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KOSHA's financial assistance targeting small workplaces

In order to promote workers' health through work environment management of small-sized workplaces, KOSHA will provide financial assistance to these small enterprises. The financial assistance provided by KOSHA will be used to fund work environment monitoring in these worksites.

Workplaces eligible for the financial assistance are those that are required to conduct work environment monitoring under Article 42 of the OSH Act with less than 10 full-time employees. Also, the eligible workplaces should have plans to conduct work environment monitoring in the second half of this year.

The provided funding is 70% of the actual expenses for the monitoring, ranging from KRW 200,000 to 350,000.

※ Work Environment Monitoring : Workplaces that use chemical substances, generate dusts or noises are required to conduct work environment monitoring on yearly basis.

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MOEL-Prosecutors' Office conduct joint safety inspection

For two weeks starting from June 7 (Tue), the Ministry of Employment and Labor (MOEL) and the Prosecutors' Office will conduct safety and health inspection targeting some 1,500 workplaces across the country. The main goal of the nation-wide inspection is to check whether the workplaces are taking proper accident prevention measures.

Summer season is vulnerable to accidents and the likelihood of accidents at work is on the rise. The joint inspections will reduce occupational risk factors and raise the safety and health awareness of workers and employers. The workplaces subject to the inspections will be evenly distributed across the nation.

○ ○ ○ The joint inspection's main targets are :

- Workplaces with the history of serious accidents (fatalities, etc.) due to fires, explosions or poor safety management within the past year
- Workplaces that experienced a recent rise in accidents
- Workplaces with high risks of accidents, or those with poor work conditions

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OSHRI-KOSHA organizes International Seminar on Ex-proof Electrical Equipment

Presenters include an ex-proof expert from Germany

On May 31, 2011 Korea Occupational Safety and Health Agency (KOSHA; President: Min-Ki Noh) organized an "International Seminar on Ex-proof Electrical Equipment" in COEX, Seoul.

The international seminar has been organized to prevent fires and explosions, which can be caused by explosion-proof electrical equipment being installed and used in chemical plants.

An ex-proof professional from PTB of Germany has been invited to give presentations about "Safety Process Industry - Explosion Protection," and "Explosion-proof equipment for usage in hazardous area." In addition, the European certification system on ex-proof equipment was introduced.

- ○ ○ [PTB] Physikalisch-Technische Bundesanstalt :

National Institute for science and technology, for the field of chemical physics, explosion protection, certification and testing of flameproof enclosure, etc.

- ○ ○ Presenter from PTB

Dr. Detlef Markus: Department of Flame Transmission Processes, PhD in Physics

A presenter from Hyundai Heavy Industries gave a presentation about "Making inroads into international market through advancing ex-proof designs" and Professor Seong-Mo Kang from OSHRI-KOSHA presented about "Design, selection, and installation of ex-proof electrical equipment."

"The seminar is an opportunity to introduce advanced techniques related to ex-proof electrical equipment, which encompasses the manufacturing, designing and electing processes of the equipment. Furthermore, the latest trends of the European market on ex-proof equipment have been introduced. As a result, the seminar will go a long way to preventing accidents in Korean worksites, while enhancing national competitiveness of Korean companies manufacturing the equipment," said an official from KOSHA.

※ OSHRI-KOSHA : Occupational Safety and Health Research Institute of KOSHA



Spreading the Seoul Declaration on Safety and Health at Work

KOSHA - Safety News, organize the 1st Network Meeting for SD

May 19, 2011-05-23

On May 18, 2011, a network meeting on the Seoul Declaration on Safety and Health at Work was held to gather the ideas of the participants on ways to promote the implementation. During the meeting, President Yeo-Song Yoon of Korea PSM (Process Safety Management) Forum was elected as the Chair of the Network for the Seoul Declaration. The newly-elected President Yeo committed to lead the Network in carrying out activities to promote the Seoul Declaration.

Korea Occupational Safety and Health Agency (KOSHA; President: Min-Ki Noh) and Safety News (Publisher: Jin-Young Kim) organized the 1st General Meeting of the "Network for the Implementation of the Seoul Declaration" in Sejong Hotel. The meeting was attended by some 40 members of the Network and Director General Dae-Yul Choi of KOSHA.

The General Meeting was held to promote prevention culture and strengthen the collaboration among the members of the network. Accomplishments so far relating to the activities for implementing the Seoul Declaration and future plans were discussed. After that, a new Chairperson for the Network was elected, followed by group discussions.

"Since the adoption of the Seoul Declaration on Safety and Health at Work three years ago, there have been many efforts jointly made by KOSHA, ILO and ISSA to spread the implementation, while more than 1770 organizations from home abroad endorsed and supported the Seoul Declaration. I look forward to the activities of the Network in discussion effective ways to spread the Seoul Declaration and gather thoughts on ways to prevent accidents at work," said Director General Choi of KOSHA.

"In the past 10 years or so, the subjects for occupational safety and health management have diversified, which entailed changes in accident prevention techniques, and the globalization of the OSH sector. The Network for the Implementation of the SD will actively support activities that aim to promote the ideas of the Seoul Declaration," said Dr. Byong-Oh Song of OSH Research Center of Safety News.



▲ The 1st General Meeting of the
"Network for the Implementation of the Seoul Declaration"



OSHRI publishes "Risk Assessment Reports on Fires and Explosions"

Scientific analysis on accidents caused by chemical substances

June 8, 2011

Occupational Safety and Health Research Institute (OSHRI) of KOSHA published Risk Assessment Reports to prevent chemical accidents and identify their causes.

The reports published by OSHRI contain information on risk assessment, and they target workplaces that have recently received technical support related to chemical accidents and explosions.

- The reports are comprised of four volumes and the topics of each volume are :

- Dust explosion in the manufacturing process of non-explosive rock breaker
- Dust explosion of acrylic impact modifier and processing aid
- Fires and explosions of heating medium oil (polysiloxane) with the passage of time
- Dust explosion risk assessment of magnesium alloys

The physical and chemical properties of each material and the use of analyzing equipment for fire and explosion testing help to understand the cause of an accident. Also, by providing scientific data, it is possible to suggest measures that prevent similar accidents.

The reports are available for downloads at OSHRI's website (<http://oshri.kosha.or.kr>). OSHRI offers these reports to enable safety and health managers in worksites prevent accidents involving explosions caused by chemical substances and identify the causes should accidents occur in the future.

The reports were given ISBN (International Standard Book Number) from the National Library of Korea to improve accessibility and quality of the contents.

Director General Seong-Kyu Kang of OSHRI said, "The latest publications from OSHRI demonstrated a scientific and systematic analysis through a combination of highly qualified researchers and advanced equipment. They will be very useful in analyzing the cause of fires and explosions in industrial sites and prevent accidents."

In February 2009, OSHRI had been recognized as a qualified institution under KOLAS (Korea Laboratory Accreditation Scheme) in dust explosion category, for the first time as a Korean research institute. Furthermore, OSHRI satisfies a total of 20 international standards for tests involving fires, explosions, and physical hazards.



▲ OSHRI published reports on risk assessment



▲ Risk assessment testing in OSHRI

<http://www.english.kosha.or.kr>



Turkey Adopts Kayseri Statement in Support of the Seoul Declaration KOSHA attends the 25th OSH Week of Turkey

May 9, 2011

On May 4 (Wed.) 2011, Korea Occupational Safety and Health Agency (KOSHA; President: Min-Ki Noh) attended a ceremony held on the occasion of the 25th OSH week of Turkey. The event was held in Kayseri, Turkey and the Kayseri Statement in support of the Seoul Declaration was adopted.

Seoul Declaration on Safety and Health at Work

In June 2008, during the 18th World Congress on Safety and Health at Work held in Seoul, Korea 46 representatives of workers, employers, and governments around the world adopted and signed the "Seoul Declaration on Safety and Health at Work." The Seoul Declaration is a universal charter on safety and health, which recognized safety and health as workers' fundamental right as well as the means to achieve economic development. The Seoul Declaration is a collective commitment made by each member of the society to keep workers safe and healthy in workplaces.

Director General Dae-Yul Choi for Training and Public Relations of KOSHA attended the signing ceremony of Kayseri Statement in support of the Seoul Declaration, which was organized by the Ministry of Labor and Social Security of Turkey. On behalf of KOSHA, which is one of the key organizations in formulating the Seoul Declaration, Director General Choi addressed a keynote speech to highlight the importance of the Seoul Declaration. Also, the representatives of the ILO, ISSA and KOSHA signed the statement as witnesses, laying the foundation for the spread of the Seoul Declaration in Turkey.

The signing ceremony was held on the occasion of the 25th OSH week of Turkey organized by the Ministry of Labor and Social Security, in order to promote the implementation of the Seoul Declaration through the Kayseri Statement. The Ministry of Labor and Social Security of Turkey is the organizer of the 19th World Congress on Safety and Health at Work to be held in Istanbul in September, 2011.

KOSHA Newsletter

With the participation of some 300 representatives of workers, employers and the government including the Minister of Labor and Social Security, 11 of them signed and adopted the support statement, while the representatives of the ILO, ISSA, and KOSHA also signed the statement as witnesses.



▲ Commemorative Photo Shoot during the Signing Ceremony of Kayseri Statement

During the keynote speech, Director General Choi said “Turkey’s voluntary action to organize a signing ceremony supporting the Seoul Declaration is very encouraging and meaningful development. I hope the ideas of the Seoul Declaration are well understood across the country and contribute to preventing accidents in workplaces.” He also called for close collaboration among workers, employers and the government so that various activities related to safety and health at work take place in Turkey.

Thanks to the signing of Kayseri Statement in Turkey, the total number of signatories and supporters of the Seoul Declaration increased to 1,633 organizations, including 271 Korean organizations and 1,362 overseas organizations. Many government agencies and professional OSH organizations are actively implementing safety and health activities under the spirit of the Seoul Declaration.



KOSHA Expands Partnerships with Singapore and Germany

KOSHA signs technical arrangements with WSH Institute and DGUV

May 4, 2011

Korea Occupational Safety and Health Agency (KOSHA; President: Min-Ki Noh) signed technical arrangements with WSH Institute in DGUV in Germany to boost its technical exchanges with professional accident prevention organizations in Singapore and Germany.

On April 29, 2011, KOSHA signed technical arrangement with WSH Institute, which is an organization under the Ministry of Manpower in Singapore. Also, on May 2, 2011 KOSHA signed another technical arrangement with DGUV in Sankt Augustin, Germany. Through the arrangements, the organizations agreed to work together to enhance the expertise in safety and health in each country.

So far, KOSHA has been promoting technical exchanges with the Ministry of Manpower in Singapore. However, Singapore established and expanded the function of WSH Institute in 2011 whose function is to prevent occupational accidents, similar to KOSHA. Upon the request made by KOSHA, the two organizations now have a firm basis for technical collaboration.

※ Workplace Safety and Health Institute (WSH Institute) of Singapore :

Established in 2011 as an organization under the Ministry of Manpower, WSH Institute is a professional organization specializing in occupational safety and health. WSH Institute provides training and education to develop OSH experts and conducts R&D to formulate policies on OSH.

KOSHA has been having numerous exchanges and collaborations with the DGUV of Germany but there were no formal grounds for further cooperation between the two organizations. Thanks to the recent signing of technical arrangement, DGUV - the host of the 20th World Congress on Safety and Health at Work to be held in 2014 - and KOSHA - the successful host of the 18th World Congress in 2008 - will have more active cooperation in the future.

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※ DGUV (Deutsche Gesetzliche Unfallversicherung : German Social Accident Insurance)

DGUV is a central organization in Germany, in charge of accident prevention, compensation, and rehabilitation. It manages 36 BGs (Berufsgenossenschaft) some of which include mining, machinery & metal, and chemicals. DGUV's main roles are: legislation and revision of accident prevention regulations; testing of hazardous machinery and facilities; technical consultation and inspection; and training for OSH managers.

Through the technical arrangements signed with professional OSH organizations in Singapore and Germany, KOSHA will be able to exchange expertise and information related to safety and health. Meanwhile, KOSHA is the chair organization of the new "Prevention Culture Section" of ISSA. Against the backdrop, the two organizations discussed ways for future collaboration in advancing prevention culture worldwide.

Director General Shin-Jae Yi for Technology of KOSHA, who visited the countries on behalf of KOSHA said, "Building the foundation for cooperation with professional OSH organizations in Singapore and Germany, the representative countries in Asia and Europe, is a good investment for the future. I am very positive that KOSHA will develop reliable partnerships with these organizations, which are beneficial for each other in pursuing activities home and abroad."

So far, KOSHA has concluded 59 technical arrangements with professional OSH organizations in 28 countries. Through the technical arrangements, KOSHA has been engaged in various activities that foster vibrant exchanges of human and technical information





Suffocation Hazards in Confined Spaces

KOSHA signals warning and stresses 3 safety tips

May 31, 2011

In preparation for the summer season, the warning signals are up for operations in confined spaces such as manholes, water-purifier tanks, etc.

On May 26, a worker collapsed due to suffocation as he was entering inside a sewerage through a manhole, at a sewer system repair site in Busan. A co-worker of the collapsed worker also entered the sewerage in rescue and was suffocated as well. This accident led to a fatality and the other worker is in critical condition.

High temperature and localized heavy rains in summer, lead to the proliferation of micro-organisms thus raising the risks of accidents involving suffocations caused by oxygen deficiency.

Statistics on suffocations accidents at work show 37 fatalities in the past three years, and 48% of the deaths - 18 deaths - occurred from June to August.

Suffocation accidents at work from 2008 to 2010

(unit: No. of persons)

Fatal / non-fatal	Total	2010	2009	2008
No. of fatalities	37	11	12	14
No. of non-fatal accidents	14	5	3	6

Monthly suffocation accidents at work from 2008 to 2010

(unit: No. of persons)

	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. of fatalities	37	2	3	3	3	1	6	8	4	3	2	0	2



The worksites where the most number of suffocation accidents occur are waste water treatment facilities with 12 deaths, followed by manholes (9 deaths), and storage tanks and chemical facilities (8 deaths).

● Suffocations accidents by worksite types from 2008 to 2010

(unit: No. of persons)

	Total	manholes	waste water treatment facilities	storage tanks, chemical facilities	Inside of a vessel	Inside of pipes	foodstuff tanks	the use of heating equipment	drying chamber
No. of fatalities	37	9	12	8	1	1	3	2	1

Confined spaces like waste water treatment facilities, manholes, and water-purifier tanks have limited access of humans and are poor ventilated. Since these confined spaces easily run out of oxygen and build up toxic gases like hydrogen sulfide, there are high risks of accidents.

Entering or working in confined spaces without the aid of ventilation or protective equipment can cause oxygen deficiency or the exposure to toxic gases leading to symptoms like unconsciousness, convulsions, and even deaths in extreme cases. Confined spaces with less than 10% of oxygen concentration can render a person unconscious upon entering the space and kill him within minutes.

Against the backdrop, Korea Occupational Safety and Health Agency (KOSHA; President: Min-Ki Noh) designated the months June through August as the emphasis period for preventing suffocation accidents in industrial sites. While raising the alarm against hazards, KOSHA set out “Three safety tips for work in confined spaces” to check workplaces’ compliances with the guidelines and extend technical support.

○ Three safety tips for work in confined spaces are :

- Measuring oxygen and toxic gas concentrations before and during work
- Ventilating confined spaces before and during work
- Wearing protective equipment when conducting rescue works in confined spaces

In addition to following the tips above, it is necessary to take additional safety measures including the placement of an observer, checking the numbers of workers, and preparing safety devices.



In addition, KOSHA leases oxygen indicators, air masks, portable ventilation fans and so on to workplaces, free of charge, upon their requests. Also, if workplaces wish to purchase these devices, KOSHA provides financial assistance of 50~80% of the prices.

Further information about the lease or purchase of safety devices is available from the website at www.kosha.or.kr.

“According to the weather forecast, we will experience more frequent rains and high temperature this summer. This gives us the reason to pay more attention to suffocation hazards in confined spaces,” said Director Jungsun Park of Occupational Health Department, calling for the observance of Three safety tips for work in confined spaces.

○ Examples of suffocation accidents in confined spaces in 2010 ○

Case #1

On September 19, 2010 in a waste water treatment tank located at an underground parking lot in Ulsan, a worker cleaning the tank collapsed due to toxic gas poisoning (hydrogen sulfide). Two other workers who went inside the tank to rescue the first worker were also poisoned by the toxic gas. All of the three workers died.

Case #2

On August 20, 2010 a worker was removing waste water inside a treatment tank. The treatment tank was being dismantled and was located in an apartment complex in Yongin, Gyeonggi-do. The worker collapsed due to hydrogen sulfide poisoning, and other four workers who had been working nearby went inside the tank in rescue. The workers succumbed to the toxic gas one by one. One of the workers died and four others fell into critical conditions.

