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Interministerial GHS Activities and Implementation in Korea

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Abstract

To implement a globally harmonized system of classification and labeling of chemicals (GHS) in Korea, an interministerial GHS working group involving 6 ministries established an expert working group composed of 7 experts from relevant organizations and one private consultant to prepare an official Korean GHS version by March, 2005. As such, the translation and review of the official Korean GHS version, including annexes, started in October, 2004 and was completed on March 15, 2005. The official Korean GHS version has now been posted on the websites of the relevant ministries and organizations to solicit public opinions. The official Korean GHS version will be finalized after a public hearing scheduled for May, 2005. Collaborative efforts as regards implementing and disseminating the GHS in Korea will be continued to avoid any confusion or duplication and for effective use of resources.

The globally harmonized system of classifying and labeling chemicals (GHS) was originally adopted in 1992 at the United Nations Conference on Environment and Development (UNCED), as subsequently reflected in Agenda 21 chapter 19. The work was coordinated and managed under the auspices of the Interorganization Programme for the Sound Management of Chemicals (IOMC) Coordinating Group for the Harmonization of Chemical Classification Systems (UNCEGHS). The technical focal points for completing the work were the International Labour Organization (ILO); Organization for Economic Cooperation and Development (OECD); and United Nations Economic and Social Council's Subcommittee of Experts on the Transport of Dangerous Goods (UNSCETDG). The work was finalized in October 2002, and the World Summit on Sustainable Development in Johannesburg on 4 September 2002 encouraged countries to implement the new GHS as soon as possible with a view to having the system fully operational by 2008 (UN, 2003). Implementation has already started with pilot countries introducing the system to their national practices in different regions of the world. The GHS

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text, called the purple book, became available as a UN publication in early 2003. The GHS system will be kept dynamic, and regularly revised and made more efficient as experience is gained in its implementation. While national or regional governments are the primary audiences for this document, it also contains sufficient context and guidance for those in industry who will ultimately be implementing the national requirements that will be introduced (UN, 2003).

The Japanese government published their official Japanese GHS version, the first in Asia, in April 2004 after starting work in January 2003 based on an interministerial chemical coordination committee involving 7 ministries, including the Ministry of Foreign Affairs, Ministry of Internal Affairs and Communications, Ministry of Health, Labour, and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of Land, Infrastructure, and Transport, and Ministry of Environment (MOE, 2004). Accordingly, similar to the Japanese GHS efforts, this paper presents the interministerial efforts involved in publishing the official Korean GHS version.

GHS-related activities in Korea

After the adoption and publication of the GHS purple book in 2003, several Korean ministries independently initiated GHS-related activities. The Ministry of Labor (MOL) in collaboration with the Korean Occupational Safety & Health Agency (KOSHA) instigated the translation of the GHS in early 2003 in preparation for a planned revision of the Industrial Safety and Health Act (ISHA) and its related regulations. Meanwhile, the Ministry of Environment (MOE) started research projects in late 2003 to analyze the impact of adopting the GHS in Korea and possible revision of the Toxic Chemical Control Act (TCCA). The Ministry of Commerce, Industry, and Energy (MOCIE) also started research projects in 2004 as regards applying the GHS to Korean Industry Standards.

However, to consolidate these independent GHS-related activities by different ministries, the MOCIE called an interministerial (MOL, MOE, MOCIE, Ministry of Government Administration and Home Affairs, and Ministry of Foreign Affairs and Trade) meeting on April 9, 2004 to discuss effective implementation of the GHS, share information on current APEC (Asia Pacific Economic Cooperation) Chemical Dialogue activities, and explore common interests. Then, on July 20, 2004, an interministerial GHS working group (IGWG) meeting was convened by the MOE, including the MOL, MOCIE, newly organized National Emergency Management Agency (NEMA) and Ministry of Maritime Affairs and Fisheries (MMAF), to discuss the implementation and introduction of the GHS in Korea. The consensus was to create an expert working group, consisting of experts recommended by the various ministries to translate and review the purple book, and hold frequent IGWG meetings. The subsequent IGWG meeting at the MOL on September 23, 2004 recommended members for the expert working group, including 7 experts from 6 ministries and one private consultant (Table 1), and their mandate was to collaborate to produce an official Korean GHS translated version by March, 2005 for dissemination nationwide.

Publication of official Korean GHS translated version

When translating the GHS purple book into Korean, the expert working group made every effort to apply terms already used in existing regulations, such as ISHA, TCCA, etc. Meanwhile, terms

Table 1. Expert Working Group for Official Korean GHS Translated Version.

Ministry	Relevant Organization	Number of expert
Ministry of Labor	Occupational Safety & Health Research Institute (OSHRI), KOSHA	2
Ministry of Environment	National Institute of Environmental Research (NIER)	1
Ministry of Commerce, Industry and Energy	Korea Toxicology Institute (KIT)	1
Ministry of Agriculture	National Institute of Agricultural Science and Technology (NIAST), Rural Development Agency (RDA)	1
Ministry of Maritime Affairs and Fisheries	Korea Maritime Dangerous Goods Inspection Center (KOMDIC)	1
National Emergency Management Agency	Korea Fire Equipment Inspection Corporation (KOFEIC)	1
Private Consultants	SafeChem	1

that did not appear in existing regulations were extensively discussed in group meetings. The expert group always attempted to reach a consensus and use Korean terminology, unless English terms were in common use, plus the Japanese GHS was used for reference. The translated version covered the entire purple book, including the 9 annexes, and at least three reviews were completed from October, 2004 based on the already published KOSHA version (KOSHA, 2003) and NIER version (NIER, 2004). Each section of the purple book was assigned to experts according to their scientific and legal expertise, and different groups of experts used for each review, where the first review was finished on December 30, 2004, the second on January 21, 2005, and the third on February 11, 2005. The progress was checked and terminology extensively discussed at expert group meetings held between the deadlines. The expert group meeting for the final review was held at the KOMDIC from February 21-23 in Seoul. As such, a consensus was reached for each uncertain term, every line of the translated purple book was checked, and all the chapters in the annexes were thoroughly examined. After some editorial work, the final version was completed on March 15, 2005 and submitted to the IGWG group meeting held at the NEMA on March 16, 2005. When discussing the dissemination of the official Korean GHS version nationwide, the IGWG determined to post the official Korean GHS version on the websites of the respective ministries and relevant organizations for a certain time period to collect opinions, and schedule a public hearing for the middle of May, to be hosted by the Agency for Technology and Standards (ATS) at the MOCIE.

Implementation of GHS in Korea

The collaborative efforts involved in publishing the official Korean GHS version was the first time the relevant ministries coordinated together to harmonize and mediate chemical-related regulatory affairs. Therefore, even though 7 different ministries and 12 legislative acts are currently responsible for managing and regulating chemicals in Korea (Lee et al., 2004; Hwang et al., 2005), the GHS will be introduced to Korea with consistent terminology, classifications, and

labeling, thereby avoiding confusion for the public, employers, and workers. Accordingly, the terms, classifications, and labeling used in GHS-related regulations, such as ISHA, TCCA, the Fire Service Act, and Maritime Dangerous Goods Code, will be harmonized through the IGWG and based on the official Korean GHS version. The chemical regulatory ministries of the Korean government are scheduled to revise their respective regulations in line with the GSH by the end of 2005, and to enforce and adopt the GHS by 2008 after 2 years of public notice. Meantime, various education and dissemination programs, such as a GHS guide book and computer programs to generate classifications and labeling for GHS, are planned. The Korean Society of Toxicology is scheduled to offer the first education program on the GHS on May 12, 2005. The Korea Institute of Fire Science and Engineering and Korea Specialty Chemical Industry Association are also planning GHS education courses for this spring.

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Chemical regulating Acts and its purpose in Korea

Target	No	Jurisdiction	Related Acts
Health Hazard	698	MOL	Industrial Safety and Health Act
Toxic	512	MOE	Toxic Chemical Control Act
Agrochemical, fertilizer, feed	314	MAF	Agrochemicals Control Act, Fertilizers Control Act, Control of Livestock and Fish Feeds Act
Medical supplies, narcotics	2,600	MHW	Pharmaceutical Affairs Act, Narcotics Control Act
Food additives	461	MHW	Food Sanitation Act
Dangerous article, Explosives	64	NEMA	Fire Service Act, Control of Firearms, swords, Explosives, etc. Act
High pressure gas	51	MOCIE	High Pressure Gas Safety Control Act
Radioactive agents	Isotope	MOST	Atomic Energy Act

Interministerial GHS activities

- MOCIE (4.9, 2004) : 5 ministries
 - discussed effective implementation of the GHS
 - shared information on current APEC Chemical Dialogue activities,
 - explored common interests
- MOE (7.20, 2004) : 6 ministries
 - interministerial GHS working group (IGWG) meeting was suggested
 - discussed the implementation and introduction of the GHS in Korea

Interministerial GHS activities

- MOL (9.23, 2004): IGWG meeting
 - expert working group, including 7 experts from 6 ministries and one private consultant
 - mandate to produce an official Korean GHS translated version by March, 2005
- NEMA (3.16, 2005) IGWG meeting
 - submission of official Korean GHS version
 - posting the official Korean GHS version on the websites
 - scheduled a public hearing for the middle of May

Expert Working Group for Official Korean GHS Translated Version

Ministry	Related organization	Expert
MOL	Occupational Safety & Health Research Institute (OSHRI), KOSHA	2
MOE	National Institute of Environmental Research	1
MOCIE	Korea Toxicology Institute (KIT)	1
MOAF	National Institute of Agricultural Science and Technology, Rural Development Agency	1
MMAF	Korea Maritime Dangerous Goods Inspection Center (KOMDIC)	1
NEMA	Korea Fire Equipment Inspection Corporation (KOFEIC)	1
Civilian	Safechem	1

Process of translating Official Korean GHS Version

	Date	Action
1st	11/3/04	Terminology, 1st translation assignment, scheduling
2nd	12/8/04	Checking 1st translation, terminology harmonization, 2nd translation assignment
3rd	1/14/05	2nd translation checking, risk/hazard phrase harmonization
4th	2/21-23/05	Final check, terminology harmonization, editorial work, annex
final	3/15/05	Draft submitted

Implementation of GHS

- Public hearing on Korean draft (5/19/05)
- Official version distribution (6/1/05)
- Frequent revision (6/2005-2008)
- Providing education and dissemination programs (eg. Guide book, classification & labeling program)
- Revision of respective regulations in line with the GSH by the end of 2005
- Enforcing and adoption the GHS by 2008 after 2 years of public notice

Perspectives

- GHS will be introduced to Korea with consistent terminology, classifications, and labeling, thereby avoiding confusion for the public, employers, and workers.
- Terms, classifications, and labeling used in GHS-related regulations will be harmonized through the IGWG and based on the official Korean GHS version.