

4. WORKING GROUP SESSIONS

Guidance questions for Working Group session 1

IS MERCURY POLLUTION A PROBLEM RELEVANT TO THIS REGION/SUB-REGION? –

Identification of major issues, problems, challenges and priority information gaps at regional and national levels

1. What is known with regard to sources and releases of mercury in the countries of the region?
 - Is mercury used in the countries of the region, for which purposes and to what extent?
 - What is known about sources and quantities released of mercury?
 - What type(s) of monitoring/reporting/calculations are currently used to estimate releases?
2. What is known with regard to levels of mercury in different media (such as air, water, and soils) and biota (such as fish, marine mammals, and other wildlife)?
 - Have mercury concentrations been measured in various media/biota? If so, have measurements been made on any systematic basis?
 - Do data show any significant levels or give rise to concern?
 - Are there any observable trends in the concentration levels?
3. What is known about mercury exposures for humans in the region?
 - Have mercury levels been measured in human tissues (hair, blood, urine)? If so, how many people were sampled? Was it a representative sample of the general population, or a subpopulation?
 - Have other methods been used to estimate human exposures, such as by using dietary survey data combined with data on mercury levels in the foods consumed?
 - Can any conclusions be drawn about the extent of exposures and degree of concern?
 - If data are only available for a few countries in the region, or only for certain subpopulations, can these data be used to predict exposures (and/or level of concern) for other countries or other subpopulations in the region?
4. Based on existing data, what issues and problems are of greatest concern for countries in region?
 - Do data give rise to particular concerns for any specific releases or uses in specific countries or within the region?
 - Do data trends provide indications of potential future increases or decreases in releases?
 - Are current exposures (or potential future exposures) to human health and the environment of concern to the region?
5. What further information is needed to assess releases and exposures to mercury in countries?
 - Is there need for further evaluation and estimation of releases of mercury or for monitoring mercury in a particular media or biota?
 - Is it possible to identify trends with the estimation and monitoring systems/programmes, which could assist in evaluating successes of actions to reduce/eliminate releases?
 - Which tools, such as inventories, reporting requirements, data management, and networks, would be needed to make information more easily accessible and useable?
6. What are the barriers faced in trying to better understand releases and levels of mercury in countries?

Reports from Working Group session 1

IS MERCURY POLLUTION A PROBLEM RELEVANT TO THIS REGION/SUB-REGION? –

SUMMARY OF FINDINGS OF THE TWO GROUPS

Question 1 - What is known with regard to sources and releases of mercury	
GROUP A	GROUP B
<ul style="list-style-type: none"> • Mercury mining operative – China and Mongolia (private sector) • No coal powered thermal plants in Nepal, Laos, Bhutan, Cambodia, Singapore, Maldives, Sri Lanka • Industries not using coal – Maldives, Cambodia, Singapore, Laos (only uses minimal amounts), Nepal (minimal), Sri Lanka (minimal), Bhutan • Countries not using coal for domestic purpose – Nepal, Singapore, Bhutan, Cambodia, Maldives <p>Sources of Hg contamination</p> <ul style="list-style-type: none"> • Extraction of gold mining • Exceptions – Singapore, Maldives, Korea, Thailand, Bhutan, China • Main contributor of Hg pollution primarily through gold processing – Myanmar, Philippines, Indonesia, Mongolia • <u>No inventory regarding the quantity of Hg released</u> • Countries not using Hg containing pesticide & fungicide – Except <u>Sri Lanka</u>, rest of the countries have minimal use (no inventory) or no information about the status. <p>Oil and Gas</p> <ul style="list-style-type: none"> • Oil & gas related production and processing - Thailand and Vietnam • All other sources are common • Absolute lack of monitoring system • Most of the countries have done standard methods of monitoring but measurements lack any systematic basis 	<ul style="list-style-type: none"> • Natural resource exploitation, mining and processing to be assessed • Small scale gold mining is also a problem • Mercury containing products are produced in the region. <ul style="list-style-type: none"> ○ their fate within region uncertain

Question 2 – What is known with regard to levels of mercury in different media	
GROUP A	GROUP B
<ul style="list-style-type: none"> • Data show significant concerns and levels in India only. Data is inadequate to assess the concern. • No clear data on observable trends in the concentration levels 	<ul style="list-style-type: none"> • Significant data on water available but need more data on aquatic species • Need for more specific data from the small scale gold mining activities • Use UNEP's INFOTERRA and its national focal points to coordinate the collection/dissemination of data • Concern that not all information is properly documented nor readily available • More inventory work is required • Disparity between the amounts of information between countries in the region
Question 3 - What is known about mercury exposures for humans	
GROUP A	GROUP B
<ul style="list-style-type: none"> • Hair analysis is conducted to some extent in some parts of the region • Scanty and scattered data is available 	<ul style="list-style-type: none"> • International information on reference doses and consumption advisories extensive • Applying to this region may be difficult • Inadequate information in this region
Question 4 - What issues and problems are of greatest concern for the region	
GROUP A	GROUP B
<ul style="list-style-type: none"> • Based on available data, the pertinent issues of concern that warrants addressal • Illegal dumping and trading, lack of monitoring and resources (financial and technical) • lack of database • Health concerns for exposed populations 	<ul style="list-style-type: none"> • Need comprehensive inventory • Need for capacity building in the region • Communicating human health and environmental concerns to public and decision makers
Question 5 - What further information is needed to assess releases and exposures to mercury	
GROUP A	GROUP B
<ul style="list-style-type: none"> • Further info needed to assess Hg • Data and standards on levels of environmental media – water, air, soil, fish etc. • Total inventory on mercury and mercury related items 	<ul style="list-style-type: none"> • Need for more toxicological data • Need for Information on impacts on wildlife (especially on rare, endangered and threatened, both floral and fauna, species)
Question 6 - What barriers are faced to better understand releases and levels of mercury in the region	
GROUP A	GROUP B
<ul style="list-style-type: none"> • Technical resources • Financial support • Lack of information exchange • Lack of awareness at local level • Lack of database and inventory • Standardisation of protocol • Lack of capacity building 	<ul style="list-style-type: none"> • Need for cooperative regional initiative • Financial constraints • Lack of regional policy and action plan

Guidance questions for Working Group session 2

HOW CAN THE REGION ADDRESS ANY MERCURY RELATED PROBLEMS?

Discussion of possible national/regional actions, policy approaches and regional cooperation that might be needed to reduce the risks posed by mercury

1. What national/regional actions, policy approaches and regional cooperation might be needed to reduce the risks posed by mercury in the region/sub-region?
2. What kinds of immediate actions could be taken at the national and sub-national levels to assess and address mercury-related problems relevant to the region and which would be of highest priority? Possible examples include:
 - Developing an inventory of mercury uses and releases;
 - Establishing a network of experts dealing with mercury-related problems;
 - Conducting studies to identify populations at risk;
 - Introducing alternatives, including cleaner technologies and non-mercury products and processes;
 - Providing education, guidance and support to artisanal miners to help reduce mercury use;
 - Establishing fish consumption advisories;
 - Introducing more efficient and effective waste collecting, management and disposal technologies and techniques;
 - Introducing better control technologies on various release sources;
 - Gathering and analyzing information on mercury trade.
3. What are the possible ways and means to implement actions identified above and which would be of highest priority? Examples could include:
 - Develop guidelines and other tools on mercury management;
 - Develop national action plans;
 - Leverage existing resources by including mercury in other chemicals management programs, actions, and studies;
 - Establish national co-ordinating mechanisms involving relevant government authorities, other national partners/stakeholders and the concerned public;
 - Develop/strengthen national chemicals legislation and/or regulations;
 - Use assistance and advice provided by international, regional organizations and national agencies;
 - Encourage voluntary programmes by industry;
 - Conduct public information campaigns;
 - Seek financial and technical assistance from donors to support such actions.
4. How could countries work together to raise awareness throughout the region of mercury-related problems?
5. What regional network could be employed to exchange information and expertise about mercury related issues among countries in the region?
6. In which other ways might countries in the region work together more effectively to address mercury related problems?

Reports from Working Group session 2

HOW CAN THE REGION ADDRESS ANY MERCURY RELATED PROBLEMS?

SUMMARY OF FINDINGS OF THE TWO GROUPS

Question 1 - What national/regional actions, policy approaches/regional cooperation might be needed	
GROUP A	GROUP B
<ul style="list-style-type: none"> • National/Regional actions needed: • Information sharing (technical knowledge) • Political will • Regional coordinating intergovernmental mechanism • Synchronized action plan • Capacity building • Involving NGOs and all stake holders 	<ul style="list-style-type: none"> • UNEP INFOTERRA Focal Points could gather data for the region. • Use sub-regional groups like South Asia Coop. Env. Prog.(SACEP) to gather and analyze data for the region. • Recommend the inclusion of mercury issues in national action plans. • Make use of the data available from the Regional Seas Programme • Cooperation could also be based on 'issues' and countries with similar issues (e.g., artisanal gold mining) could work together.
Question 2 – What immediate actions could be taken at the national and sub-national levels	
GROUP A	GROUP B
<ul style="list-style-type: none"> • Capacity building • Designing protocols • Generate data on Hg levels in air, soil, water, iota • Developing inventory (highest priority) • Continue follow-up to ensure continuity & information sharing 	<ul style="list-style-type: none"> • All items listed by UNEP are important. In addition: <ul style="list-style-type: none"> - Education and Public Awareness - Address Problems of Deforestation - Legal enforcement on small scale gold miners - Capacity building at national level • Gather information for the region on the import/export of elemental mercury and mercury-containing products • May need to stimulate national discussion by putting information on contaminant levels in fish in public/political view. • Submit a list to the Governing Council and let the GC prioritize...too difficult to do at this meeting...this would take time and thought.

Question 3 - What possible ways and means to implement actions identified above and highest priority	
GROUP A	GROUP B
<ul style="list-style-type: none"> • Create willingness (political, administrative & scientific) to address the problem • Develop multipronged action plan (create awareness to) • Resource management (money, human resources & machine) • Sequence of priority 	<ul style="list-style-type: none"> • Use existing regional centers for capacity building • Gather more specific information on legislative approaches, action plans, models, inventory approaches, etc. available from other countries and countries in the region. • Initiate a regional project • Start data gathering etc. phase wise (sub-regionally then regionally)
Question 4 - How could countries work together to raise awareness throughout the region	
GROUP A	GROUP B
<ul style="list-style-type: none"> • Create willingness to come together • Forming regional committees • Frequent meeting • Develop information material and create information sharing system 	<ul style="list-style-type: none"> • Use sub-regional and regional organizations (SACEP, SAORC, etc) • Conduct awareness at the grassroots using NGOs etc. • Promote awareness and exchanges amongst different industries in the region to facilitate technology exchanges and capacity building, etc. • Countries outside the region with technical competence could initiate awareness and capacity building programs for the region
Question 5 - What regional network could be employed to exchange information and expertise	
GROUP A	GROUP B
<ul style="list-style-type: none"> • Create willingness to come together • Forming regional committees • Frequent meeting • Develop information material and create information sharing system 	<ul style="list-style-type: none"> • Use relevant existing international protocols and conventions. • Clearing house for the region • Create a E Forum for information exchange
Question 6 – In which other ways might countries in the region work together more effectively	
GROUP A	GROUP B
<ul style="list-style-type: none"> • Create willingness to come together • Forming regional committees • Frequent meeting • Develop information material and create information sharing system 	<ul style="list-style-type: none"> • Start gathering info on other toxic elements/materials now (National/Regional Toxic Release Inventories).

Guidance questions for Working Group session 3

HOW CAN THE REGION ADDRESS ANY MERCURY RELATED PROBLEMS?

Discussion of any further measures may be needed at the regional or international level and the needs of the region for technical, financial and other types of assistance

1. Are there mercury-related problems that are common to a number of countries in the region and which could be addressed more efficiently through regional co-operation? If so, what type of co-operation might be envisaged?
2. What further measures may be needed at the regional or international level? Examples could include:
 - regional action plans;
 - international instruments (non-binding or binding);
 - other instruments for international action.
3. How can countries be effectively supported by regional and international organizations and non-governmental organizations, such as public interest groups and industry, in their efforts to address mercury pollution?
4. What are the needs of the region for technical, financial and other types of assistance to address the adverse impacts of mercury pollution at national, regional and international levels?
5. How can you as participants, after the workshop, ensure that your Governments participate in and contribute to the coming policy discussions on further needs for action on mercury at the next UNEP Governing Council session in February 2005?

Reports from Working Group session 3

HOW CAN THE REGION ADDRESS ANY MERCURY RELATED PROBLEMS?

SUMMARY OF FINDINGS OF THE TWO GROUPS

Question 1 - Are there common problems that could be addressed more efficiently through regional co-operation	
GROUP A	GROUP B
<ul style="list-style-type: none"> • Sharing information in regional/subregional, action groups etc. • Coordinating central body will coordinate on sectors like epidemiology, measuring levels in air, water, soil, biota, health risk etc. • Monitoring and Evaluation body 	<ul style="list-style-type: none"> • Sub-regional groups could be formed based on geo-social similarities (e.g. India, Pakistan, Maldives, Nepal, Bhutan) and existing group of ASEAN (ten countries) to deal with common Hg issues. • Following brainstorming among regional sub groups such as those above, UNEP could issue direction to focal points to gather/evaluate information. • Information developed by UNEP Focal points could be used to advise to advise SAARC • Need to identify the common issues to be addressed through a regional/subregional group meeting(s) • Basel Convention Regional Centre offered to create three working groups <ul style="list-style-type: none"> - policy, technical, database network - could work with Universities • UNEP to approach regional organizations such as SAARC to promote action on Hg as follow-up of this regional workshop. Individual countries in the region also need to promote action on Hg
Question 2 – What further measures may be needed at the regional or international level	
GROUP A	GROUP B
<ul style="list-style-type: none"> • Comprehensive action plans (short & long term) at national, regional & global levels related to specific subsectors • International harmonization of protocol & method • Encouraging policy planners & stakeholders to phase out mercury use ASAP by setting goals, perhaps through international agreement on major issues 	<ul style="list-style-type: none"> • International trade agreements could have an environmental accord associated with the trade agreement. • Make Hg an extension of some other int'l agreement, (LRTAP?) • Very new issue in region...need more time to consider priority of this issue at national level, • Unsure at this time if mercury issues will be a national/regional priority...must prepare for GC meeting in 2005 • Advice from UNEP to SAARC or others on how to deal with Hg sources and products would help raise the profile of mercury in the region. UNEP could provide leadership, establish priority and propose alternatives

Question 3 - How can countries be effectively supported by regional and international organizations and non-governmental organizations, such as public interest groups and industry	
GROUP A	GROUP B
<ul style="list-style-type: none"> • Suggesting alternatives • Investing finance • Creating awareness • Information material • Collecting donation • Technology sharing & transfer • Information exchange 	<ul style="list-style-type: none"> • Several existing regional groups could assist with the problem <ul style="list-style-type: none"> - SAARC, Basel Convention Regional Centres, Regional Seas initiative, UNEP • Role of NGO's-is it feasible to involve them? <ul style="list-style-type: none"> - Governments should lead, but NGO's, academia and industry associations to provide input - NGO's and others help to move the initiative forward in shorter time frame • Consumer groups/associations can be helpful to direct actions and focus attention through information campaigns • Religious sector (Social Action Centre) may be able to play a role in raising awareness on environmental problems • Financial assistance/capacity building required for region!
Question 4 - What are the needs of the region for technical, financial and other types of assistance	
GROUP A	GROUP B
<ul style="list-style-type: none"> • Technology transfer • Expertise • Equipment & Labs • Human Resources Development • Financial assistance in the form of funding projects, and setting up of reference centers. • Exchange of information 	<ul style="list-style-type: none"> • This is a priority! • Technology transfer, clean communities <ul style="list-style-type: none"> - Sustainability etc • Institutional framework building- assistance of some countries on laws, regulations, enforcement, policy, management etc. will assist others in the region.

Question 5 - How to ensure that your Governments participate in and contribute to coming policy discussions on further needs for action on mercury at the next UNEP Governing Council session in 2005	
GROUP A	GROUP B
<ul style="list-style-type: none"> • Creating awareness (through reporting, information material) • Reporting of update scenario • Meeting 	<ul style="list-style-type: none"> - Use briefings, workshops, meetings • One or two day program of awareness raising for interested domestic parties <ul style="list-style-type: none"> - Business, traders, commercial entrepreneurs, environmentalists industry, academia, all stakeholders • How do we sustain the initiative, once the appropriate briefings have happened? • Need to influence senior management <ul style="list-style-type: none"> - –Pressure from below from delegates and - –UNEP to provide pressure from above - –UNEP to prepare brief executive summaries and recommendations • Need a two pronged approach to inform national governments: both international instrument, and awareness raising. • New/existing international instruments can help to frame national/state laws, regulations and actions • Awareness raising materials kits from UNEP would be useful for general public dissemination once translated and molded to national needs.