MAURITIUS NATIONAL REPORTING TO CSD18

1. <u>CHEMICALS</u>

1.1 Assessment of chemical risks, including:

1.1 Mechanisms for systematic evaluation, classification, and labeling of chemicals, including initiatives towards a harmonized system of classification and labeling of chemicals & 1.1.2 Initiatives for assessment of toxic chemicals, hazard and risk assessment, and participation in various international and regional initiatives

Mauritius has the Dangerous Chemicals Control Act 2004 (DCCA) which is the legal framework for the control of dangerous chemicals in order to prevent damage to health and to the environment by chemical substances and to provide for better protection of workers, members of the public and the environment.

The DCCA, under the Ministry of Health & Quality of Life, is in line with the Globally Harmonized System of Classification and Labeling of Chemicals. There is established for the purpose of the implementations of the provisions of the DCCA, a Dangerous Chemicals Control Board (DCCB) whose functions are the following:

- o To classify dangerous chemicals according to the appropriate schedules.
- To ensure co-ordination and co-operation amongst the law enforcement agencies, government departments and other institutions for the effective control of dangerous chemicals.
- o To consider applications for the grant of licenses, permits and authorization for marketing and use of dangerous chemicals under the Act.
- o To register dangerous chemicals.
- o To develop policies and administrative measures to ensure effective consultation on matters relating to dangerous chemicals.

High risks workers in certain hazardous trades such as chemical storage facilities or pesticides sprayer men are required to undergo periodic medical examination.(for both public and private sector).

The Government Analyst Division of the Ministry of Health and Quality of Life is responsible for the toxicological assessment for heavy metals such Mercury, Nickel and Lead.

1.1.3 Strategies for exposure assessment and environmental monitoring and improvement in procedures for using toxicological and epidemiological data to predict and estimate the effects of chemicals on human health and the environment

None

1.1.4 Information exchange and cooperation, data-quality assurance, application of assessment criteria, and linkages to risk management activities

Undertaken under the aegis of the DCCB, as elaborated at 1.1.1 and 1.1.2 above.

1.2 Sound management of toxic chemicals

1.2.1 Progress within the larger framework of Strategic Approach to International Chemicals Management (SAICM)

The Ministry of Health and Quality of Life is the focal point for SAICM and is represented by the Occupational Health Unit.

While the SAICM is not a treaty and is not legally binding, it represents a public commitment, a global policy strategy, and a plan of action to guide authorities, industry and civil society for safely managing chemicals.

The project aims firstly to assist Mauritius to develop a comprehensive assessment of the national infrastructure, relating to the legal, intuitional, administrative and technical aspects of chemicals management. The project also aims to assist Mauritius to build upon the National Profile development process

Mauritius is also party to the Rotterdam Convention (1997) for the prior Informed Consent (PIC) procedure for Banned or Restricted Chemicals in International Trade. The designated National Authority for Mauritius is the Ministry of Health and Quality of Life. Mauritius ratified the Convention on 03 August 2005 and the Convention came into force in Mauritius in November 2005. Implementation of the articles of the Convention is on-going.

Government actively participates in the implementation of the Basel Convention on the transboundary movement of hazardous wastes. The Hazardous Wastes Regulations govern the domestic management and export of hazardous wastes. Import of hazardous wastes is banned.

Mauritius has, so far, not embarked on a dedicated program of Sound Management of Chemicals. The preparation of a National Profile to assess the National Infrastructure for Management of Chemicals, relating to their institutional, administrative and technical aspects, would be an important step in the strengthening of the legislation. However, actions have been initiated to secure funds from SAICM QSP to undertake a comprehensive national chemicals management profile.

1.2.2 Initiatives and innovations for risk reduction, particularly taking in to account the life cycle of the chemicals

Mauritius has procedures in place to ensure that any hazardous material put into circulation is accompanied, at a minimum, by appropriate and reliable safety information, such as material

safety data sheets and labels. However, the mechanism is yet to be put in place for the collection and disposal of hazardous wastes and obsolete chemicals.

1.2.3 Precautionary measures derived from broad-based life cycle analysis & 1.2.4 Policy measures to phase out chemicals that pose unreasonable and unmanageable risk to human health and human environment, such as, for example, ozone-depleting substances

On and above the national approach explicated at 1.1.1 and 1.1.2 above, parallel mechanisms have also been established for specific categories of chemicals such as the POPs and ODS.

Mauritius signed the Stockholm Convention on POPs in May 2001 and ratified it in 2004 and is committed to comply with its provisions. Most of the POPs have been banned. The Health and Environmental issues associated with POPs are covered mostly under the two main legal frameworks, namely the Dangerous Chemical Control Act 2004 and the Environment Protection (Amendment) Act 2008.

Mauritius has already prepared its National Implementation Plan (NIP) for the management of POPs. In the context of the implementation of the Stockholm Convention, a project partly funded by the Global Environmental Facility (GEF) has been launched this year. The objective of this 4-year project is the implementation of the first 2 priorities from the Mauritius National Implementation Plan (NIP) namely: (i) Disposal of obsolete POPs chemicals and decontamination of POPs-related infested areas; and (ii) Development of alternative strategies for malaria vector management with reduced, or no, reliance on DDT.

Mauritius is a signatory to the Vienna Convention on the Protection of the Ozone Layer (1985) and the Montreal Protocol on Substances that Deplete the Ozone Layer (1987). For complying with these requirements, the Consumer Protection Act prohibits the import of CFC's.

1.2.5 Policies and frameworks for prevention of accidents, preparedness and response

Mauritius does not have any mechanism in place for prevention, preparedness and response for chemical accidents

1.2.6 Policies aimed at reducing the risks posed by lead, mercury and cadmium and other harmful heavy metals, including through a review of relevant studies, such as, for example, the United Nations Environment Programme global assessment of mercury and its compounds

Mauritius is participating in the UNEP Programme regarding the monitoring of release of mercury and its compounds into the environment and their impacts on human health. To this effect, 12 national partnerships have been developed. The 12 partnerships, implemented by different organizations, mainly deal with monitoring of mercury in the environment, awareness

raising, substitution and phasing out of mercury-containing reagents and equipment. The projects are ongoing but some organizations are behind the scheduled time due to shortage of funds.

1.2.7 Initiatives to reduce overdependence on the use of agricultural chemicals

In the non-sugar sector, there are already introduced strategies for optimum utilization and management of resources for soil conservation and fertility management, nutrient and water management, agricultural waste recycling, use of organic manure, development of bio-fertilizer and compost activators, biodiversity conservation, and integrated pest management (IPM). As a prerequisite to promote export of horticultural products (e.g. litchi, pineapple, anthurium), farmers are sensitized on the importance of adopting Good Agricultural Practices (GAP) within a framework of agricultural production to ensure food safety, environment production, workers safety and welfare, and long-term sustainability. Several training programmes have already been carried out by the Government to discourage bad agricultural practices and promote good practices. Training of agricultural workers on safe use of pesticides are carried out by to planters.

The training includes, amongst others:

- Storage and safe use of agrochemicals
- Correct application of agrochemicals
- Maintenance of protective clothing
- Disposal of containers and pesticide waste
- Storage and transport of pesticides
- Emergency measures in event of failure or breakdown of an equipment or accident or spillage.

2. MINING

2.1 Environmental Impact Assessment (EIA) and monitoring of all phases of mining

In Mauritius, mining of ores is not a common activity in view of its volcanic origin. A few decades ago, lagoon sand mining was carried out by sand miners and boat owners in the shallowest parts of the largest lagoons on the north and east coast of the island. Coral sand was being removed from the lagoons by sand extractors in traditional pirogues and in some areas extractions were restricted to the occurrence of low tide. The extracted coral sand was used mainly as a raw material in the construction industry.

Coral sand extraction from the lagoon has been banned since October 2001. Following studies carried out by the University of Mauritius, basalt sand is being used as a replacement material for coral sand in the construction industry. A detailed GIS study for the estimation of rock reserves in Mauritius was commissioned by the Ministry of Environment in 2004. Quarrying of basaltic rocks is one alternative following the exploitation of all available surface rocks. Offshore coral sand mining is another alternative, as well.

As per the First Schedule of the Environment Protection (Amendment) Act 2008, both offshore sand mining and rock quarrying are undertakings that warrant an EIA licence. To date only two EIA licences have been granted for rock quarrying and one quarry site is presently operational. EIA licences are usually granted subject to terms and conditions. The conditions attached to the EIA licence granted for rock quarrying also require the proponent to, amongst others:

- Provide for earth bunds to inhibit dust emissions and noise propagation
- Provide for a buffer zone from public access road
- Provide for the reinstatement of the quarry zone concurrently with the progression of the quarry
- Exploit the quarry in conformity with the methodology proposed in the EIA report.
- Submit an environmental monitoring plan prior to starts of works with subsequent monitoring reports.

Use of explosive for blasting purposes is normally not allowed except under the control and supervision of a special branch of the Police Force. Information pertaining to the decommissioning of the project at the end of its life cycle and associated impacts and the reinstatement plan of the quarry zone should also be submitted to the Department of Environment for approval.

A Monitoring Committee comprising representative of the different ministries/authorities concerned has been set at the Department of Environment to follow up on the implementation of the project after issue of the EIA licence and to conduct monitoring exercises to ensure that the conditions of the EIA licence are being complied with.

2.2 Private Public Partnership PPP for sustainable mining

The legal and institutional framework for PPP in Mauritius (PPP Act and PPP Guidance Manual) does not have specific guidelines for mining. Rock and inland sand quarries are private activities.

3. WASTE MANAGEMENT

3.1 Policy measures for the prevention and minimization of hazardous wastes

- Government through the Dangerous Chemicals Control Board has set up measures to ban importation of mercury containing batteries.
- The use of cleaner production is being encouraged in the industrial sector.
- Industries are being encouraged to put in place waste exchange mechanisms.

3.2 Transfer of environmentally sound technologies and know-how on clean technologies and low-waste production

The Ministry is actively participating in the Regional Institute for English Speaking Countries (Africa Institute) where the transfer of environmentally sound technologies and know-how on clean technologies and low-waste production is being promoted. Through this participation, Government hopes to benefit much in these sectors.

3.3 Initiatives to treat, recycle, reuse and dispose of wastes at the source of generation and regulatory mechanisms (Polluter pays principle)

Provision is made for Polluter-pays principle through the Environmental Protection (Amendment) Act 2008. Consequently, industries are mandated through the Hazardous Waste Regulations to render hazardous wastes innocuous prior to disposal.

3.4 Recovery, reuse and recycling of hazardous wastes and their transformations into useful materials

Government is in the process of launching tenders for the Construction of a Hazardous Waste Facility at La Chaumière.

3.5 Phase-out of toxic, persistent and bio-accumulative wastes

- Ban on Mercury batteries
- Implementation of Persistent Organic Pollutants Implementation Plan with support of UNDP

3.6 Prevention and minimization and environmentally sound management of hazardous wastes.

Procedures for environmental impact assessment, taking into account the cradle-to-grave approach.

There are no specific EIA procedures for the hazardous wastes management. The management, collection, handling, transport, treatment, storage and disposal of hazardous waste are regulated under the Environment Protection (Standards for Hazardous Wastes) Regulations 2001.

As regards solid wastes in general, according to the First Schedule of the Environment Protection (Amendment) Act 2008 "Incineration of municipal solid waste, quarantine waste, medical and clinical wastes" and "Landfill" warrant an EIA licence as per Part IV of the Act.

Proper storage and disposal of laboratory waste is a key element of the commitment towards the protection and conservation of the environment. Unfortunately, at present there is no established mechanism for the safe transport and proper disposal of laboratory waste in Mauritius. The waste are presently being stored on the laboratory premises and awaiting appropriate facilities for the disposal of laboratory waste, with the forthcoming setting of the interim hazardous wastes facility.

3.7 Radiation Protection Sector

One issue of national importance is the sound management of radioactive waste. With a view to ensuring the proper management of all radioactive waste being generated in the country, the Radiation Protection Authority is currently drafting a set of regulations for the storage of all disused and spent radioactive sources. The Authority is also planning the construction of a new secure Centralised Radioactive Waste Storage Facility for storage of all spent radioactive sources.

4. <u>THE TEN YEAR FRAMEWORK OF PROGRAMMES ON SUSTAINABLE</u> CONSUMPTION AND PRODUCTION PATTERNS

4.1 Generic issues relating to the inclusion of SCP in national policies

With support from UNEP, the Ministry of Environment and National Development Unit has developed a National Programme for Sustainable Consumption and Production (SCP) for Mauritius (2008-2013). The following strategic priorities form the focus of the SCP programme framework:

- Sustainable Energy Consumption
- Sustainable Water Consumption
- Sustainable Buildings
- Education and Communication for Sustainable Lifestyles
- Integrated Solid Waste Management and Recycling
- Sustainable Public Service Practices
- Increase the Market Supply and Demand for Sustainable Products

The SCP programme comprises 44 projects under the above thematic priority areas, and whose implementation would cost around 1 million USD. The following mechanisms identified for funding the programme are:

- Direct funding by government organisations through the programme-based budgeting process and through taxation of various types by the Ministry of FinanceMaking use of the "Maurice Ile Durable" Fund for specific projectsBy linking the demand for SCP technical support and the supply of technical /financial services by development cooperation agencies. Liaising with Marrakech Task Forces to identify technical and financial support
- The UNEP/ Wuppertal Institute Collaborating Centre on Sustainable Consumption and Production based at in Germany, will provide technical support and input to the MOE on developing pilot projects into full project documents that could be submitted for fund mobilization by countries.
- Sponsorship by the private sector through their CSR activities

Implementation of the national SCP programme has started by the various agencies responsible for the implementation of specific projects. However, in most instances where implementation is being delayed, the core reason is due to lack of funds at the level of various implementing agencies.

Energy Efficiency and Renewable Energy (SCP)

In the context of the current energy crisis and climate change, a lot of emphasis is being devoted to the energy sector. An Energy Efficiency Bill is currently under preparation and is expected to be enacted before the end of this year. The Energy Efficiency Bill aims at promoting energy efficiency in all sectors of the economy with priority being in buildings and electrical appliances labeling, including their minimum energy performance standard wherever applicable. Energy efficiency in the industrial sector would be addressed subsequently. With the assistance of World Bank, this Ministry is currently in the process of appointing a Consultant for the preparation of a

"Renewable Energy Development Strategy and Implementation Plan", expected to be completed before mid 2010. With regard to housing and construction, a Consultant would be appointed soon for the preparation of a Building Control Bill.

4.2 Green public procurement policies, laws and regulations

A project is under way to attempt implement the sustainable public procurement approach developed by the Marrakech Task Force on Sustainable Public Procurement. The project started in February 2009, with a duration of 2 years and is being executed by the Public Procurement Office. Its overall objective is to promote the implementation of effective Sustainable Public Procurement (SPP) policies in Mauritius.

The project will allow to:

- i) promote good practice internationally through capacity building and the promotion of the use of sustainability criteria in public tender documents,
- ii) engage public authorities and businesses in emerging and developing economies to curb polluting emissions, and face the international environmental challenges such as climate change, chemicals, hazardous waste etc. At the same time, it will increase the competitiveness of these businesses in international markets, where issues such as climate change and resource depletion are already addressed in public procurement policies (Japan, EU, USA, Canada..)
- iii) provide expert assistance for governments wishing to develop an SPP policy, to raise awareness of all stakeholders in the procurement process (e.g. government purchasers, policy makers) and convince them of the need to serve as a role model by buying goods and services needed for their day-to-day activities in a sustainable way, by taking into account economic, social and environmental aspects and to raise interest in sustainability issues through concrete actions.
- iv) address the increasing gap in safety, resource efficiency and environmental standards between products sold on European and on developing world markets. Sustainable Public Procurement has to be seen as a tool to boost internal markets for sustainable products and services so as to avoid that the increasing demand from Europe or other more environmentally conscious markets creates a sort of market niche for export of "greener goods" to developed countries

A research to identify the legal framework for procurement in the country and the legal possibilities to integrate SPP principles is being carried out.

4.3 Instruments for sustainable consumption & Awareness-raising programmes/campaigns on SCP, including water conservation, energy efficiency, waste minimization and recycling & 4.4 Policies and/or infrastructure to support citizens' choices for responsible consumption of products and services, including consumer information tools

4.3.1 Measures Implemented

- (i) Creation of a Ministry for Consumer Protection and Citizens Charter to protect consumers and safeguard their interests and rights.
- (ii) Decentralisation of the Consumer Protection Unit with a view to providing a service "de proximité" to the public at large. The Consumer Protection Unit now offers decentralised services in four zones of the country in Citizens Advice Bureau offices, excluding Port Louis.
- (iii) Work restructuring of the Consumer Protection Unit with effect from 01 June 2009. Henceforth, works of the Consumer Protection Unit are being taken on the basis of regions to ensure better follow up and monitoring of all consumer matters within the respective regions.
- (iv) Setting up of a Flying Squad in January 2009 to handle complaints more effectively and to track down offenders within the shortest delay.

4.3.2 Future Initiatives

- (i) The setting up of a Price Observatory is being seriously considered. The Price Observatory is an excellent mechanism through which consumers can be informed on the variables that are taken into account when determining the price of a commodity. The Price Observatory would also detect possible cases of dumping of products on the local market.
- (ii) A complete review of the legislations in the field of consumer protection is being envisaged. Preliminary works have already been carried out by the Ministry and arrangements are being made with the Law Reforms Commission for this exercise.
- (iii) The issue of a magazine to give impetus to consumer education and information is envisaged. The magazine will be a regular feature of the Ministry's activities.
- (iv) To enlarge the scope of consumer protection, the concept of Citizen's Charter is being reviewed and revitalised with a shift from the traditional service-provider driven approach to a service-user driven approach.
- (v) To continue the ongoing awareness/sensitization campaigns on consumer protection and on intelligent buying.
- (vi) As the business environment is dynamic and volatile, new measures will have to be considered as and when changes occur with the ultimate objective of protecting the consumers.

4.4 Curriculum development/formal education programmes

Education and Communication for Sustainable Lifestyles (ECSL)

The Ministry of Education, Culture and Human Resources is driving the Education and Communication for Sustainable Lifestyles Project under the National Programme on Sustainable Consumption and Production. It has set up a Technical Committee comprising members from the Ministry of Environment & National Development Unit and institutions of higher education [University of Mauritius (UOM), University of Technology Mauritius (UTM) and Mauritius Institute of Education (MIE)] who have been working on the development of learning objectives and outcomes for sustainable lifestyles to be integrated into the primary and lower secondary school curricula.

The Technical Committee has been meeting every Wednesdays to review the existing materials and identifying learning objectives/outcomes suitable at each level. Priority is being given to upper primary sector as textbooks are being written currently for Standards V and VI. Meetings have also been held with Primary Curriculum Writers to determine strategies of integration. For the lower secondary level, the competencies will be identified subsequently as the National Curriculum Framework for secondary level is still at draft stage.

As at now, the Technical Committee will be finalizing the curriculum guidelines for Sustainable Consumption and Production at primary level and submitting it to the Ministry of Education, Culture and Human Resources for approval. The project is expected to end by December 2009.

Strengths

It should also be pointed out that the new National Curriculum Framework for primary level has addressed education for Sustainable Development and it clearly shows integration of various Sustainable Consumption and Production related concepts. Some Sustainable Consumption and Production related activities are already present in our primary school textbooks.

Limitations

The constraints faced by the Technical Committee include mostly the unavailability of members.

A. SECTORS AND ISSUES	Current Government Priority (please tick)	Expected Future Priority (please tick)	Contact Name (if possible)	Contact Email (if possible)
Solid waste management			Mr P Kowlesser (Solid Waste Management Division)	pkowlesser@intnet.mu
- Waste disposal				
- Reuse and recycling				
- Waste reduction				
- Others				
Transport				
- Clean fuels and vehicles	V			
- Public and alternative transportation		V		
- Urban and regional transportation planning	V			
- Others				
Cleaner production				
- Resource efficiency		$\sqrt{}$		
- Pollution prevention	$\sqrt{}$			
- Technology strategies				
- Others				
Energy efficiency and renewable energy				
- Industrial energy efficiency		V		
- Household energy efficiency	V			
- Renewable energy		$\sqrt{}$		
markets				
- Others				
Housing and construction				
- Energy efficiency	V			
- Building materials	,	V		
- Construction		V		
standards				

A. SECTORS AND ISSUES	Current Government Priority (please tick)	Expected Future Priority (please tick)	Contact Name (if possible)	Contact Email (if possible)
- Building operations		V		
- Others				
Food and clothing				
- Organic products	,	V		
Chemical management	V	V	Dr P Ramdin (Dangerous Chemicals Control Board - DCCB)	pramdin@intnet.mu
			Dr R Goorah ((DCCB)	dccbmoh@mail.gov.mu
Hazardous waste	V		Mr P Kowlesser	pkowlesser@intnet.mu

B. POLICY INSTRUMENTS	Current Government Activities (please tick)	Expected Future Priorities (please tick)
General policy instruments		
- Taxes, subsidies	$\sqrt{}$	
- Preferential tariffs and trade policies	$\sqrt{}$	
- Economic instruments	$\sqrt{}$	V
- Tax reform	$\sqrt{}$	
- Consumer protection policies	$\sqrt{}$	
- Polluter-pays principle	$\sqrt{}$	
- Integrated product policies		V
Changing consumer behaviour		
- Education and public information	V	
- Consumer information		V
- Labeling, eco-labels		V
- Consumer organizations	$\sqrt{}$	
- Public procurement policies		
- Others		
Changing production patterns		
- Regulation of emissions and effluents	√	
- Charges or incentives for cleaner production	V	V

B. POLICY INSTRUMENTS	Current Government Activities (please tick)	Expected Future Priorities (please tick)
- Product standards (e.g. energy efficiency)		
- Cleaner production programmes		
(R&D, training, technical assistance)		
- Pollutant reporting and registers		
- Strategic industrial and technology planning		
- Investment incentives		
- Voluntary initiatives and codes of conduct		
- Corporate social/environmental responsibility		
- Improved management accounting		
- Investment analysis		
- Others		
Analytical tools		
- Life-cycle analysis		
- Indicators of sustainability		
- Technology impact assessment		
- Policy impact assessment		√
- Impacts of globalization and urbanization		√
- Impacts of changes in international markets		
- Others		

Policy	Current Government Priorities	Expected Future
Instruments		Priorities
General policy in		
- Taxes, subsidies	(i) MID levy, to be paid into the MID Fund - 15 cents per litre on all petroleum products, 15 cents per kilo on LPG and 15 cents per kilo of coal. (ii) subsidies on Solar Water Heaters via the MID Fund (iii) excise duty of Rs 1.00 per PET bottle to aluminum cans used for soft and alcoholic drinks as from May 2009	Yes
-Preferential tariffs and trade policies	(i) Financial incentives which include reduction by half taxes, excise duties, road tax and registration fees on hybrid vehicles and electric vehicles and elimination of customs duties on tyres with energy saving and emission reducing certification. (ii) Removal of duties in Solar Water Heaters	Yes
-Economic Instruments	Yes – subsidies, removal of duties to encourage sustainable consumption and levies petroleum products, aluminum cans and PET bottles.	Yes
- Polluter- Pay-principle	As from July 2008, Road Tax is based on both the polluters pay and the ability to pay principles.	Yes

Policy	Current Government Priorities	Expected Future
Instruments		Priorities
Changing Consu		
- Education	Development of Maurice Ile Durable module for	Yes
and public	both primary and secondary schools.	
information		
- Consumer	Display of interactive banner on the Mauritius	Yes – eco-labeling of
Information	Broadcasting Corporation channels indicting peak	the electrical appliances
	usage in real time and requesting consumers to	under the UNDP/GEF –
	manage electricity consumption.	Energy Conservation &
		Energy Efficiency in
		buildings in Mauritius

Ministry of Environment and National Development Unit 15 July 2009