

# Republic of the Philippines Department of Health OFFICE OF THE SECRETARY

January 3, 2013

ADMINISTRATIVE ORDER No. 2013 - 0009

SUBJECT: National Chemical Safety Management and Toxicology Policy

## I. Rationale/Background:

Over the past decade there has been a vast increase in the use of chemicals and this trend will continue as chemicals have a direct impact on the economic growth and improved quality of life. Chemical safety and hazardous waste issues have been raised among countries in economic transition and rapid industrialization. However, there are risks associated with the unsafe use of chemicals in commercial and in industrial activities. The extent of their ill—effects on health, ecological damage and resultant economic losses has always been underestimated.

All chemicals are toxic to some degree, with health risk primarily a function of the severity of the toxicity and the extent of exposure. However, most chemicals have not been adequately tested to determine their toxicity. Only 2% of chemicals produced commercially have complete health hazard assessment while only 14% of all chemicals have sufficient information to support even a partial hazard assessment. The general population is frequently uninformed about the hazards of the exposure to these chemical substances, including the routes of exposure and potential adverse health effects.

While the Philippines' Medium Term Development Plan focused on industrialization, agriculture remains a major contributor to the country's economy. Data showed that the incidence of poisoning by pesticides comprises 32% of the total poisoning cases reported and it is estimated that about 8—10% of the poisoning cases die every year as a result of intentional, accidental, and occupational exposures (UP-NPMCC, 2011). Furthermore, chronic exposures have been linked to other health effects, such as polyneuropathy, dermatitis, behavioral changes, and damage to organ-systems. Pesticide poisoning remains one of the pressing public health problems in many countries in the world, especially those with agriculture-based economies.

The adoption the Strategic Approach to International Chemicals Management under the auspices of the United Nations Environment Programme, the World Health Organization, the International Labor Organization, the Food and Agricultural Organization and other international - organizations at the International Conference on Chemicals Management provides a global framework for countries aiming to achieve the goal of sound chemicals management by 2020.

Moreover, the Fifty-Ninth World Health Assembly in 2006 adopted a resolution urging member states to take full account of the health aspects of chemical safety in the national implementation of the Strategic Approach to International Chemicals Management. Accordingly, the proposed framework under the Strategic Approach articulated the development of joint action between participating agencies in the spirit of coordination and cooperation through improved dialogue, shared information and expertise on the sound management of chemicals.

## II. Objectives

### A. General Objective

To formulate an integrated and comprehensive national chemical safety management and toxicology policy that will effectively address the gaps in chemical management in the Philippines.

## B. Specific Objectives

- 1. To formulate strategies to minimize the health and environmental risks associated with chemical use, production and trade
- 2. To Improve the knowledge and awareness of stakeholders on chemical management and toxicology
- 3. To strengthen the governance and coordination of agencies involved in chemical management and toxicology
- 4. To promote capacity-building and technical cooperation among stakeholders
- 5. To prevent illegal trafficking of toxic and dangerous chemicals in the country

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## III. Scope and Coverage

This issuance shall apply to all units and instrumentalities, including attached agencies of the DOH. It also applies to the local government units (LGUS), non—government organizations (N GOs), professional organizations, industry, private sector and other relevant partners involved in the implementation of a national chemical safety management and toxicology program.

#### IV. Definition of Terms

1. Chemicals - any organic or inorganic substance of a particular molecular identity, including:

- i) Any combination of such substances occurring in whole or in part as a result of chemical reaction or occurring in nature; and
- ii) Any element or uncombined chemical.
- 2. Chemical mixture any combination of two or more chemical substances if the combination does not occur in nature and is not, "in whole or in part, the result of a chemical reaction, if none of the chemical substances Comprising the combination is a new chemical substance and if the combination could have been manufactured for commercial purposes without a chemical reaction at the time the chemical substances comprising the combination were combined. This shall include non-biodegradable mixtures.
- 3. Exposure amount of chemical that is available for absorption into the body through possible routes of entry into the body i.e. inhalation, ingestion and skin absorption.
- 4. Importation entry of products or Substances into the Philippines (through the seaports or airports of entry) after having been properly cleared through or still remaining under customs control, the product or substance of which is intended for direct consumption, merchandising, warehousing, or for further processing.
- 5. Manufacture mechanical or chemical transformation of substances into new products whether work is performed by power-driven machines or by hand, whether it is done in a factory or in the worker's home, and whether the products are sold at wholesale or retail.
- 6. Unreasonable risk expected frequency of undesirable effects or adverse responses arising from a given exposure to a substance.
- 7. Hazards inherent characteristics of chemical substances and mixtures that are potentially dangerous or which have the capacity to do harm to the health and the environment.
- 8. Hazardous substances are substances which present either:
- 8.1 short-term acute health hazards, such as acute toxicity by ingestion, inhalation or skin absorption, corrosivity or other skin or eye contact hazards (or the risk of fire or explosion; or
- 8.2 long-term chronic health hazards which upon repeated exposure can result to any of the folloWing adverse health effects such as cancer, damage to the different organ systems, endocrine disruptors, etc
- 9. Poison any agent capable of producing deleterious effects in a biologic system, seriously injuring function or producing death.

- 10. Risk the potential (likelihood) that injury (biological damage) will occur in a given situation that is, the interaction of hazard (nature/incident) and the vulnerability (man/society).
- 11. Toxicity the ability of a substance to cause injury to biologic material

## **Guiding Principles**

Precautionary Principle and Prevention. As embodied in the Rio Declaration under Principle 15 states that where there are threats of serious or irreversible damage to the environment, lack of full scientific certainty shall not be used as a reason for postponing . cost-effective measures to prevent en Vironmental degradation. In the development of policies and guidelines on chemicals safety, agencies shall consider the importance of precautionary measures in avoiding human health and environmental impacts of new, existing or future chemicals use. Furthermore, concerned agencies shall contribute to the scientific understanding of the links between environmental exposure and human health impacts, and the need to ensure the participation and protection of vulnerable groups, such as women, children, older persons, indigenous populations and socially and economically disadvantaged groups, including equitable provision of comprehensible information.

- 2. Workers' Right to Know. The right to health and safety at work has been stipulated in the Constitution of the World Health Organization (WHO) and International Labor Organization (ILO) and is supported by a number of other United Nations documents. This shall cover information on the hazards in their workplaces, confidentiality (privacy) of health information, access to training and education and maintenance of a healthy and safe workplace.
- 3. Integrated life-cycle approach. The Plan of Implementation of World Summit on Sustainable Development proposed the development of production and consumption policies and involves strong controls from the manufacture of a chemical to its storage, transport, treatment, reuse, recycling, recovery and final disposal. It promotes product stewardship which ensures that those who design, manufacture, sell, and use consumer products take responsibility for reducing negative impacts to the economy, and calls on those in the product life cycle manufacturers, retailers, users, and disposers—to extend and share responsibility for reducing the environmental and health impacts of products. It- shall also mandate manufacturers/producers/distributors to take back and recycle products until the end of their useful lives.
- 4. Pollution prevention. Taking into account the provisions under Principle 6 of the Declaration of the United Nations Conference on the Human Environment which states that the discharge of toxic substances or of other substances and the release of heat, in such quantities or concentrations as to exceed the capacity of the environment to render them harmless, shall be halted in order to ensure that serious or irreversible damage is not inflicted upon ecosystems. Under Principle 7 of the said Declaration, countries shall take all possible steps to prevent pollution of the seas by substances that are liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea.

- 5. Policy Coherence and Governance. Under the guiding principles of sustainable \_ development, coherence, harmonization and integration between local, regional, national and global actions to increase their contribution to sustainable development shall be promoted.
- 6. Private-Public Partnership. Cooperative venture between the public and private sectors, built on the expertise of each partner, that best meet clearly defined public needs through allocation of resources, risks and rewards shall'be promoted.

Other guiding principles and considerations of importance in developing the strategy shall include the promotion of consistency and coherence, building upon and leveraging existing policies, commitments and processes and encouraging the ever-closer coordination and cooperation between stakeholders in a shared framework of action ad synergies. It shall also emphasize on the importance of encouraging closer coordination and cooperation among stakeholders on a shared framework of action.

VI. Strategic Approach in Ensuring the Implementation of the Program

A. Strengthening Organizational Structure for Chemical Safety and Toxicology at Different Levels of Governance.

The Secretary of Health shall be designated as Chair and the Secretary of the Environment and Natural Resources as the Vice—Chair of the Inter-Agency Committee on Environmental Health (IACEH) as stipulated in Executive Order No. 489 signed 22 November 1991. The Environmental and Occupational Health Office of the National Center for Disease Prevention and Control under the Support to Service Delivery Team 11 shall serve as the Secretariat for the IACEH.

The Sub-sector on Toxic Substance and Hazardous Waste (TSHW) under the IACEH shall be reconstituted and strengthened to include other concerned agencies and serve as the main coordinating body for the implementation of the National Chemical Safety Management Program (see Figure 1).

The support and engagement of high—level and senior officials shall be undertaken to provide decision makers with;

- (a) clear and up-to~date advice and evidence on the burden of disease and associated costs to promote dialogue between sectors and to raise the policy profile in the sound chemicals management.
- (b) critical information to ensure the implementation of chemical management strategies and initiatives at the different levels of governance
- (c) strategic approaches to ensure the participation of the private sector and non- government organizations in the implementation of joint programmes together with government agencies.

Roles and Responsibilities of Implementing and Coordinating Agencies

- The following agencies shall be involved in chemical safety management and toxicology.
- Department of Environment and Natural Resources shall be responsible for formulating and implementing environmental policies, laws, plans and programs including those related to industrial

chemical management and hazardous waste management.

- Department of Health shall be responsible for the development and formulation of policies, plans and programs to protect individuals, families and communities exposed to hazards and risks that could affect their health.
- Department of Labor and Employment shall be responsible for occupational safety and health, working conditions and employees compensation.
- Department of Agriculture which shall be responsible for the registration, labeling and use of pesticides and fertilizers and development of maximum residue limits (MRLs).
- Department of Transportation and Communication which shall be responsible for the promotion, development and regulation of a dependable and coordinated network of transport of chemicals including the enforcement of marine pollution regulations, including oil spill response.
- Department of Interior and Local Government which shall be responsible for the regulations on flammable and combustible chemicals including hazardous materials response.
- Department of Finance which shall be responsible for the entry/importation of hazardous chemicals.
- Department of Trade and Industry which shall be responsible for the registration of chemical products.
- Department of Energy which shall be responsible for the energy sustainable plan in the country.
- Department of Justice which shall be responsible for the use of chemicals which may be used for precursors in illegal drugs.
- National Economic Development Authority which shall be responsible for mainStreaming chemicals in the national development agenda.
- Other government agencies which shall be called upon, as necessary.

Academe, industry and non-government organizations

In cases where technical assistance on environmental and health concerns may be needed, these shall be referred to the Centers for Health Development in the different regions in the country through the Regional Inter-agency Committee on Environmental Health (RIACEH). The Local Government Unit (LGU) shall be encouraged to adopt the structure and composition at the regional/provincial/ municipal/city level.

C. The TSHW sub-sector under the IACEH shall work towards the implementation of the

following activities under the programme;

- 1. Capacity Building for Personnel .1 Governments, academe and relevant professional bodies shall consider working together to share and optimize the use of existing training materials and possibly extending or adapting them for use in teaching curricula on chemicals including strategic planning, risk assessment and management, \_ testing and research and control of illegal traffic and other relevant areas of concern.
- 2. Capacity for Risk Assessment, Reduction, Management and Communication Activities under this part of the health sector strategy shall be focused at increasing actions pertaining to the management of chemicals, thereby stimulating interest and building capacity for broader action to Contribute to the sound management of 'chemicals and the development of action plans to address priority concerns in relation to groups with specific vulnerabilities. Approaches to risk assessment procedures to include sampling procedures, standards, test methods shall be harmonized to include upgrading of capability for accreditation and reference laboratories. Hazard mapping shall be established at the national/regional and local levels. The risk management approach shall utilize health economic. analyses, which take into account the value of health and illness in monetary terms in comparison to benefits from the use of a hazardous chemical or chemical substances.
- 3. Capacity for Implementation & Enforcement Inter-agency coordination on the drafting, interpretation and enforcement of rules and regulations on chemical safety shall be enhanced and strengthened. Outdated laws, rules and regulations shall be updated to strengthen implementation of preventative programs. Based on the evaluation made under the National Profile, gaps in the implementation and enforcement may be attributed to the lack of a clear mechanism to translate the program goals, objectives and activities into workable and systematic means. Thus, the TSHW shall look into effective use of existing resources, streamlining and strengthening of existing policies, rules and regulation, procedures and other tools to ensure effective and efficient implementation of the program. An integrated approach through institutional arrangements shall be considered to optimize use of existing resources.
- 4. Capacity to Respond to Emergencies Protocols stating specific roles and responsibilities of responding agencies shall be established. Technical cooperation and collaboration with the private sector and international agencies shall be considered and enhanced.
- 5. Capacity for Rehabilitation of Contaminated Sites Protocols for clean-up, remediation and rehabilitation of chemical-contaminated sites shall be developed by the TSHW Sector.
- 6. Capacity for Surveillance and Treatment of Cases There shall be a continuing upgrading of health facilities in managing patients suffering from chemical emergencies including continuing education and training of medical and allied personnel in toxicology and epidemiology.
- 7. Awareness and Education a deeper interest in and awareness of sound chemicals management among stakeholders shall be fostered. In order to build their capacity to undertake preventive

actions, the amount, quality and relevance of information disseminated to the sector shall be increased. Coordinated efforts among agencies to educate the public on chemical hazards shall be encouraged including peer-review of educational materials among agencies.

8. Research - Evidence-based studies shall be undertaken to support policy formulation and standard setting. These efforts shall include various health studies, toxicological research, database generation, disease tracking, surveillance and other relevant studies.

9. Information Gathering and Dissemination — An integrated, harmonized database on chemicals that can be referred to, for information such as relevant laws, chemical lists and their active ingredients/adjuvants, toxicity information, registry of poisoning cases including mechanisms to link-up available information from each agency shall be developed.

10. Monitoring & Evaluation — Existing and future Strategic Approach implementation plans shall be reviewed in conjunction with existing planning tools. Activities and outputs shall be monitored and the effects of the different program strategies on chemical risk reduction shall be evaluated on a regularly basis. Thus, necessary interventions and program revisions shall be made in an appropriate manner.

# VII. Budget and Financing

The Department of Health (DOH) shall allocate a corresponding yearly budget. based on the implementation of the National Chemical Safety Management and Toxicology Policies and Programs.

The DOH shall encourage other national government agencies and the local government units to fund their local NCSMTP to implement their respective thrusts and concerns at the local level.

## VIII. Separability Clause

In the event that any provision or part of this Order is declared unauthorized or rendered invalid by any court of law or competent authority, those provisions not affected by such declaration shall remain valid and effective.

#### IX. Effectivity

This Order shall take effect immediately.