	<b>2.1.2</b>	
	<ul style="list-style-type: none"> <li>Promote the development of a final disposal site/mechanism for obsolete chemicals at all institutions/industries</li> </ul>	<b>2.1.10</b>	
	<ul style="list-style-type: none"> <li>Coordinate with Ministries of Higher Education and Ministry of Education on safe collection and disposal of laboratory chemicals from all schools and universities</li> </ul>	<b>2.1.4</b>	
<b>2.3.8</b>	<ul style="list-style-type: none"> <li>Coordinate with Disaster Management Centre to establish and train emergency Response teams for chemical hazards at Divisional Secretariat Level.</li> </ul>	<b>2.1.4</b>	
	<ul style="list-style-type: none"> <li>Facilitate all entities along the value chain to train their staff and establish emergency preparedness plans</li> </ul>	<b>2.1.4</b>	

<b>2.3.9</b>	<ul style="list-style-type: none"> <li>Establish a system for industry inspection by a combined group consisting of officers from Central Environment Authority, Public Health Inspectors from Health Ministry and Labour Officers from Labour Department</li> </ul>	<b>2.1.10</b>	
	<ul style="list-style-type: none"> <li>Strengthen factory inspection program through training of EHS inspectors</li> </ul>	<b>2.1.10</b>	
	<ul style="list-style-type: none"> <li>Coordinate with Central Environmental Authority to promote chemical consumption reporting of industries in EPL Application</li> </ul>	<b>2.1.10</b>	
<b>2.3.10</b>	<ul style="list-style-type: none"> <li>Introduce a Management Information System to collect chemical related information through coordination with all players along the value chain</li> </ul>	<b>2.1.5/2.1.6</b>	
	<ul style="list-style-type: none"> <li>Encourage and incentivize journalists/media personnel to publish books, booklets, articles and posters on safe chemical consumption.</li> </ul>	<b>2.1.5/2.1.6</b>	
	<ul style="list-style-type: none"> <li>Coordinate with Ministry of Health to encourage and promote media to publicize relevant information on chemicals for communities related to human and environmental health.</li> </ul>	<b>2.1.5/2.1.6</b>	
	<ul style="list-style-type: none"> <li>Strengthen National Green Reporting System to make reporting chemical related information by industry</li> </ul>	<b>2.1.5/2.1.6</b>	
	<ul style="list-style-type: none"> <li>Coordinate with Labour Department to streamline reporting of accidents as well as incidents related to chemicals</li> </ul>	<b>2.1.5/2.1.6</b>	
	<ul style="list-style-type: none"> <li>Organize a system to collect information on obsolete chemicals available with all institutions/industries</li> </ul>	<b>2.1.5/2.1.6</b>	