Key Projects of the

Environmental Health Policy Office

Chemical Safety Management System

The Ministry of Environment is reestablishing the chemical safety management system by wholly amending the “Chemicals Control Act” (CCA) and enacting the “Act on the Registration and Evaluation, etc. of Chemicals” (AREC). Both acts will be enforced as of January 1, 2015.

The new CCA tightens controls over toxic chemicals and chemical accidents. A toxic chemicals business permit system will be introduced requiring toxic chemicals businesses to submit an off-site consequence analysis report, test report, and risk management plan and be equipped with facilities, equipment, and staff of a certain standard in order to obtain a permit. The handlers of substances requiring preparation for accidents must formulate a risk management plan every five years, and also have a greater responsibility to report any accidents. The chemical accident response system was reorganized so that the Ministry of Environment is in supreme charge of all chemical accidents, and the National Institute of Chemical Safety (NICS) was newly established in 2014 as a specialized institution to be in charge of chemical accident prevention and responses.

The AREC introduces an advanced chemical registration and evaluation system to register the toxicity and harmfulness information on chemicals that are domestically produced or imported and to conduct toxicity evaluations and harmfulness assessments of registered chemicals. The chemical safety information thus obtained will be shared across industries and the government and is expected to enhance the effectiveness of safety management and policy formulation. Furthermore, products containing toxic chemicals must be reported, and any household chemicals such as cleaning agents and pesticides must be produced and imported in accordance with safety and labeling requirements.

As the Ministry puts an emphasis on children's health, their activity spaces such as playgrounds are being monitored for risks.

Prevention and Control of Environmental Diseases

Korea’s environmental policy paradigm is shifting from media-specific management to a receptor focus and ensuring of environmental rights, and accordingly, policies aim to minimize the health damage caused by environmental pollution.

The Ministry of Environment is putting a particular emphasis on protecting the health of children, a population sensitive to environmental pollution. Since 2006 it has been carrying out environment monitoring in children’s playgrounds, childcare

facilities, schools, school zones, and other facilities of major concern and is preparing control measures based on the results. In 2009, environmental safety control standards were prepared on indoor air pollutants, heavy metals, and parasites in children's activity spaces and were applied to elementary schools, parks, daycare centers, and indoor and outdoor playgrounds. An environmental safety diagnosis and improvement project is in progress regarding these facilities. Also in 2009, an announcement was made specifying 135 types of environmental hazards contained in baby bottles, toys, and other children's products. A risk assessment is conducted on such products and transfer or content limits are prescribed for children's products regarding any substance whose risk is confirmed through the assessment. To encourage children's product manufacturers to engage in self-management to voluntarily reduce environmental hazards, an associated guideline has been in distribution since 2012 and financial assistance is offered to cover the consultation costs for formulating self-management plans.

Basic information is being collected and an institutional groundwork is being laid to ensure more systematic and active responses to the health impacts of environmental pollution. The National Environmental Health Survey and the "Maternal and Infant Health Impact Survey," "Children and Young Adults' Health Impact Survey," and "Senior Population Health Impact Survey" for sensitive populations are being carried out to gather basic data for formulating environmental health policies by investigating people's exposure to hazardous pollutants and health impacts.

The previous environmental impact assessment system was enhanced to create the Health Impact Assessment (HIA), which assesses impacts on human health in addition to environmental impacts. HIA has been implemented since 2010 and is targeting major development projects.

An expert visits a family in multi-unit dwelling and provides diagnosis and consultation for noise between floors.

Quiet and Pleasant Living Environment

While intensifying urbanization has made it difficult to control noise and indoor air quality, there is greater public demand for quality of life, and it is becoming increasingly necessary to improve people's everyday living environments. Accordingly, the Ministry of Environment has formulated various measures to address everyday matters such as indoor air quality, indoor radon, and noise levels, while also carrying out basic research regarding electromagnetic waves, light pollution, and other issues that lack adequate controls.

The "Indoor Air Quality Control in Public-use Facilities, etc. Act" was wholly amended in 2004 to control indoor air quality in public-use facilities and newly built multi-unit dwellings, and accordingly, 21 facility groups, including subway stations, underground road shopping districts, medical institutions, steam rooms, large shops, and movie theaters are required to comply with maintenance limits regarding five substances: fine dust (PM_{10}), carbon dioxide (CO_2), formaldehyde (HCHO), total airborne bacteria, and carbon monoxide (CO). Constructors of newly built multi-unit dwellings consisting of 100 or more homes, for which the "sick house syndrome" is of particular concern, are required to determine and announce the indoor air quality before the residents move in, and construction materials that produce large amounts of pollutants are prohibited from indoor use in public-use facilities and multi-unit dwellings. An indoor air quality guideline for public transportation was formulated and has been enforced since March 2014. A manual has also been developed and distributed since 2007 for small facilities that are not subject to legal controls to encourage the facility managers themselves to manage indoor air quality.

Since 2008, indoor radon has been investigated in schools, government offices, public-use facilities, and homes nationwide, and the results will be used to create a national radon map. A free radon diagnosis and consultation service has been provided since 2012 to underground and ground floor residences, which are vulnerable to radon exposure.

Factory noise, traffic noise, and factory-generated vibration are managed by the Noise and Vibration Control

Act. The Airport Noise Prevention and Area Assistance Act was separately enacted (Ministry of Land, Infrastructure and Transport) for aircraft noise in 2010. Recently there has been a rapid increase in civil complaints regarding everyday noise, and in particular there have been frequent incidents of noise between floors in multi-unit dwellings (apartments), resulting in conflicts between neighbors and creating a social problem. Accordingly, the Ministry of Environment jointly enacted the "Control Standards on Noise between Floors in Multi-unit Dwellings" with the Ministry of Land, Infrastructure and Transport. In 2012, a professional agency was also established to provide consultation and mediation regarding noise between floors.

In terms of light pollution, the "Act on the Prevention of Light Pollution by Artificial Lighting" was enforced as of February 2013, requiring any lighting equipment installed in a lighting environment control area to comply with permissible light emission levels. Installation and management standards for public lighting, advertisement lighting, and decorative lighting are also being prepared.

Asbestos Safety

Asbestos, when inhaled into the human body, is known to cause diseases such as malignant mesothelioma and lung cancer after an incubation period of 10-40 years. It was intensively used in Korea in the 1970s to 1990s, mainly for construction materials (82%). The Korean government announced 2007 as the first year of asbestos safety management, and several associated government ministries have been implementing multifaceted policies.

Asbestos use in Korea was wholly prohibited as of 2009, and as a result, asbestos safety management became particularly important in terms of environmental health rather than industrial health. The Ministry of Environment is focusing on developing and implementing asbestos control policies in the environmental health sector such as the safe management and demolition of buildings in which asbestos has been used, appropriate treatment of waste asbestos, managing and restoring asbestos mines and areas with naturally occurring asbestos, and preparing a relief system for people whose health has been negatively affected by asbestos.

The Asbestos Injury Relief Act was enacted in 2011 and a relief system was implemented for people affected by asbestos injury. The Asbestos Safety Management Act aims to manage the entire asbestos life cycle and was enforced as of April 2012. Accordingly, an asbestos survey must be carried out in schools, public-use facilities, medical institutions, children's facilities, and other buildings. Buildings in which large amounts of asbestos have been used must prepare a building asbestos map and designate an asbestos building safety manager. If it is deemed that health risks caused by asbestos are of concern, orders may be given to dismantle or remove the asbestos from the building.

Slate is a construction material that typically has a high asbestos content (10-15%). It was widely used in Korea around the 1970s, especially in rural areas. The deterioration of such a large number of asbestos slate roofs is raising concern over damage to residents' health, but it was highly likely that their removal would be delayed or handled inadequately in rural areas due to cost burdens. To address this, the government worked together with associated government ministries to formulate the Comprehensive Plan on Slate Control in 2010 and is working towards the timely removal of slate roofs by providing budget support.

▲ Before slate removal

▲ After roof renovation

Korean government provides financial support for timely removal of slate roofs containing asbestos.