

MALAYSIA



The Management of Environmental Risk Factors which Impact on Human Health

Part 3

A National Action Plan on Environmental Health for MALAYSIA

Ministry of Health
Malaysia 2009

Introduction

This document provides details of proposed actions to be taken as collaboration between different sectors of government. The tables attached cover each of the “Environmental Health Areas of Concern” which were identified as part of the National Consultative Workshop on Environmental Health held in September 2009. The participants in the workshop were asked to rank the actions they recommended using the matrix (cost/benefit rank) attached as Appendix 1.

The Environmental Health Areas of Concern noted were as follows:

1. Hazardous waste management (DOE, MOH, NRE, DOSH);
2. Rural water supply and sanitation (MOH, MEGTW, DOE, NRE, DID, FDPM, MRRD);
3. Recreational water (MOH, DOE, MHLG);
4. Safe drinking water (MOH, MEGTW, SPAN, DOE, MHLG, DID, FDPM, MAABI);
5. Air pollution – outdoor and indoor (DOE, DOSH, MOH, MHLG);
6. Sewerage and urban sanitation (MEGTW, SPAN, DSS, DOE, MHLG, DID);
7. Solid waste management (NSWMD, MHLG, DOE);
8. Food safety (MOH, MOA, MHLG).
9. Occupational health and safety (DOSH, MOH)
10. Soil contamination (DOE, MOH)

The additional area of climate change was identified to be a very important emerging issue (All sectors)

DID	:	Department of Irrigation and Drainage
DOE	:	Department of Environment
DOSH	:	Department of Occupational Safety and Health
DSS	:	Department of Sewerage Services

FDPM	:	Forestry Department of Peninsular Malaysia
MAABI	:	Ministry of Agriculture and Agro-Based Industry
MEGTW	:	Ministry of Energy, Green Technology and Water
MHLG	:	Ministry of Housing and Local Government
MOH	:	Ministry of Health
MRRD	:	Ministry of Rural and Regional Development
NRE	:	Ministry of Natural Resources and Environment
NSWMD	:	National Solid Waste Management Department
SPAN	:	National Water Service Commission

**Area of Concern 1
Hazardous Waste**

Action	Lead agency	Supporting agencies	Time frame (S,M,L)	Performance Indicators	Cost/Benefit Rank
Implementation of Nationwide Clinical Waste Management	DOE	MOH	S		15
Surveillance of Illegal Deposition and Disposal	DOE	MOH	S		8

Area of Concern 2
Rural Water Supply and Sanitation

Action	Lead agency	Supporting Agencies	Time frame (S,M,L)	Performance Indicators	Cost/Benefit Rank
To upgrade primitive systems	MRRD				
To gazette water catchment area for gravity feed system	FDPM	MOH			
To develop data or information sharing between government agencies	MRRD	MOH, JHEOA			
To establish scheduled desludging programs					
To develop a comprehensive policy and targets to address rural sanitation issues					
Establishment of guidelines and monitoring procedures for the maintenance and enhancement of associated values and ecological functions	FDPM				
Adoption of Forest Rules for the Management of Water Catchment Forests	FDPM				

**Area of Concern 3
Recreational Water**

Action	Lead agency	Supporting Agencies	Time frame (S,M,L)	Performance Indicators	Cost/Benefit Rank
To re-evaluate existing sampling locations and improve method and analysis of samples for both river and marine sampling programs	DOE	NRE	S		
To promote IRBM approach	DID				
Usage of National Marine Quality Criteria and Interim Standards to replace existing interim standards starting 2009	NRE				

Area of Concern 4
Safe Drinking Water

Action	Lead agency	Supporting Agencies	Time frame (S,M,L)	Performance Indicators	Cost/Benefit Rank
To establish Safe Drinking Water Act	MOH	SPAN			
To regulate Water Services Industry Act (Act 655) 2006	SPAN				
To protect water resources by enforcing EQA	DOE				
To promote research on safe drinking water parameters including other contaminant effects such as hormonal, pharmaceutical, etc.	MOH	Universities, WHO			
To promote safe drinking water necessity at certain areas	KeTTHA	SPAN			
To promote efficient water usage in order to reduce wastage	KeTTHA	SPAN			

**Area of Concern 5
Outdoor and Indoor Air Pollution**

Outdoor Air

Strategies/Action	Lead agency	Supporting agencies	Timeframe (S,M,L)	Performance Indicator	Cost Benefit Rank
S1: Motor Vehicles Emission Reductions					

Strategies/Action	Lead agency	Supporting agencies	Timeframe (S,M,L)	Performance Indicator	Cost Benefit Rank
S2: Industrial Emission Reductions					
S3: Haze pollution					
a. Impose heavier penalty for open burning offences	AGC	DOE	S		10
b. Strengthen enforcement action against open burning activities	DOE	DOE, FRD	S		20
c. Promote zero burning policy	MOA	DOE	S		20
d. Implement ASEAN Agreement on Trans-boundary Haze Pollution	NRE	NRE,DOE, MOA	S		20
e. Implement sustainable peatland management	Forestry Dept.	NRE, MOA	L		15

Indoor Air

Action	Lead agency	Supporting agencies	Time frame (S,M,L)	Performance Indicators	Cost/Benefit Rank
Review and amend Uniform Building By-Law to update requirements for ventilation in buildings and building design.	MHLG	JKR, MOH			15
Review Code of Practice on Indoor Air Quality, 2005 to include additional and review parameters and standards for biological, physical and chemical contaminants.	DOSH	MOH, EHRC, Chemical Dept.			15
Awareness and dissemination of information on importance of Indoor Air Quality in buildings.	NIOSH	MOH, DOSH, MHLG			12
Addressing Indoor Air Quality issue in buildings during disaster period such as Haze.	MOH	DOSH, DOE, EHRC			12

Area of Concern 6
Sewerage and Urban Sanitation

Action	Lead agency	Supporting agencies	Time frame (S,M,L)	Performance Indicators	Cost/Benefit Rank
To obtain government endorsement on the Strategic Directions for Sewerage Services in Malaysia	MEGTW (KeTTHA)	SSD/JPP, SPAN	S		
To implement regional treatment plants especially at urban centers, tourists attraction locations, upstream of water intake points and rationalize small treatment plants	MEGTW (KeTTHA)	SSD/JPP, SPAN			
Integration of Water Supply and Sewerage Services – To implement single billing (Full Cost Recovery and Green Tariff)	MEGTW (KeTTHA)	SSD/JPP, SPAN			
To develop a more pragmatic enforcement program that would be formulated with KPI to be put in place	DOE				
Special program to address sullage, property connections and conversation of insanitary systems	LA				
Programs to identify major sources of pollution and health threats	DOE	MOH			
Potential reuse of treated effluent, biosolids and biogas via green technology applications					

Area of Concern 7
Solid Waste

Action	Lead agency	Supporting agencies	Time frame (S,M,L)	Performance Indicators	Cost/Benefit Rank
Waste Minimization and Recycling based on the waste management hierarchy concept	NSWD	NRE, NSW, MOH	S		10
Strict management on solid waste operating and facilities to achieve required standards	NSWD	NSWC	S		9
Surveillance of collection workers	NSWD	NSWC, MOH	S		12
Intensify awareness through public participation	NSWD	State Government, NGO's	S		12

Area of Concern 8
Food Safety

Action	Lead Agency	Supporting Agencies	Time Frame (S,M,L)	Performance Indicators	Cost/Benefit Rank
Strengthen inter-ministry coordination in enforcement of food safety (including food smuggling).	MOH	MOA, KPKT, JPA, KPT, RMP, APMM	S		16
Establish and synchronize the implementation of food safety regulations at national, state and local government level.	MOH	MOA, KPKT, JPA, KPT	S		16
Establish food safety regulations at point of distribution from manufacturer to consumer.	MOH	MOA, KPKT	M		12
Strengthen Food Act and its Regulation.	MOH	MOA, KPKT	M		12
Strengthen laboratory services through specialization of services (eg. Chemical, microbiological, Standard, etc.)	MOH	MOA, SIRIM, KPT	M		12
Strengthen and increase public awareness on food safety	MOH	MOA, KPKT, KPDNKK, MOI	M		12
Strengthen research and development on food safety.	MOH	MOA, KPT, SIRIM	M		12
Human resource capacity building on food safety	MOH	KPT	L		12

Area of Concern 9
Occupational Safety and Health (OSH)

Action	Lead agency	Supporting agencies	Time frame (S,M,L)	Performance Indicators	Cost/Benefit Rank
Develop, implement or monitor national injury prevention strategies for priority areas. Strengthen OSH in high risk sectors in transportation, Construction Safety Master Plan and agriculture.	DOSH	JKJR, CIDB, MOA			10
Improve the implementation of systems for identifying and preventing occupational diseases.	DOSH	MOH, SOCSO			10
Conduct hazard related health screening to affected workers in selected high risk industry.	DOSH	MOH, SOCSO			15
Integrating OSH into the academic syllabus in relevant professional courses and school.	MOHR	MOE, MOHE, NIOSH and others related agencies			20
Develop program to promote workers' awareness on OSH issue.	DOSH	NIOSH, SOCSO, NGO			12

**Area of Concern 10
Contaminated Soil**

Action	Lead agency	Supporting agencies	Time frame (S,M,L)	Performance Indicators	Cost/Benefit Rank
Surveillance of contaminated land/soil	DOE	LA, State Government, NGO's	S		6
Development of policy on usage of decontaminated soil					

Appendix 1

Cost Benefit Ranking for each proposed Action

	Ease of implementation	Health benefit
1	Very difficult	Minor benefit
2	Difficult	Moderate benefit
3	Moderate	Good
4	Easy	Very good
5	Very easy	Excellent

Ease of implementation	Health Benefits				
	Very Low	Low	Moderate	Large	Very Large
Very Difficult	1	2	3	4	5
Difficult	2	4	6	8	10
Medium	3	6	9	12	15
Easy	4	8	12	16	20
Very easy	5	10	15	20	25