

The Formation of Information Network on Chemical Safety with Toxicological Data in China

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ABSTRACT : China is an Asia country with population more than 1,200 millions. According to the national registration, the number of chemicals commonly used in China reaches 80,000, and the number of chemicals produced in China is more than 30,000, about 10% of which has been evaluated for safety and has the toxicological data. Most of the chemicals still need safety evaluation and a part of chemicals need a renewed evaluation. At present, the information techniques and telecommunication network are developing widely and intensively. It is used not only in different institutions and enterprises, but also in many governmental sectors in my country. Here is the introduction of the situation of information network on chemical safety with toxicological data and the work done by different institutions and governmental sectors in China.

I. THE WORK AND EFFORTS OF THE MAIN RELATED MINISTRIES AND INSTITUTIONS

1. SEPA (State Environment Protection Agency)

Under the efforts of SEPA the Environment Protection Law was issued in 1989.

SEPA joined the Intergovernmental Forum on Chemical Safety (IFCS) in 1994 in Stockholm with the other ministries of China and afterwards took the leadership to organize the Interministerial Committee to deal with the tasks of IFCS, for discussion and decisions on POPs (Persistent organic pollutants), PIC (Prior inform concern) and the other related matters.

SEPA has the Centre for Registration of Chemicals which is responsible for registration of imported and exported toxic chemicals, requiring for toxicological and ecotoxicological data.

In 1997 SEPA organized the National Committee for Evaluation of Toxic Chemicals (NCETC). The Committee invites experts from different fields. SEPA has its own network on chemical safety which provides toxicological and ecotoxicological data.

2. Ministry of Agriculture (MA) and Institute for

Control of Agrochemicals, MA (ICAMA)

ICAMA is a very important governmental agency in China. It has a network throughout the China. Provinces, autonomous regions, and municipal cities have their own ICA. ICAMA and its network has longer history than SEPA and most of their work goes regularly and connects with many international agencies. ICAMA publishes Annual Bulletin on Registered Pesticides with data on their chemistry, toxicity, producers and etc. ICAMA also issued a set of soft disks with all registered pesticides in China since 1996. The data are renewed every year. Recently ICAMA is establishing an information network for pesticides with its homepage on the internet.

"The Regulations for Control of Pesticides" were issued in May of 1997, signed by the State Council. It was a big victory for MA to have "The Regulations" which have the power with the law enforcement and deal with pesticides in all aspects, including management of pesticide safe use in China, registration with requirements of toxicological and ecotoxicological data, chemical and other data, requirements of pesticide quality and quality control, punishments and fines when "The Regulations" are violated, and etc.

ICAMA has the leading organizing role in establishing the Joint Committee for Full Registration of Pesti-

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cides (JCFRP) in China. Many ministries take part in this Committee, such as MA, Ministry of Health (MH), SEPA, Bureau of Petroleum and Chemical Industry, governmental branches on commerce, transportation, and foreign affairs etc. The Joint Committee also discusses pesticide related topics and problems.

ICAMA has a journal "Pesticides and Sciences" published quarterly, which provides not only the informations for scientists, but also for managers and pesticide users.

Import and export of pesticides are under the control of ICAMA.

ICAMA is a very useful channel for information distribution and training. Very often MH and ICAMA organize meetings and training courses together for pesticide evaluation, safe use of pesticides (IPCS Multilevel Training Course), and management purposes.

ICAMA also has a detail data base for all registered pesticides which can be used with the permission of ICAMA.

3. Ministry of Health (MH) and Institute of Occupational Medicine (IOM)

In the field of industrial health and occupational diseases MH conducts many activities and fulfills many tasks with support from governmental branches and many institutions, among which IOM is a very important one.

IOM is a national institute for occupational medicine. It is also the WHO collaborating Centre for Occupational Health (Beijing) and the National Centre for Occupational Health with 6 local centres located in different areas of China. The National Occupational Disease Registration and Reporting System (ODRRS) and the National Poison Control Centre (NPCC) are established within the IOM.

Besides, MH also has other health reporting systems and programmes, such as : radioactive contamination monitoring system, food poisoning reporting system, hygienic supervision and monitoring on drinking water etc.

Health inspection and monitoring data are published in "Annual Bulletin of Health Inspection" since 1990.

IOM frequently has visitors and exchanges scientific informations with institutions all over the world,

among them the Japanese National Institute of Health Sciences.

Of course, there are many medical and health journals and magazines, giving information on chemical safety, but usually they are published only in Chinese, although many of them are with English abstracts now.

Recently our minister (MH), Dr Zhang, talked about reform in the field of health and medical services for Chinese people, and especially for people who are exposed to occupational hazards, mainly to toxic chemicals. A draft for "Law on Treatment and Prevention of Occupational Diseases" has been prepared and it is expected to be accepted by the Peoples' Assembly and will be issued as a law in the near future. It will be a big event for MH, for working people, and for all health workers in China as well.

II. INFORMATION NETWORKS AND AVAILABLE DATA BASES

1. Centre for Registration of Chemicals (SEPA)

- Chemical, toxicological, and ecotoxicological data base and the home page on the internet: <http://www.crc-sepa.org.cn>

2. ICAMA Data Base : <http://www.Chinapesticide.gov.cn>

3. NPCC/IPCS (MH and IOM): <http://www.npcc.org.cn> or <http://npcc.org.cn>

- Data base and the home page on the internet with all newly happened events and news, information on knowledge for toxicants and drugs, treatment and special antidotes, lists of dangerous chemicals, specialists and institutions.

- Issue of "Ligislation status of occupational medicine", informing the recent situation of legislation status, new accidents caused by chemicals, treatment and prevention measures, and etc.

- Published papers of poisoning cases in China (> 3000).

- Providing Chinese and foreign data bases on chemicals.

- Developing a PCC network in China, it has now 5

branches : Henan PCC, Hebei PCC, Guangdong PCC, Liaoning PCC , and Tianjin PCC.

- Strengthening connections at international level :

Participating in the IPCS activities and accepting IPCS/INTOX softwares and using IPCS format for data collection on toxic chemicals.

- Establishing PCC network hospitals in China , 20-50 at the end of year 2000. Now we have 6 network hospitals : in Beijing, Shanghai, Guangdong, Shenyang, Xuzhou, and Tianjin.

4. Occupational Disease Registration and Reporting System

Acute occupational poisoning (especially pesticide poisoning) and chronic occupational diseases are registered in general hospitals, clinics, township health centers, and anti-epidemic stations at county, prefectural, and provincial (or municipal cities) level. The data are transmitted through the reporting network to CAPM and finally will be reported to the Ministry of Health and included in the "Annual Bulletin of Health Inspection". The emergency cases are reported immediately by phone to the Ministry of Health.

5. Shanghai Chemical Toxic Substances Information Service

-Data base and organizing of the home page on the Internet, chemaid @ online.sh.cn

-It provides one of the best data bases on chemicals in China.

-It provides internet addresses of many data bases, such as OSHA, MSDS, ATSDR, ECDIN, MEDLINE, TOXLINE, major hazardous incidents data system and etc.

6. Other Related Data Bases with the Same Functions are Available :

-AMS

-CAPM

-Medical universities and colleges.

III. FUTURE DEVELOPMENT

1. Communication among many existed governmental sectors and various institutions in China should be improved, rational organizations and networks on chemical safety should be created, JCFRP and NCETC are good samples.

2. Exchange of information, toxicological data and other data through internet with other countries.

3. Although NPCC and other institutions have data bases and some have their internet addresses, yet most Chinese data are in Chinese language. How could we exchange informations with other countries, especially with other Asia countries? We would like to discuss, exchange opinions, and solve this problem in the future.