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KOSHA NEWS

Protecting Worker's Life and Health

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Contents

Intensive Safety Inspections Targeting Lithium Battery Manufacturing Facilities	03
Nationwide On-Site Inspections in Response to Heavy Rain and Heatwaves	05
Mandatory Safety Education for All Foreign Workers Up to KRW 100 Million in Support for Facility Improvements to Enable Rapid Evacuation	14
On-Site Inspections to Prevent Heat-Related Illnesses and Protect Foreign Workers!"	26

Intensive Safety Inspections Targeting Lithium Battery Manufacturing Facilities

• Focused Fire Prevention Measures on the 13th On-Site Inspection Day: Ensuring Compliance with Emergency Exit and Fire Suppression Standards

- › The Ministry of Employment and Labor (MOEL, Minister Lee Jung-sik) and the Korea Occupational Safety and Health Agency (KOSHA, President Ahn Jong-ju) are conducting on-site inspections as a follow-up to the recent fire incident at the Hwaseong Aricel Plant. These inspections are aimed at preventing similar fire and explosion accidents in the future.
- › On the 13th On-Site Inspection Day, which will take place on Wednesday, July 10th, directors of district labor offices and industrial safety inspectors across the country will focus on inspecting facilities that manufacture or handle hazardous materials, such as lithium, as well as those involved in the production of first and second batteries, which are considered to be at high risk of fire and explosion.

The inspections will particularly target:

- 1 Facilities that have submitted Material Safety Data Sheets (MSDS) related to lithium;
- 2 Facilities involved in the production of first and second batteries;
- 3 High-risk facilities among those that have submitted MSDSs;
- 4 Facilities subject to Process Safety Management (PSM) within the Jeongok Marine Industrial Complex in Hwaseong.

Intensive Safety Inspections Targeting Lithium Battery Manufacturing Facilities

- › During these inspections, the focus will be on verifying the implementation of key compliance measures to prevent fire and explosion accidents, including: (1) the installation and maintenance of emergency exits; (2) the installation of appropriate fire suppression systems and emergency response protocols; and (3) ensuring that safety and health training for workers, including foreign workers, is thoroughly conducted on-site.
- › Additionally, the “10 Essential Safety Rules for Handling Hazardous Chemicals” will be distributed (see attachment), and in collaboration with the Korea Battery Industry Association and other related organizations, efforts will be made to guide and encourage the thorough implementation of these safety rules on-site.
- › Minister Lee Jung-sik emphasized, “Facilities that manufacture or handle hazardous chemicals such as lithium must take the recent fire incident as a critical lesson. They should proactively assess the risks of fire and explosion within their operations and take necessary corrective actions to address any identified hazards.” He further urged, “In facilities where there is a heightened risk of fire or explosion, it is crucial to comply with safety regulations, including the installation and maintenance of emergency exits and appropriate fire suppression systems. Additionally, regular training and drills should be conducted for all workers, including foreign employees, to enhance their ability to respond effectively in emergency situations.”



Nationwide On-Site Inspections in Response to Heavy Rain and Heatwaves

- **Full Mobilization of Industrial Safety and Health Personnel Across the Country**
- **July 15: Special On-Site Inspection Day for Heavy Rain and Heatwave Response**

- › The Ministry of Employment and Labor (MOEL, Minister Lee Jung-sik) and the Korea Occupational Safety and Health Agency (KOSHA, President Ahn Jong-ju) have designated July 15 as the “Special On-Site Inspection Day for Heavy Rain and Heatwave Response” to prevent industrial accidents caused by these extreme weather conditions. Following similar inspection days on June 12 and June 26, this additional inspection day has been scheduled in response to the alternating occurrences of heavy rains and heatwaves during the rainy season.
- › To address the risks posed by heavy rains and heatwaves, the Ministry of Employment and Labor will fully mobilize district labor offices and the Korea Occupational Safety and Health Agency, deploying 600 inspectors and 600 KOSHA personnel, to conduct focused inspections of workplaces vulnerable to these conditions.*

* **Workplaces vulnerable to heavy rain:** Approximately 5,900 sites identified in cooperation with relevant ministries (including the Ministry of Environment, the Ministry of the Interior and Safety, and the Korea Forest Service) based on concerns such as heavy rain, landslides, flooding, and burial.

* **Workplaces vulnerable to heatwaves:** Approximately 64,000 sites, including construction, logistics, and distribution industries, as well as building management companies, courier services, and gas and electricity meter reading services, which employ a large number of mobile workers.

Nationwide On-Site Inspections in Response to Heavy Rain and Heatwaves

- Additionally, through the “Serious Accident Siren” (an open chat room for critical accident alerts) and other channels, the Ministry is providing guidance on safety rules related to heavy rain and heatwaves that workplaces must adhere to. In cases of imminent danger, employers and workers are strongly encouraged to make full use of the right to stop work.

The “Serious Accident Siren” offers:

Industrial hazards during flood recovery: Risks such as collapse, electric shock, and drowning, along with essential safety guidelines

Three basic rules for preventing heat-related illnesses: Access to water, shade, and ventilation, and regular breaks

- Minister Lee Jung-sik stated, “Last week’s extreme heavy rains caused significant damage nationwide, and with more rain expected this week, workplaces must prioritize the lives and safety of their workers above all else. The Ministry of Employment and Labor will also continue to remain vigilant and proactive, focusing on on-site activities to prevent industrial accidents throughout the special response period for heavy rain and heatwaves, which runs until August 31.”

The “Serious Accident Siren” offers:

- 1 Key Contents of “Industrial Accident Prevention and Response Measures for Heavy Rain and Typhoons”
- 2 Workplace Action Guide for Heavy Rain and Typhoon Preparedness
- 3 Self-Inspection Checklist for Workplaces in Preparation for Heavy Rain and Typhoons
- 3 Heat-Related Illness Prevention Guide (in Korean and Chinese)

Nationwide On-Site Inspections in Response to Heavy Rain and Heatwaves

Attachment 1

Key Contents of "Industrial Accident Prevention and Response Measures for Heavy Rain and Typhoons"

1. Management of Vulnerable Workplaces Establishment of Information Dissemination Systems

- **Management of Vulnerable Workplaces:** Based on AI-driven data regarding areas vulnerable to heavy rain and typhoons provided by relevant ministries, approximately 5,929 vulnerable workplaces* have been identified and are subject to intensive monitoring.

* A database of vulnerable workplaces is being established and managed, using information from the Ministry of the Interior and Safety, the Ministry of Environment, and the Korea Forest Service, focusing on areas and workplaces at risk of flooding, landslides, and burial.

- **Information Dissemination:** Real-time dissemination of weather conditions (such as heavy rain and typhoon forecasts)* and accident cases using the "Serious Accident Siren"

* **National Level:** The "Serious Accident Siren," the Construction Workers' Mutual Aid Association's electronic card app, and industry-specific cooperative bodies are used for dissemination.

* **Regional Level:** Disaster management officials utilize social media and other channels operated by district offices to disseminate information to workplaces in their jurisdiction.

2. Establishment and Operation of Emergency Response Systems for Heavy Rain and Typhoons

- **Operation of Special Response Period:** A "Special Response Period for Heavy Rain, Typhoons, and Heatwaves" will be in effect from June to August.
 - A cooperative system among district offices, KOSHA, and private disaster prevention agencies, has been established to conduct workplace inspections, monitoring, and provide guidance on disaster preparedness during the summer season.
- **Operation of Emergency Response Systems:** An emergency response system involving headquarters, district offices, and KOSHA has been established to receive, disseminate, and respond promptly to reports of workplace damage.

Nationwide On-Site Inspections in Response to Heavy Rain and Heatwaves

- In the event of a heavy rain or typhoon warning (or during recovery), a nationwide emergency inspection meeting will be held, chaired by the Minister, Vice Minister, or the head of the headquarters, to assess the situation and mount an all-out response.
- **Guideline Refinement:** Detailed response measures for each stage of industrial accident prevention (preparation–response–recovery) and for each entity (headquarter/district offices/KOSHA) have been outlined in the “2024 Special Response Guidelines for Heavy Rain” (distributed on June 21) and the “2024 Special Response Guidelines for Typhoons.”

3. Strengthening of Safety Management Inspections

- **Focused Workplace Inspections:** Focused inspections and guidance will be provided to vulnerable workplaces and workplaces at risk of accidents due to heavy rain and typhoons, especially those identified in the “High-Risk Areas and Workplaces Database” (covering vulnerable industries such as construction, chemical, and shipbuilding).
 - Before the onset of the rainy season, and during the issuance of heavy rain or typhoon warnings and the recovery phase, a “Special On-Site Inspection Day” will be designated and operated from June to August.

* “On-Site Inspection Days” were previously held on June 12 and June 26 to prepare for natural disasters in the summer, such as heatwaves and heavy rain.

- **On-Site Leadership by Senior Officials:** The Minister, Vice Ministers, and heads of agencies (including Chiefs of Local Employment and Labor Offices and Heads of Branch Offices) will personally conduct on-site inspections at each stage (preparation, pre-incident, and post-incident) of heavy rain and typhoon events to ensure thorough safety management at workplaces.

* **For example:**

- June 5: The Vice Minister conducted inspections of construction sites in – preparation for heatwaves and heavy rain.
- June 12: The Vice Minister, along with the Labor Special Committee, visited construction sites.

Nationwide On-Site Inspections in Response to Heavy Rain and Heatwaves

- July 4: The Vice Minister inspected logistics centers in preparation for heatwaves.
- July 8: The Minister conducted inspections of construction sites in preparation for heavy rain and heatwaves.
- July 10: The Minister inspected logistics centers in preparation for heatwaves.
- July 12: The Minister of Employment and Labor, together with the Minister of Land, Infrastructure and Transport, visited construction sites in preparation for heavy rain and heatwaves.

4. Support for Workplace Preparedness, Response, and Recovery

- **Development of Guidelines:** Guidelines have been developed and distributed to help employers and workers prevent, respond to, and recover from heavy rain and typhoons.
[Jointly] "Workplace Safety Management Guide for Heavy Rain and Typhoon Preparedness" (June 21).
[Construction Industry] "Safety and Health Guide for Construction Sites During the Rainy Season" (June 3).
[Delivery Workers] "Safety Management Implementation Guide for Delivery Workers during Heavy Rain and Typhoons" (June 24), distributed to nine platform companies.
- **Self-Inspection:** Major vulnerable workplaces are required to conduct self-inspections in preparation for heavy rain and typhoons from June 4 to June 21.
 - Self-inspection checklists and safety guidelines have been distributed via SNS and other channels to the relevant workplaces.
 - (1) Joint inspections and discussions on the establishment of warning systems and evacuation plans are strongly recommended for contractors and subcontractors.
 - (2) In cases where there is an imminent risk of industrial accidents due to heavy rain or typhoons, a formal notice regarding the suspension of work will be sent, with strong guidance provided to employers to stop work.
 - During consultations, technical guidance, and training sessions, guidance on self-inspection and safety rules for heavy rain and typhoons will be provided.

* Guidance will also be provided on the implementation of safety measures for key risk factors such as overturning and falling caused by heavy rain and typhoons

Nationwide On-Site Inspections in Response to Heavy Rain and Heatwaves

- **Technical Guidance for Recovery:** A "Heavy Rain and Typhoon Recovery Support Team" (provisional name) will be formed to provide technical guidance and support to workplaces during recovery efforts to prevent secondary disasters.

5. Strengthening Promotion of Industrial Accident Prevention for Heavy Rain and Typhoons

- **Promotional Media:** Promotional materials for the prevention of industrial accidents related to heavy rain and typhoons will be produced and distributed. This will be accompanied by campaigns targeting both employers and workers, utilizing industrial safety billboards (40 nationwide), radio campaigns, and other media channels.
- **Collaboration with Relevant Organizations:** A comprehensive promotional campaign will be conducted in collaboration with 39 regional Safety Culture Implementation Teams, which include associations, disaster prevention agencies, local media, and workplaces across the country.

Key Activities Include:

- Labor and Management Organizations: Promoting safety among member companies.
- Disaster Prevention Agencies: Providing relevant information during workplace visits.
- Local Media: Assisting with coverage related to disaster preparedness in workplaces.
- Workplaces: Disseminating safety information to other workplaces after implementation.
- Local Governments: Utilizing local government-managed media (billboards, banners, etc.) for promotion.



Nationwide On-Site Inspections in Response to Heavy Rain and Heatwaves

Attachment 2

Workplace Action Guide for Heavy Rain and Typhoon Preparedness

Workplace Action Guide for Heavy Rain and Typhoon Preparedness

General Guidelines

- Remote Work and Leave: Strongly recommend remote work and leave for workplaces located in areas where heavy rain or typhoon warnings have been issued.
- Work Stoppage: Cease work if there is an imminent risk of industrial accidents due to heavy rain or typhoons.
 - * Relevant Laws: Article 51 (Suspension of Work by Business Owners), Article 52 (Suspension of Work by Employees) of the Occupational Safety and Health Act
- Weather Monitoring: Continuously monitor weather warnings and special weather reports starting from the occurrence of heavy rain or typhoons.
 - * Source: Korea Meteorological Administration's Weather Nuri website, Weather Warnings section (Forecast > Warning > Special weather reports)

Strong Winds

- Inspection of Facilities: Check the secure fastening of various facilities, signs, materials, etc.
- Tower Cranes: Release the brake on tower crane booms to allow free rotation (to prevent breaking or bending)
- Outdoor Work: Stop outdoor work such as steel frame assembly and lifting operations during strong winds.

Flooding

- Inspection of Facilities: Inspect and maintain drainage channels and facilities in advance.
- Underground Structures: Stop work in locations prone to flooding, such as underground structures.
- Access Control: Restrict access of personnel and vehicles to flooded areas (verify the risks of electric shock and suffocation).

Collapse

- Inspection: Inspect areas prone to collapse, such as retaining walls and stone embankments.
- Preventive Measures: Install preventive measures, such as waterproof covers and retaining walls.
- Access Control: Restrict entry and prohibit passage in areas at risk of collapse and burial.

Electric Shock

- Waterproofing: Ensure that water does not enter electrical components, such as live parts and switchboards (relocate electrical equipment if flooding is anticipated).
- Inspection and Maintenance: Inspect and repair the connection of circuit breakers, external battery terminals, and insulation.
- Power Shutdown: Ensure power is shut off before inspecting machinery and equipment damaged by flooding.

Nationwide On-Site Inspections in Response to Heavy Rain and Heatwaves

Attachment 3

Self-Inspection Checklist for Workplaces in Preparation for Heavy Rain and Typhoons

Self-Inspection Checklist for Heavy Rain and Typhoon Preparedness

Workplace Name:	Inspector:	
Location:	Inspection Date:	
Inspection Items	Inspection Results	Actions and Improvement Plans
Have work stoppages been implemented in response to heavy rain, typhoons, or other extreme weather conditions?		
Has a preliminary risk assessment been conducted to identify and confirm disaster-prone areas (e.g., landslides, weakened ground) during heavy rain and typhoons?		
Are roofs, signs, and other items that could be blown away during strong winds secured?		
Is there a risk of flooding during heavy rain? (Have drainage systems been inspected?)		
Is there a risk of electric shock in case of flooding?		
Are there any areas where the inflow of contaminants could cause hygiene issues during flooding?		
Is emergency recovery equipment, such as pumps, available in case of flooding?		
Are emergency supplies (flashlights, candles, etc.) available in case of a power outage?		
Has an emergency contact network and recovery team been established, and are they operational in preparation for natural disasters?		
Have contractors and subcontractors conducted joint inspections and discussions on warning systems and evacuation plans to prepare for emergencies?		
Have manuals for natural disasters been prepared, and are regular drills being conducted?		
Are post-recovery measures clearly defined for actions to be taken after heavy rain or typhoons?		

Response Guideline: In case of imminent industrial accident risk, “Immediately stop work and evacuate!”

Workplace:

Inspector: (Signature)

Representative: (Signature)

Nationwide On-Site Inspections in Response to Heavy Rain and Heatwaves

Attachment 4

Self-Inspection Checklist for Workplaces in Preparation for Heavy Rain and Typhoons

Heat Illness Prevention Guide for Summer Heatwaves

1. Implementation of the Three Basic Rules

	Outdoor worksites	Indoor worksites	
Water	<ul style="list-style-type: none"> - Provide cool, clean water and encourage regular water intake during work. - Provide shaded rest areas near the worksite. - Install shade structures in locations with good airflow. - If necessary, provide additional portable air conditioners. 	<ul style="list-style-type: none"> - Install and monitor thermometers and hygrometers at the worksite. - Set up fans, portable air conditioners, and ensure proper ventilation. - Control indoor temperature even during night shifts. 	Water
Shade			Ventilation
Rest	<ul style="list-style-type: none"> - During heatwave warnings (advisories or alerts), provide regular breaks of 10–15 minutes. - Minimize outdoor work during peak heat hours (2 PM – 5 PM). 		Rest

2. Heatwave Response Guidelines by Stage

Work Stoppage: Employers or workers should stop work if there is an imminent risk of heat-related illnesses.

Warning or Heatwave Alert ▶ Perceived Temperature 35°C and above	Perceived Temperature	Danger or Severe Heatwave Alert ▶ Perceived Temperature 38°C and above
<ul style="list-style-type: none"> - Provide 15-minute breaks every hour. - Stop outdoor work during peak heat hours, except in unavoidable situations. 		<ul style="list-style-type: none"> - Provide 15-minute breaks every hour. - Stop all outdoor work except for disaster management and safety-related tasks.
Common Guidelines ▶ Perceived Temperature 31°C and above	Scan the QR code to check the perceived temperature.	Advisory or Heatwave Advisory ▶ Perceived Temperature 33°C and above
<ul style="list-style-type: none"> - Provide workers with heatwave information. - Prepare cool water, shade (rest areas), and ventilation. - Provide cooling gear such as cooling sleeves. - Manage high-intensity workers and sensitive groups. 		<ul style="list-style-type: none"> - Provide 10-minute breaks every hour. - Reduce outdoor work hours during peak heat or adjust work schedules.

3. In Case of Heat Illness

Call 119 immediately!

Emergency Contact: [Contact Person]

Mandatory Safety Education for All Foreign Workers

Up to KRW 100 Million in Support for Facility Improvements to Enable Rapid Evacuation

- **The construction industry's industrial safety management costs will be increased for the first time in 10 years to expand safety investments.**
- **A certification system for safety and health interpreters will be introduced, with a smartphone app to be developed and released by November.**
- **Significant revisions to the risk assessment system will be implemented, and any insurance premium reductions will be reclaimed if a serious accident occurs after risk assessment approval.**

- On August 13, 2024, at 2:00 PM, the “Central Accident Response Headquarters for the Hwaseong Aricel Plant Fire Accident” (headed by Minister Lee Jung-sik of Employment and Labor) held its third meeting at the Government Complex Seoul and announced the “Measures to Enhance Safety for Foreign Workers and Small Businesses.”
- These measures are a follow-up to the emergency safety support actions implemented on July 18 to prevent fire accidents at battery-handling workplaces. They were developed based on feedback from foreign workers, business owners, and industry associations.

Emergency Safety Support Measures (Implemented on July 18):

- 1 Financial support for purchasing alarm, evacuation, and fire suppression equipment (KRW 5 billion).
- 2 Distribution of fire response posters and safety and health warning stickers in 16 languages.

Mandatory Safety Education for All Foreign Workers Up to KRW 100 Million in Support for Facility Improvements to Enable Rapid Evacuation

- › The primary focus of these measures is to improve safety management at small businesses, where the majority of fatal accidents occur, and where many foreign workers are employed. The goal is to ensure that foreign workers receive comprehensive safety education.

1. Up to KRW 100 Million in Support for Facility Improvements to Enable Rapid Evacuation

(1) Structural Improvements to Prevent Fire Spread

Up to KRW 100 million will be provided for installing partition walls or facilities to separately store hazardous materials to prevent fire spread (to be implemented in 2025). This initiative was inspired by a best practice observed by the Minister of Employment and Labor during a visit to a battery manufacturing company on August 1, and it has now been adopted as an official government program.

Example from a Lithium Battery Manufacturing Facility:

Following a major fire incident, the company relocated its plant, ensuring a minimum of 2-3 evacuation routes per workspace and installing partition walls in each building to enhance safety (refer to the August 1 press release).

(2) Visual Improvements to Clearly Indicate Emergency Exits and Evacuation Routes

In collaboration with the Ministry of Trade, Industry and Energy, the Ministry of Employment and Labor will provide up to KRW 100 million to improve the visual environment of workplaces. This includes installing fluorescent signs for emergency exits to ensure that everyone can easily identify exits and evacuation routes (to be implemented in 2025).

- Figure 1: Improved visibility of emergency exits during a power outage.
- Figure 2: Wall-mounted evacuation route signs.

Mandatory Safety Education for All Foreign Workers Up to KRW 100 Million in Support for Facility Improvements to Enable Rapid Evacuation

2. Expanded Safety Investments in the Construction Industry, Which Accounts for Half of All Fatal Accidents

Amendment to the Calculation and Use Standards for Industrial Safety and Health Management Costs in the Construction Industry

(Administrative Notice by the Ministry of Employment and Labor)

(August 14, 2024 - September 3, 2024; Effective January 1, 2025)

(1) Significant Increase in Industrial Safety and Health Management Costs for the First Time in 10 Years

The industrial safety and health management costs in the construction industry, where accidents are most frequent, will be increased by an average of 19% for the first time in 10 years. These costs, provided by the client, must be used for safety management, which is expected to lead to expanded safety investments at construction sites.

(2) Gradual Elimination of Out-of-Pocket Costs for Purchasing Smart Safety-Related Equipment

To ensure that the increased industrial safety and health management costs are focused on purchasing and leasing smart safety-related equipment, the current 60% out-of-pocket cost will be gradually reduced and eliminated by 2026.

- Figure 3: AI-based portable human detection system.
- Figure 4: Smart equipment for preventing asphyxiation accidents.

3. Mandatory Safety Education for All Foreign Workers

(1) Providing Basic Safety and Health Education to All Foreign Workers

All foreign workers (approximately 920,000) will be required to receive at least one session of professional basic safety and health education before or upon employment, similar to the Employment Permit System.

Mandatory Safety Education for All Foreign Workers Up to KRW 100 Million in Support for Facility Improvements to Enable Rapid Evacuation

To start, a basic safety and health education course will be introduced into the Social Integration Program (run by the Ministry of Justice) for the F visa series, which has the highest number of employed workers. Additionally, basic safety information and accident compensation guidelines will be included in the “Domestic Settlement Guide for Overseas Koreans” (produced by the Overseas Koreans Agency).

The Korea Occupational Safety and Health Agency (KOSHA) will provide on-site education at local industrial complexes and expand experiential education using both public (3 locations) and private (approximately 200) training centers.

Efforts are also underway to amend the Industrial Safety and Health Act to mandate that all foreign workers outside the Employment Permit System complete basic safety and health education at professional training institutions before being assigned to worksites.

(2) Providing Translated and Illustrated Materials that Are Easy for Foreign Workers to Understand

Safety rules for different types of accidents and major processes will be translated into foreign workers’ native languages or presented through easy-to-understand illustrations (e.g., O, X symbols) and virtual reality (VR) content. Additionally, a smartphone app dedicated to foreign workers will be developed and distributed by November to make these resources easily accessible.

- Figure 5: Installation of safety railings.
- Figure 6: Caution against electric shock during wiring work.

A certification system for “safety and health interpreters” will be introduced to train professional instructors in foreign language safety education. Long-term foreign workers will be designated as “Foreign Worker Safety Leaders” within their companies or regions to pass on safety education and work expertise to other foreign workers.

Mandatory Safety Education for All Foreign Workers Up to KRW 100 Million in Support for Facility Improvements to Enable Rapid Evacuation

4. Significant Revisions to the Risk Assessment System: Strengthened Post-Management and Improvement of Recognized Risk Assessment Projects

(1) Consulting Within 3 Months, Follow-up Inspections Within 6 Months for Vulnerable Workplaces

For workplaces identified as vulnerable based on the results of comprehensive industrial safety inspections (indicated by a red ● in the self-diagnosis), consulting services will be provided by professional institutions such as the Korea Occupational Safety and Health Agency (KOSHA) or the Korea Industrial Safety Association within 3 months. Interviews with business owners and management representatives will also be mandatory. A follow-up management stage will be introduced, requiring a revisit within 6 months after the consulting sessions (5 sessions) to verify the implementation of improvements.

The Risk Assessment Support System (KRAS) will be improved to allow small businesses to easily conduct and manage risk assessments online without the burden of paperwork.

To enhance the quality of consulting, all supported workplaces will be monitored by phone, and the results of on-site inspections will be reflected in evaluations. The weighting of evaluations for project performance appropriateness will be increased to 60% (from the previous 40%). Agencies with insufficient performance will be restricted from participating for two years.

(2) Priority Inspections of 200 High-Risk Workplaces for Fire and Explosion

In response to concerns that the Hwaseong Aricel Plant was excluded from inspections despite being a high-risk workplace, 200 high-risk workplaces for fire and explosion that have not been inspected in the past three years will be prioritized for inspection. These inspections will include verifying the proper installation of emergency exits, conducting safety and health education, and ensuring overall compliance with safety and health regulations.

Mandatory Safety Education for All Foreign Workers Up to KRW 100 Million in Support for Facility Improvements to Enable Rapid Evacuation

(3) Strengthening the Review of Recognized Risk Assessment Projects and Reclaiming Insurance Premium Reductions

To prevent the misuse of recognized risk assessment projects as a means to reduce industrial accident insurance premiums, the recognition criteria will be raised (e.g., from 70 points to 90 points). If a serious accident occurs within three years of recognition, the reclaimed insurance premium reductions will be pursued.

5. Promoting a Safety Culture Through the “Four NO!s Campaign”

To prevent accidents, the “Four Prohibitions Campaign” will be conducted in cooperation with industry associations and companies. This campaign emphasizes the following key safety rules:

1. NO disabling of safety devices!
2. NO operation of unfamiliar machinery!
3. NO working without personal protective equipment (PPE)!
4. NO maintenance of operating machinery!

Additionally, measures to strengthen the management of hazardous materials, such as lithium—identified as the direct cause of the Hwaseong Aricel Plant fire—will be included in the recommendations to be announced by the “Battery Plant Fire Prevention Task Force” at the end of August.

Lee Jung-sik, head of the Central Accident Response Headquarters (Minister of Employment and Labor), stated, “These measures have been developed by incorporating the voices of various stakeholders in the field to ensure that tragic accidents like the Hwaseong Aricel Plant fire do not happen again.” He emphasized, “We will do our utmost to raise the level of safety management in the field, in response to the changing environment, including new technologies, new industries, the increase in foreign workers, and an aging workforce.”

Mandatory Safety Education for All Foreign Workers Up to KRW 100 Million in Support for Facility Improvements to Enable Rapid Evacuation

Appendix: Measures to Enhance Safety for Foreign Workers and Vulnerable Workplaces

- Reference 1: Examples of Workplace Design Improvements
- Reference 2: Key Points of the Partial Amendment to the “Calculation and Use Standards for Industrial Safety and Health Management Costs in the Construction Industry”
- Reference 3: Supported Smart Safety-Related Equipment Items
- Reference 4: Experiential Training Centers
- Reference 5: Non-Verbal Content Examples
- Reference 6: App for Foreign Workers
- Reference 7: Foreign Worker Safety Leader Examples
- Reference 8: Risk Assessment Support System KRAS 2.0
- Reference 9: The Four NO!s Campaign

Reference 1

Examples of Workplace Design Improvements

Figure 1: Improved Visibility of Emergency Exits (During Power Outages)

Figure 2: Enhanced Emergency Evacuation Routes

Figure 3: Installation of Fire Extinguishers, First Aid Kits, and Personal Protective Equipment Storage

Mandatory Safety Education for All Foreign Workers Up to KRW 100 Million in Support for Facility Improvements to Enable Rapid Evacuation

Reference 2

Key Points of the Partial Amendment to the “Calculation and Use Standards for Industrial Safety and Health Management Costs in the Construction Industry”

1. Increase in Industrial Safety and Health Management Cost Rates

- An average increase of 19% has been applied based on an analysis of excess usage across different types and sizes of construction projects.

Table: Revised Standards for Calculating Industrial Safety and Health Management Costs by Project Type and Size (Unit: KRW)

Previous						Amendment					
Category	< 0.5 Billion	0.5 Billion to < 5 Billion		5 Billion to < 80 Billion	≥ 80 Billion	Category	< 0.5 Billion	0.5 Billion to < 5 Billion		5 Billion < 80 Billion	≥ 80 Billion
		Application Rate (%)	Base Amount (KRW)					Application Rate (%)	Base Amount (KRW)		
Building Construction	2.93%	1.86%	5,349,000	1.97%	2.15%	Building Construction	3.11%	2.28%	4,325,000	2.37%	2.64%
Civil Engineering	3.09%	1.99%	5,449,000원	2.10%	2.27%	Civil Engineering	3.15%	2.53%	3,300,000	2.60%	2.73%
Large-Scale Construction	3.43%	2.35%	5,400,000	2.44%	2.66%	Large-Scale Construction	3.64%	3.05%	2,975,000	3.11%	3.39%
Specialized Construction	1.85%	1.20%	3,250,000	1.27%	1.38%	Specialized Construction	2.07%	1.59%	2,450,000	1.64%	1.78%

2. Gradual Expansion of Support for Purchasing and Leasing Smart Safety-Related Equipment

- The support for purchasing and leasing smart safety-related equipment, whose usage has recently expanded, will be gradually increased from the current 40% to 100% (70% by 2025, 100% by 2026).

Note: The total cost cap of 10% will remain unchanged.

3. Application of KRW 20 Million Minimum Contract Value for All Annual Unit Price Contracts

- Industrial safety and health management costs will be calculated for all annual unit price contracts with a total contract value of KRW 20 million or more.

Note: Currently, only certain contracts under the "Electrical Construction Business Act" and the "Information and Communications Construction Business Act" are subject to this minimum contract value requirement.

Mandatory Safety Education for All Foreign Workers Up to KRW 100 Million in Support for Facility Improvements to Enable Rapid Evacuation

Reference 3

Supported Smart Safety-Related Equipment Items

Examples of Usage in Temporary Construction	Examples of Usage in Concrete Construction
<p>Smart Airbag Vest</p> <ul style="list-style-type: none"> - Minimizes injury from worker falls. - Sends communication (rescue request) in case of danger. <p>Portable and Fixed AI CCTV</p> <ul style="list-style-type: none"> - Real-time risk monitoring. - Alerts managers when an accident is detected. <p>Personal Safety Equipment</p> <ul style="list-style-type: none"> - Confirms helmet wear. - Verifies safety harness connection. - Tracks worker location in case of danger. <p>Collapse/Displacement Warning Equipment</p> <ul style="list-style-type: none"> - Alerts workers in case of collapse risk. - Hazardous Area Approach Warning Equipment <p>Hazardous Area Approach Warning Equipment</p> <ul style="list-style-type: none"> - Prevents workers from entering danger zones, such as areas where falling objects may occur. 	<p>Harmful Gas Detection and Warning Equipment</p> <ul style="list-style-type: none"> - Measures harmful gases in real-time. - Alerts workers to evacuate when dangerous levels are detected. <p>Fire Risk Detection and Warning Equipment</p> <ul style="list-style-type: none"> - Detects fire occurrence and issues alerts. <p>Hazardous Area Approach Warning Equipment</p> <ul style="list-style-type: none"> - Prevents worker access to danger zones, such as open pits. <p>Concrete Curing Monitoring Equipment</p> <ul style="list-style-type: none"> - Alerts managers when there is improper concrete curing. <p>Collapse/Displacement Warning Equipment</p> <ul style="list-style-type: none"> - Alerts workers in case of collapse risk. <p>Portable and Fixed AI CCTV</p> <ul style="list-style-type: none"> - Real-time risk monitoring. - Alerts managers when an accident is detected. <p>Construction Machinery Approach Detection Equipment</p> <ul style="list-style-type: none"> - Detects workers approaching within the operating range of heavy machinery and issues danger alerts.

Category	Items
Safety (25 Items)	AI-based human detection systems (2 items)
	Smart integrated safety systems for high-risk machinery (2 items)
	Portable smart approach warning devices for hazardous equipment
	Smart safety-related devices for elevated work platforms
	AI-based smart crane collision prevention devices, optional anti-sway devices (2 items)
	Smart safety-related devices for vehicle-mounted construction machinery and handling equipment (4 items)
	Smart safety-related device for electric forklifts (managed item)
	Smart integrated tip-over prevention systems for portable cranes
	Smart integrated tip-over prevention systems for vehicle-mounted aerial work platforms
	Smart integrated tip-over prevention systems for moving lifts used in moving operations
	Integrated monitoring systems for chemical accident prevention (6 items)
	Electrical safety monitoring systems (2 items)
	Collision protection airbag vests for motorcycle riders
Health (6 Items)	Smart asphyxiation prevention equipment for confined spaces
	Power-assisted suits
	Integrated safety management systems for hazardous materials
	Ergonomic support devices for heavy lifting
	Smart safety and health-related personal protective equipment (2 items: dust masks, earplugs)
Autonomous	Smart safety and health-related equipment certified by national and governmental agencies

Source: Smart Safety-Related Equipment Utilization Guidelines, Construction Technology Promotion Act, March 2024.

Mandatory Safety Education for All Foreign Workers Up to KRW 100 Million in Support for Facility Improvements to Enable Rapid Evacuation

Reference 4

Experiential Training Centers

Training Center Overview

Press Operation Experience

Roller Operation Experience

Personal Protective Equipment (PPE) Experience

Confined Space Asphyxiation Prevention Experience

CPR Training

Scaffold Fall Prevention Experience (Using VR Equipment)

Safety Harness Suspension Experience (Using VR Equipment)

Reference 5

Non-Verbal Content Examples

〈Korea Occupational Safety and Health Agency (KOSHA)〉

- Posters Using O and X Symbols:
 - Posters for safe work practices, including the use of personal protective equipment (PPE).
 - Posters for safe work practices in mixed operations (collision prevention).
- VR Content:
 - Building Management (in English)
 - Chemical Plant Fire (in English)

〈Private Sector Examples〉

- Safety Pictograms:
 - Basic safety rules and work standards for each task are created using O and X pictograms to enhance understanding.
- Non-Verbal Training Manuals:
 - During TBM (Toolbox Meetings) and safety training, 190 different hazards are presented through illustrated manuals to overcome language barriers.
- QR Codes:
 - Custom QR codes are created and used to provide materials and safety rules specific to each task.

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Reference 6

App for Foreign Workers

〈Korea Occupational Safety and Health Agency (KOSHA)〉

- Main Screen
- Safety and Health Content

〈Private Sector Examples〉

- Safety Talk:
 - A mobile translation app developed in-house is used to facilitate communication during work instructions and safety training.
- Document Translation System:
 - Translates documents created in the workplace, minimizing the need for editing the original content and establishing a rapid communication system.

Reference 7

Foreign Worker Safety Leader Examples

- Four skilled foreign workers* have been designated as safety leaders, receiving a monthly allowance of KRW 50,000 to 130,000.
 - * Two from Vietnam, one from Myanmar, and one from the Philippines.
- The safety leaders are responsible for providing dedicated training on safe work practices to new foreign workers.

Figure 1: Appointment of Safety Leaders by Nationality

〈HD Hyundai Heavy Industries〉

- The first Sri Lankan team leader was appointed at a domestic shipyard.
- Leads a painting team composed of 9 Koreans and 19 Sri Lankans.

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Reference 8

Risk Assessment Support System KRAS 2.0

Main Screen

(Mobile Web) Worker Participation and Result Sharing

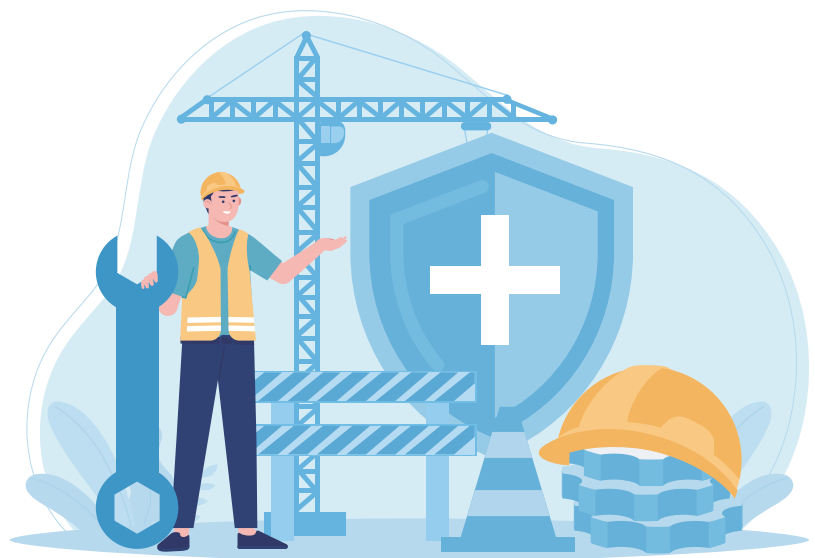
(Dashboard) Real-Time Monitoring of Risk Assessment Status

(Expanded Methods) Increased from 3 to 7

Reference 9

The Four NOs Campaign

1. NO disabling of safety devices!
2. NO operation of unfamiliar machinery!
3. NO working without personal protective equipment (PPE)!
4. NO maintenance of operating machinery!



On-Site Inspections to Prevent Heat-Related Illnesses and Protect Foreign Workers!

• Fifteenth On-Site Inspection Day Focuses on Heat-Vulnerable Workplaces and Sites with Large Numbers of Foreign Workers

- The Ministry of Employment and Labor (MOEL, Minister Lee Jung-sik) and the Korea Occupational Safety and Health Agency (KOSHA, President Ahn Jong-ju) have designated Wednesday, August 14th, as the 15th On-Site Inspection Day. On this day, heads of local labor offices and industrial safety inspectors across the country will conduct intensive inspections and provide guidance on safety and health measures at heat-vulnerable workplaces, such as construction sites and logistics centers, as well as at sites employing large numbers of foreign workers.
- With heatwave warnings in effect nationwide, it is essential to focus on preventing heat-related illnesses among workers. Inspections will closely monitor compliance with the three basic rules for preventing heat illnesses—[Outdoor] Water, Shade, Rest; [Indoor] Water, Ventilation, Rest—and will actively guide the implementation of safety and health measures according to the severity of the heatwave.
- At outdoor sites, particularly construction sites, mobile inspections will be conducted during peak heat hours (2 PM to 5 PM) using patrol cars. For workplaces with large numbers of foreign workers, the ministry will also oversee the distribution and on-site education of heat illness prevention guides* tailored specifically for them.

* The heat illness prevention guides are available in 17 languages and can be accessed on the MOEL and KOSHA websites.

On-Site Inspections to Prevent Heat-Related Illnesses and Protect Foreign Workers!

- ▶ Recognizing the potential language barriers and other challenges that foreign workers may face, inspections at these workplaces will focus on whether safety and health education is being effectively conducted, and whether safety measures are in place for the three major types of accidents and eight key risk factors.* Additionally, various safety and health materials** designed for foreign workers will be used to reinforce safety guidelines.

* 〈Falls〉 Scaffolding, roofs, ladders, aerial work platforms; 〈Entanglement〉 Guard devices, lockout/tagout during maintenance; 〈Strikes〉 Mixed operations, collision prevention devices.

** Available at: KOSHA website > “Publications” > “Resources”

- ▶ Minister Lee Jung-sik emphasized, “As the heatwave continues, it is crucial that both employers and workers remain vigilant and rigorously follow the guidelines to prevent heat-related illnesses. I urge all workplaces to take proactive and decisive action in educating their teams and enforcing safety measures, with particular attention to safeguarding our foreign workers.”



KOSHA NEWS

Protecting Worker's Life and Health



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