KERTAS 4:

CADANGAN PROSES DAN MEKANISME PELAKSANAAN NEHAP

29 APRIL 2013

BAHAGIAN PERKHIDMATAN KEJURUTERAAN
KEMENTERIAN KESIHATAN MALAYSIA
CONTENTS

• HAZARD TRANSMISSION
• NEHAP A TRANSFORMATIONAL APPROACH
• IMPLEMENTATION PROCESS
• IMPLEMENTATION MECHANISM
• PROPOSED FORMATION OF THEMATIC WORKING GROUPS (TWGs)
• STANDARD OPERATING PROCEDURE
• Q & A SESSION
HAZARD TRANSMISSION IN ENVIRONMENTAL HEALTH

AGENT RESERVOIR *(EG: ANIMALS, HUMANS & POLLUTANT SOURCES)

MODE OF RELEASE *(EG: INSECT BITES, FECES, INDUSTRIAL EFFLUENTS & EMISSIONS)

AGENT *(BIOLOGICAL, CHEMICAL & PHYSICAL)

MODES OF AGENT TRANSMISSION

VECTORBORNE *(EG: MOSQUITOES, FLIES & FLEAS)

DIRECT CONTACT *(EG: VENERAL & SKIN DISEASES)

VEHICLE-TRANSMITTED *(EG: AIR, WATER, FOOD, SOIL & FOMITES)

MODE OF ENTRY *(EG: INHALATION, INGESTION, SKIN ABSORPTION & INSECT BITES)

INTRINSIC FACTORS *(EG: AGE, SEX, ETHNICITY, GENETIC & IMMUNITY)

HEALTHY HUMAN HOST *

EXTRINSIC FACTORS *(EG: PERSONAL HYGIENE, HABIT, NUTRITION & OCCUPATION)

UNHEALTHY HUMAN HOST

ACUTE HEALTH EFFECTS *(EG: COMMUNICABLE DISEASES)

CHRONIC HEALTH EFFECTS *(EG: NONCOMMUNICABLE DISEASES)

* CRITICAL POINTS OF ENVIRONMENTAL HEALTH STRATEGIES

NEHAP: A TRANSFORMATIONAL APPROACH

• NEHAP represents comprehensive, holistic and inter-sectoral way of planning and implementing environmental health action at the national level.

• The objectives are as follows:
  – To develop and maintain human health and sustainable development in the country
  – To strengthen collaboration and cooperation with other sectors for effective use of resources in improving human health and sustainable development..

• The implementation include:
  – the process of planning, developing, adopting and implementing environmental health action with holistic, comprehensive, inter-discipline and inter-sectoral way at the national level
  – the strategies on how to identify gaps and recommend improve in environmental health within the country and defines the roles and responsibilities of various stakeholders
IMPLEMENTATION PROCESS

• Government has approved the implementation of NEHAP in Malaysia through the involvement of all relevant agencies and sectors related to Environmental Health.

• Guidance Document (part 1 & 2) on NEHAP will be used as a guide and reference in the implementations of NEHAP.

• The Ministry of Health will be responsible for strengthening collaboration between ministries and related agencies.
IMPLEMENTATION PROCESS (cont..)

• Appropriate action will be taken to further the implementation process which also includes the implementation of the Strategic Plan and Action Plan for Environmental Health. (NEHAP Document, Part 2 and Part 3)

  – These plans (Strategic and Action Plan) provide details of specific strategies and actions to achieve the environmental health objectives for Malaysia.
  – They should set out strategies to achieve the objectives and specific actions and assign responsibilities to agencies of government together with a national time frame.
IMPLEMENTATION PROCESS (cont..)

- However, these plans **shall not interfere or disrupt** the planning and implementation of future or existing policies, action plans and programs put in place by the respective ministries, government departments and other stakeholders.

- The Environmental Health Strategic and Action Plans are mainly **to complement** their existing policies and action plans by identifying and addressing environmental issues that have impact on health.

- All relevant ministries and sectors of government and other stakeholders, should take a carefully considered approach to implement the strategies described in Part 2 of the NEHAP document for effective and realizable results.
IMPLEMENTATION MECHANISM

• The implementation mechanism comprises of a three-tier approach and they are as follows:
  – Steering Committee (SC)
  – Technical Committee (TC)
  – Thematic Working Groups (TWGs)

• In addition, the Secretariat and Core Team for NEHAP within the Ministry of Health have been established for the smooth and effective implementation of this program. The roles of the Secretariat and Core Team are specified in NEHAP document (NEHAP Document, Part 1: Chapter 3, Page 12-13)
IMPLEMENTATION MECHANISM (cont..)

STEERING COMMITTEE (SC) → TECHNICAL COMMITTEE (TC) → THEMATIC WORKING GROUPS (TWGs)
Structure of NEHAP Steering Committee (SC)

NEHAP Steering Committee
[Chaired by DG of MOH]

NEHAP Secretariat / Core Team

- Representatives from Relevant Ministries & Central Agencies
- Representatives from State Government of Sabah & Sarawak
- Chairman of Technical Committee
- Chairmen of various Thematic Working Groups (TWGs)
- Experts of various fields according to Environmental Health Areas of Concern
Roles of NEHAP Steering Committee (SC)

• The roles of the SC are as follows:

  – Ensure that the planning and implementation of NEHAP are in line with the Framework and existing government policies and directions.
  – Formulate new policies to manage emerging environmental health issues.
  – Provide platform/forum for discussion and close collaboration amongst Ministries/Departments/Agencies in the implementation of NEHAP.
  – Review the NEHAP Framework and Strategic Plan periodically to ensure that they remain responsive to the needs of the Malaysian population and the international community.
  – Assess and evaluate the efficacy and effectiveness of NEHAP through performance indicators and recommend continuous improvement.
Structure of NEHAP Technical Committee (TC)

NEHAP Technical Committee (TC)
[Chaired by Director of ESD, MOH]

NEHAP Secretariat / Core Team

Chairmen of various Thematic Working Groups (TWGs)

*ESD – Engineering Services Division
Roles of NEHAP Technical Committee (TC)

- The roles of the TC are as follows:
  - **Coordinate, liaise and monitor** the activities of the various TWGs.
  - **Harmonize and integrate** action plans of all TWGs related to common environmental health issues.
  - **Conduct meetings** with the Chairmen of the various TWGs on a regular basis.
  - **Report the progress** of the various TWGs to the SC during the SC Meetings.
  - Act as **advisory committee** for the various TWGs.
  - Carry out **verifications of reports** of all TWGs and propose recommendations to the SC.
  - Establish a **centralized database** to integrate environmental health data from all areas of concern for the purpose of data sharing and decision making.
Structure of NEHAP Thematic Working Groups (TWGs)

NEHAP Technical Committee (TC)
[Chaired by Director of ESD, MOH]

NEHAP Secretariat / Core Team

Chairmen of various Thematic Working Groups (TWGs)

*ESD – Engineering Services Division*
Formation of Thematic Working Groups (TWGs)

• During the National Consultative Workshops on Environmental Health organized by MOH with the stakeholders concerned (in Sept 2009 and Dec 2010), the formation of TWGs with respect to environmental health areas of concern “was formed” and as listed below:

1) Hazardous waste management (DOE, MOH, NRE, DOSH, DOSHS);
2) Rural water supply and sanitation (MOH, KeTTHA, DOE, NRE, DID, FDPM, KKLW, JANS, SFD, FDS, LAKU, JKRSrk, SWB);
3) Recreational water (MOH, DOE, MHLG, JANS, SFD, FDS, LAKU, SWB);
4) Safe drinking water (MOH, KeTTHA, SPAN, DOE, MHLG, DID, FDPM, MOA, JANS, SFD, FDS, JPS, LAKU, JKRSrk, SWB);
5) Air pollution – outdoor and indoor (DOE, DOSH, MOH, MHLG, EPD, DOSHS, NREB, DBKU);
Formation of TWGs (cont..)

6) Sewerage (KeTTHA, SPAN, JPP, DOE, MHLG, DID, MOH, BDA, KASKA, SSDS, SMC, JKRS, MPP, MBKS);

7) Solid waste management (JPSPN, PPSPPA, MHLG, DOE, EPD, DOAS, NREB, BDA, KASKA, SMC, MCC, MPP, MBKS);

8) Food safety (MOH, MOA, MHLG, DOAS, KASKA, DBKU, JPS, SMC, MPP, MBKS);

9) Occupational health and safety (DOSH, MOH, DOAS, DOSHS, DBKU);

and

10) Soil contamination (DOE, MOA, JMG, DID, MOH, NREB, JPS.)

*Note:

• The relevant ministries/departments/agencies involved in each environmental health areas of concern are stipulated in brackets.
• The chairman of TWGs is highlighted in red.
• All acronyms in italic are state agencies of Sabah and Sarawak.
Proposed Formation of New TWGs

- Recently, identification of the environmental health areas of concern are prioritized based on the *Regional Initiative on Environment and Health in Southeast and East Asian Countries (Jeju, 2010)* as follows:
  1. Air Quality;
  2. Water, sanitation and hygiene;
  3. Solid and Hazardous Waste;
  4. Toxic Chemicals and Hazardous Substances;
  5. Climate Change, Ozone Depletion and Ecosystem Change;
  6. Contingency Planning, Preparedness and Response in Environmental Health Emergencies; and

- A new TWG shall be set up for each area of concern named above.
- It is suggested that Solid and Hazardous Waste will be formed separately.
Roles of TWGs

• Each TWG is **chaired** by the ministry/department/agency of authority or **having high stakes** with respect to the areas of concern.

• Each TWG is **represented** by Ministries/Departments/Agencies relevant to the respective **areas of concern**.

• The roles of a TWG are as follows:
  – All group members of TWG shall ensure that they **possess sound knowledge and expertise** in their respective field to identify and address environmental health issues relevant to the area of concern of the TWG.
  – Identify **emerging environmental issues** that have impact on health with respect to the area of concern of the TWG.
  – Identify environmental areas that require **further research** to verify their health impacts.
Roles of TWGs (cont..)

- Prioritize environmental health issues that need to be addressed.
- Establish and update plan of action according to priority for implementation.
- Carry out the planned activities to address environmental health issues.
- Monitor the progress of activities through regular meetings.
- Report the progress of activities to the TC through returns and during TC Meetings.
- Provide environmental health data for the respective area of concern.
PROPOSAL FOR 1st TWG:
TWG on Air Quality

Chairman: DOE

Ministries/Agencies – Peninsular Malaysia
Sabah State Agencies
Sarawak State Agencies

DOSH  MOH  MHLG  MOT  EPD  DOSHS  NREB  DBKU
## PROPOSAL FOR 1st TWG (cont..): TWG on Air Quality

### AGENCY

#### Federal Agencies
- Ministry of Health (MOH)
- Ministry of Housing and Local Government (MHLG)
- Ministry of Transport (MOT)
- Department of Environment (DOE)
- Department of Occupational Safety and Health (DOSH)

#### Sabah State Agencies
- Environment Protection Department (EPD)
- Department of Occupational Safety and Health, Sabah (DOSHS)

#### Sarawak State Agencies
- Natural Resources and Environment Board of Sarawak (NREB)
- Dewan Bandaraya Kuching Utara (DBKU)

### LEAD AGENCY
- Department of Environment (DOE)
PROPOSAL FOR 2nd TWG:
TWG on Water, Sanitation and Hygiene

Chairman: KeTTHA
**PROPOSAL FOR 2\textsuperscript{nd} TWG (cont..): TWG on Water, Sanitation and Hygiene**

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>LEAD AGENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Federal Agencies</strong></td>
<td></td>
</tr>
<tr>
<td>Ministry of Energy, Green Technology and Water (KeTTHA)</td>
<td></td>
</tr>
<tr>
<td>Ministry of Health (MOH)</td>
<td></td>
</tr>
<tr>
<td>Ministry of Housing and Local Government (MHLG)</td>
<td></td>
</tr>
<tr>
<td>Ministry of Tourism (MoTour)</td>
<td></td>
</tr>
<tr>
<td>Ministry of Rural and Regional Development (KKLW)</td>
<td></td>
</tr>
<tr>
<td>Ministry of Agriculture and Agro-Based Industry (MOA)</td>
<td></td>
</tr>
<tr>
<td>Department of Environment (DOE)</td>
<td></td>
</tr>
<tr>
<td>Department Irrigation and Drainage (DID)</td>
<td></td>
</tr>
<tr>
<td>Suruhanjaya Perkhidmatan Air Negara (SPAN)</td>
<td></td>
</tr>
<tr>
<td>Department of Sewerage Services (JPP)</td>
<td></td>
</tr>
<tr>
<td>Forestry Department of Peninsular Malaysia</td>
<td></td>
</tr>
<tr>
<td><strong>Sabah State Agencies</strong></td>
<td></td>
</tr>
<tr>
<td>Jabatan Air Negeri Sabah (JANS)</td>
<td>Ministry of Energy, Green Technology and Water (KeTTHA)</td>
</tr>
<tr>
<td>Sabah Forestry Department (SFD)</td>
<td></td>
</tr>
<tr>
<td>Jabatan Kerja Raya Negeri Sabah (JKRS)</td>
<td></td>
</tr>
<tr>
<td><strong>Sarawak State Agencies</strong></td>
<td></td>
</tr>
<tr>
<td>Jabatan Kerja Raya Negeri Sarawak (JKRSrk)</td>
<td></td>
</tr>
<tr>
<td>Lembaga Air Kawasan Utara (LAKU)</td>
<td></td>
</tr>
<tr>
<td>Sibu Water Board (SWB)</td>
<td></td>
</tr>
<tr>
<td>Bintulu Development Authority (BDA)</td>
<td></td>
</tr>
<tr>
<td>Kementerian Alam Sekitar dan Kesihatan Awam Sarawak (KASKA)</td>
<td></td>
</tr>
<tr>
<td>Sewerage Services Department of Sarawak (SSDS)</td>
<td></td>
</tr>
<tr>
<td>Sibu Municipal Council (SMC)</td>
<td></td>
</tr>
<tr>
<td>Majlis Perbandaran Padawan, Kota Padawan, Kuching (MPP)</td>
<td></td>
</tr>
<tr>
<td>Majlis Bandaraya Kuching Selatan (MBKS)</td>
<td></td>
</tr>
</tbody>
</table>
PROPOSAL FOR 3rd TWG:
TWG on Solid Waste

Chairman: JPSPN

Peninsular Malaysia

MOH, JKR, PPSPPA, JKT, DOE

Sabah

EPD, DOAS

Sarawak

NREB, BDA, KASKA, SMC, MCC, MPP, MBKS
## PROPOSAL FOR 3rd TWG (cont.): TWG on Solid Waste

<table>
<thead>
<tr>
<th>Agency</th>
<th>Lead Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Federal Agencies</strong></td>
<td><strong>Sarawak State Agencies</strong></td>
</tr>
<tr>
<td>- National Solid Waste Management Department (JPSPN)</td>
<td>- Natural Resources and Environment Board of Sarawak (NREB)</td>
</tr>
<tr>
<td>- Perbadanan Pengurusan Sisa Pepejal dan Pembersihan Awam (PPSPPA)</td>
<td>- Bintulu Development Authority (BDA)</td>
</tr>
<tr>
<td>- Ministry of Health (MOH)</td>
<td>- Kementerian Alam Sekitar dan Kesihatan Awam Sarawak (KASKA)</td>
</tr>
<tr>
<td>- Ministry of Housing and Local Government (MHLG)</td>
<td>- Sibu Municipal Council (SMC)</td>
</tr>
<tr>
<td>- Department of Environment (DOE)</td>
<td>- Miri City Council (MCC)</td>
</tr>
<tr>
<td>- Jabatan Kerja Raya (JKR)</td>
<td>- Majlis Perbandaran Padawan, Kota Padawan, Kuching (MPP)</td>
</tr>
<tr>
<td><strong>Sabah State Agencies</strong></td>
<td>- Majlis Bandaraya Kuching Selatan (MBKS)</td>
</tr>
<tr>
<td>- Environment Protection Department (EPD)</td>
<td></td>
</tr>
</tbody>
</table>
PROPOSAL FOR 4th TWG:
TWG on Hazardous Waste

TWG on Hazardous Waste
Chairman: DOE

- MOH
- NRE
- MOA
- DOSH
- DOSHS
- NREB
PROPOSAL FOR 4th TWG (cont..): TWG on Hazardous Waste

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>LEAD AGENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Agencies</td>
<td>Sabah State Agencies</td>
</tr>
<tr>
<td>• Department of Environment (DOE)</td>
<td>• Department of Occupational Safety and Health, Sabah (DOSHS)</td>
</tr>
<tr>
<td>• Ministry of Health (MOH)</td>
<td></td>
</tr>
<tr>
<td>• Ministry of Natural Resources and Environment (NRE)</td>
<td></td>
</tr>
<tr>
<td>• Department of Occupational Safety and Health (DOSH)</td>
<td></td>
</tr>
<tr>
<td>• Ministry of Agricultural and Agro based Industry</td>
<td></td>
</tr>
</tbody>
</table>
PROPOSAL FOR 5th TWG:
TWG on Toxic Chemicals and Hazardous Substances

TWG on Toxic Chemicals & Hazardous Substances
Chairman: NRE

Peninsular Malaysia

MITI, MOH, MOA, JKT, DOE, DOSH, JMG

Sabah

DOAS

Sarawak

KASKA, DBKU, DOA, SMC, MPP, MBKS
# PROPOSAL FOR 5th TWG:
**TWG on Toxic Chemicals and Hazardous Substances**

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>LEAD AGENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Federal Agencies</strong></td>
<td><strong>Sarawak State Agencies</strong></td>
</tr>
<tr>
<td>• Ministry of Natural Resources and Environment (NRE)</td>
<td>• Kementerian Alam Sekitar dan Kesihatan Awam Sarawak (KASKA)</td>
</tr>
<tr>
<td>• Ministry of Health (MOH)</td>
<td>• Dewan Bandaraya Kuching Utara (DBKU)</td>
</tr>
<tr>
<td>• Ministry of Housing and Local Government (MHLG)</td>
<td>• Department of Agriculture Sarawak (DOA)</td>
</tr>
<tr>
<td>• Department of Environment (DOE)</td>
<td>• Sibu Municipal Council (SMC)</td>
</tr>
<tr>
<td>• Ministry of Agriculture and Agro-Based Industry (MOA)</td>
<td>• Majlis Perbandaran Padawan, Kota Padawan, Kuching (MPP)</td>
</tr>
<tr>
<td>• MITI</td>
<td>• Majlis Bandaraya Kuching Selatan (MBKS)</td>
</tr>
<tr>
<td>• Jabatan Mineral dan Galian (JMG)</td>
<td></td>
</tr>
<tr>
<td>• Department of Occupational Safety and Health (DOSH)</td>
<td></td>
</tr>
<tr>
<td><strong>Sabah State Agencies</strong></td>
<td><strong>Ministry of Natural Resources and Environment (NRE)</strong></td>
</tr>
<tr>
<td>• Department of Agriculture, Sabah (DOAS)</td>
<td></td>
</tr>
</tbody>
</table>
PROPOSAL FOR 6th TWG:
TWG on Climate Change, Ozone Depletion and Ecosystem Change

Chairman: NRE

DOE  MOH  MHLG  KeTTHA  MOA  MOSTI  MOT  EPD  NREB
# PROPOSAL FOR 6\textsuperscript{th} TWG:
**TWG on Climate Change, Ozone Depletion and Ecosystem Change**

## AGENCY

<table>
<thead>
<tr>
<th>Federal Agencies</th>
<th>Sabah State Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ministry of Natural Resources and Environment (NRE)</td>
<td>• Environment Protection Department (EPD)</td>
</tr>
<tr>
<td>• Ministry of Energy, Green Technology and Water (KeTTHA)</td>
<td></td>
</tr>
<tr>
<td>• Ministry of Health (MOH)</td>
<td>Sarawak State Agencies</td>
</tr>
<tr>
<td>• Ministry of Housing and Local Government (MHLG)</td>
<td>• Natural Resources and Environment Board of Sarawak (NREB)</td>
</tr>
<tr>
<td>• Ministry of Agriculture and Agro-Based Industry (MOA)</td>
<td></td>
</tr>
<tr>
<td>• Department of Environment (DOE)</td>
<td></td>
</tr>
<tr>
<td>• Ministry of Science, Technology and Innovation (MOSTI)</td>
<td></td>
</tr>
<tr>
<td>• Ministry of Transportation (MOT)</td>
<td></td>
</tr>
</tbody>
</table>

**Lead Agency**

- Ministry of Natural Resources and Environment (NRE)
PROPOSAL FOR 7th TWG:
TWG on Contingency Planning, Preparedness and Response in Environmental Health Emergencies

TWG on Contingency Planning, Preparedness & Response in Environmental Health Emergencies

Chairman: MOH

- DOSH
- NRE
- DOE
- MHLG
- DOAS
- DOSHS
- DBKU
## PROPOSAL FOR 7th TWG:
**TWG on Contingency Planning, Preparedness and Response in Environmental Health Emergencies**

### AGENCY

<table>
<thead>
<tr>
<th>Federal Agencies</th>
<th>Sabah State Agencies</th>
<th>LEAD AGENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Ministry of Health (MOH)</td>
<td>- Department of Agriculture, Sabah (DOAS)</td>
<td>Ministry of Health (MOH)</td>
</tr>
<tr>
<td>- Ministry of Natural Resources and Environment (NRE)</td>
<td>- Department of Occupational Safety and Health, Sabah (DOSHS)</td>
<td></td>
</tr>
<tr>
<td>- Ministry of Housing and Local Government (MHLG)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Department of Environment (DOE)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Department of Occupational Safety and Health (DOSH)</td>
<td>- Dewan Bandaraya Kuching Utara (DBKU)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sarawak State Agencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NEHAP Malaysia**
PROPOSAL FOR 8th TWG: TWG on Health Impact Assessment

TWG on Health Impact Assessment
Chairman: MOH (EHRC)

DOE  MHLG  DOSH  MOH  EPD  NREB
**PROPOSAL FOR 8th TWG:**
**TWG on Health Impact Assessment**

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>LEAD AGENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Federal Agencies</strong></td>
<td></td>
</tr>
<tr>
<td>• Ministry of Health (MOH)</td>
<td></td>
</tr>
<tr>
<td>• Ministry of Housing and Local Government (MHLG)</td>
<td></td>
</tr>
<tr>
<td>• Department of Environment (DOE)</td>
<td></td>
</tr>
<tr>
<td>• Department of Occupational Safety and Health (DOSH)</td>
<td></td>
</tr>
<tr>
<td><strong>Sabah State Agencies</strong></td>
<td></td>
</tr>
<tr>
<td>• Environment Protection Department (EPD)</td>
<td></td>
</tr>
<tr>
<td><strong>Sarawak State Agencies</strong></td>
<td></td>
</tr>
<tr>
<td>• Natural Resources and Environment Board of Sarawak (NREB)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ministry of Health (MOH)</td>
</tr>
</tbody>
</table>
Standard Operating Procedure

• Three (3) SOPs have been prepared to guide the members of TWGs, TC and SC in conducting their activities.

• The SOPs should be used together with the Guidance Document of NEHAP

• The main contents of Standard Operating Procedures for each of the Committee are as follow:
  i) Role of the steering committee
  ii) Committee operations
Open For Discussion
THANK YOU
FOR YOUR ATTENTION!